# TRIPURA UNIVERSITY

# **SYLLABUS**

**FOR** 

UNDER GRADUATE IN HISTORY
(SEMESTERS-I TO VI)

MAJOR/HONOURS( CORE)

**CBCS PATTERN (NEP-2020)** 

# TRIPURA UNIVERSITY

# UNDER GRADUATE SYLLABUS IN HISTORY

# MAJOR/HONOURS (CORE)

SEMESTER	PAPER	NAME OF PAPER	CREDIT
I	I	IDEA OF BHARATA	04
	II	ASPECTS OF ANCIENT INDIA	04
		( 2500BCE-1206CE)	
II	III	ASPECTS OF MEDIEVAL INDIA	04
		(1206CE-1757 CE)	
	IV	ASPECTS OF MODERN INDIA	04
		( 1757 CE-1947 CE)	
III	V	RISE OF THE MODERN WEST,	04
		MID 15TH TO LATE 18TH CENTURIES	
	VI	MODERN EUROPE AND THE	04
IV	7711	WORLD: C. 1800 A.D1939A.D.	0.4
I V	VII	HISTORY OF NORTH –EAST INDIA, 1826 A.D1949 A.D.	04
	VIII	HISTORY OF CHINA AND JAPAN,	04
		C.1840 A.D 1949 A.D.	
V	IX	POST- INDEPENDENCE INDIA	04
	X	CONTEMPORARY WORLD (1945-1991)	04
	XI	MODERN U.S.A	04
	XII	MODERN SOUTH EAST ASIA	04
VI	XIII	EARLY INDIA (PRE HISTORIC	04
	XIV	TIMES TO 650 CE)  EARLY MEDIEVAL INDIA ( 650 CE-1200 CE)	04
	XV	MEDIEVAL INDIA ( 1200 CE-1750 CE)	04
	XVI	MODERN INDIA ( 1750-1947 CE)	04

# BA I SEMESTER History 101 Paper-I (MAJOR) The Idea of Bharata

(Credits: 4)

# **Course Specific Outcome:**

After studying this course:

- 1. Students will acquire knowledge regarding the cultural life of the people of ancient India.
- 2. They can gather knowledge about the society, religion and political life of ancient India.
- 3. They will also acquire the knowledge of scientific traditions in ancient India.

# **Course Content:**

# UNIT A

- 1. Concept of Unity in Diversity-religions, languages, peoples
- 2. Indian concept of time and space
- 3. The glory of Indian Literature: Ved, Vedanga, Upanishads, Epics, Jain and Buddhist Literature, Smriti, Puranas Etc.
- 4. Evolution of language and Script: Brahmi, Kharoshiti, Pali, Prakrit, Sanskrit

# UNIT B

- 1. Salient features of Indian Art & Architecture
- 2. Indian Society: family, marriage and other institutions
- 3. Indian educational system
- 4. Philosophical systems in Ancient India

# UNIT C

- 1. Polity and governance in ancient India: Mauryas and Guptas
- 2. The concept of Janapada & Gram Swarajya
- 3. Indian economic thoughts: kautilya
- 4. Maritime Trade

# UNIT D

- 1. Science and Technology in Ancient India
- 2. Environmental conservation: Indian View
- 3. Health consciousness of (Science of Life): Ayurveda Yoga and Naturopathy,
- 4. Indian numeral system and Mathematics.

- 1. A.l Basham: The Wonder that was India, Rupa, Delhi 1994
- 2. A.S Altekar, Education in Ancient India, Nand Kishore & Bros, Varanasi 1944
- 3. Balbir Singh Sihag: Kautilya: The true founder of Economics, Vitasta Publishing Pvt. Ltd, Delhi, 2014
- 4. Dharampal: The Beautiful Tree, Other India press, Delhi 1995
- 5. Faith Robertson Elliott: Gender Family and Society, St. Martin press, New York, 1996
- 6. Radha Kumud Mookerji: Indian Shipping, Pub. South Asia Books, 1999
- 7. R.K Mookherjee: The Fundamental Unity of India
- 8. Upinder Singh: A History of Ancient and Early Medieval India, Pearson, New Delhi, 2008.
- 9. Ranabir Chakravarti, Exploring Early India: Upto 1300 A.D., Ratna Sagar, New Delhi, 2016.
- 10. R.C. Majumdar. et. al.(ed), The History and Culture of the Indian People (Vols I- VI), Bharatiya Vidya Bhawan Series, Delhi, 1945-1960, latest editions

# BA I SEMESTER

# History 102

# Paper-II (MAJOR)

# Aspects of Ancient India (2500BCE -1206 CE)

(Credits: 4)

# **Course specific outcome:**

After studying this course:

- 1. Students will learn about the sources of ancient Indian history, Paleolithic, Mesolithic, Neolithic cultures and Harappan Civilization
- 2. Students will learn about the Vedic Age, Jainism, Buddhism, rise of Mahajanapadas and the Macedonian invasion of India.
- 3. Students will learn about the Mauryan, Kushana, Satavahana and Gupta history, Harshavardhana.

## **Course Content:**

## Unit A

- 1. Sources literary and archaeological
- 2. Harappan Civilization-origin, distribution, features and decline.
- 3. Vedic Age: Social, Political, Economic life of the Early Vedic Aryans and Later Vedic Aryans.
- 4. Jainism, Buddhism: Life & Teachings of Mahavira & Gautama Buddha

# Unit B

- 1. Mahajanpadas
- 2. Macedonian invasion- causes and impact.
- 3. The Mauryas: Conquests & achievements of Chandragupta Maurya and Ashoka,
- 4. Causes of decline of the Mauryan Empire,

# Unit C

- 1. Kushanas: Kanishka-conquests & achievements,
- 2. The Satavahanas: Gautamiputra Satakarni
- 3. The Gupta period: foundation, Chandragupta and Samudragupta.
- 4. Cultural life during the Gupta period

# Unit: D

- 1. Harshavardhana: emergence and estimate.
- 2. South India: Sangam Age, Pallava art and architecture;
- 3. The Cholas: political history
- 4. The Tripartite Struggle: Palas, Pratiharas and Rashtrakutas

- 1. Upinder Singh, A History of Ancient and Early Medieval India, Pearson, New Delhi, 2008.
- 2. Irfan Habib, A People's History of India relevant volumes, Tulika Books
- 3. R.S. Sharma, India's Ancient Past, Oxford University Press, New Delhi, 2009.
- 4. Ranabir Chakravarti, Exploring Early India: Upto 1300 A.D., Ratna Sagar, New Delhi, 2016.
- 5. Romila Thapar, A History of India, Vol I, Penguin Books, New Delhi, 1996 (Reprint)
- 6. Romila Thapar, Early India From the Origins to AD 1300, Penguin Books, New Delhi, 2002.
- 7. Romila Thapar, Asoka and the Decline of the Mauryas, Oxford University Press (3<sup>rd</sup> Edition), New Delhi, 2012.
- 8. A.L. Basham, The Wonder that was India, Rupa & Co, New Dehi, 2002 (Reprint).
- 9. R.C. Majumdar. et. al.(ed), The History and Culture of the Indian People (Vols I- VI), Bharatiya Vidya Bhawan Series, Delhi, 1945-1960, latest editions.
- 10. D.N. Jha, Ancient India in Historical Outline, Manohar Publishers, New Delhi, 2020.
- 11. K.A. Nilkantha Shastri, A History of South India, OUP, Delhi, 1966

# Books in Bengali:

- 1. P.Maity, Prachin Bharater Itihas, Sreedhar Prakashani
- 2. Dr.Ratan Kumar Biswas, Prachin Bharater Itihas (1st & 2nd Volume) Kolkata: Progressive Book forum
- 3. Ranabir Chakraborty, Bharat Itihaser Adiparva, Orient Blackswan
- 4. Subodh Kumar Mukhupadhayay, Prachin Bharat, Progressive Publisher
- 5. Nikhilesh Guha and Madhumita Baidik: Bharater Itihaser Porbantar (Kolkata: Setu)
- 6. Amit Bhattacharyya : Prachin Bharater Itihas ( 1<sup>st</sup> Volume) ( Kolkata: Setu)
- 7. Ashok Roy and Subrata Roy: Bharater Itihas: prakoitihas jug theke sorasha kristabda (Progressive Publishers)
- 8. Gopal Chandra Sinha: Bharatbarsher Itihas (2 Volumes), (Kolkata: Progressive publishers)
- 9. Teslim Choudhury: Bharater Itihas, Adi Madhya theke madhyajug (Progressive)

# B.A II Semester History 201 Paper-III (MAJOR)

# Aspects of Medieval India (1206 CE- 1757 CE) (Credits: 4)

# **Course specific outcome:**

After studying this course:

- 1. Students will learn about the history of the Delhi Sultanate period and Vijayanagar and Bahamani kingdoms.
- 2. The course provides information about sources of Mughal India.
- 3. It discusses the Mughal and Afghan fight for supremacy in India and analyses the administration of Sher Shah Suri as well as that of the various policies under the various kings of Mughal India like Babur, Humayun, Akbar, Jahangir, Shah Jahan and Aurangazeb.
- 4. Students will learn about the rise of the Marathas, Bhakti and Sufi Movements.

## **Course Content:**

#### Unit: A

- 1. The Arab Invasion of India: Causes and Impact.
- 2. Sources of Delhi Sultanate.
- 3. The Beginnings of the Delhi Sultanate: The political history of the Slave dynasty.
- 4. The Khaljis and the Tughlags.

#### UNIT B

- 1. The Rise of the Vijayanagar kingdom.
- 2. The Rise of the Bahamani kingdoms.
- 3. The Revenue (Iqta) System of the Delhi Sultanate.
- 4. The Market Policy of Alauddin Khalji.

# UNIT C

- 1. The Decline of the Delhi Sultanate.
- 2. Sources of Mughal History.
- 3. Mughal-Afghan contest for supremacy. Sher Shah's administrative reforms.
- 4. Establishment ,Expansion and consolidation of the Mughal Rule: Babur, Akbar, Aurangzeb

# UNIT D

- 1. The Rise of the Marathas: role of Shivaji, Mughal Maratha Conflict
- 2. Sufi and Bhakti traditions,
- 3. Growth of Sikhism.
- 4. The Decline of the Mughal Empire-causes

- 1. Satish Chandra, History of Medieval India, Orient Blackswan, New Delhi, 2009
- 2. Satish Chandra, Medieval India: From Sultanate to the Mughal-Delhi Sultanate Part I, Har Anand Publications, New Delhi, 1997.
- 3. Vipul Singh, Interpreting Medieval India, Vol. I, Laxmi Publications, New Delhi, 2009.
- 4. Salma Ahmed Farooqui, A Comprehensive History of India Vol. V, 1206-1526: The Delhi Sultanate, PPH, Delhi, 1987.
- 5. Aniruddha Ray, The Sultanate of Delhi (1206-1526), Manohar Publishers, New Delhi, 2019
- 6. B. Jackson: The Delhi Sultanate (Cambridge, Foundation Books)
- 7. Irfan Habib: Medieval India, NBT

- 1. Subodh Kumar Mukhopadhyay, Aadi Madhyujug o Modhujuger Itihas, Progressive Publishers.
- 2. Anirudhha Roy: Mughal Samrajyer Utthan Pataner Itihas, (Kolkata: Progressive)
- 3. Subodh Kumar Mukhopadhyay, Mughal Smrajya theke British Raj, Kolkata: Progressive Publishers.
- 4. P. Maity, Bharat Itihash Parikroma, Sridhar Publishers.
- 5. Teslim Choudhury: Bharater Itihas: Mughal jug theke adhunik juge uttaran ( Progressive)
- 6. Gorishankar Dey: Bharater Itihas: Turko Afghan Jug (Kolkata: Progressive)
- 7. Soumitra Srimani: Sultani Rajattya kale Bharat (Kolkata: Progressive)
- 8. Irfan Habib : Madhyajuger Bharat (NBT)

# B.A II Semester History 202 Paper-IV (MAJOR)

# Aspects of Modern India (1757 CE-1947 CE) (Credits: 4)

# **Course specific outcome:**

# After studying this course:

- 1. The course will also analyze the developments leading to the coming of the English East India Company and how it consolidated its position in India
- 2. Students will learn about the Revolt of 1857.
- 3. The students will get a glimpse of the economic experience of India under the colonial rule.
- 4. The students will get a basic idea about the different aspects of the National Movement in India.

#### **Course Content:**

#### UNIT A:

- 1. Arrival of European companies: Rivalry for Control in the Carnatic
- 2. Ascendancy of English East India Company: Battle of Buxar and Plassey; Their effects
- 3. Anglo Maratha, Anglo- Mysore and Anglo- Sikh relations
- 4. Revolts of 1857 causes, nature and impact.

# UNIT-B

- 1. Land revenue settlements: Permanent and Ryotwari
- 2. Progress of English Education- Macualey's Minute
- 3. Socio-religious reform movements: Young Bengal, Rammohun Roy, Vidyasagar
- 4. Vivekananda and Sir Syed Ahmad Khan.

## UNIT C

- 1. Drain of Wealth
- 2. Deindustrialization of traditional industries:
- 3. Emergence of modern industries and transportation facilities-iron and Steel and railways.
- 4. Government of India Acts of 1909 and 1919

# Unit: D

- 1. Indian National Congress formation, Moderates and Extremists,
- 2. Swadeshi Movement.
- 3. Gandhian Movements: Non-cooperation, Civil Disobedience, Quit India Movements; women's participation.
- 4. B. R. Ambedkar; Subhash Chandra Bose and his role, Circumstances leading to the partition of India.

- 1. Sumit Sarkar, Modern Times: India 1880s to 1950s, Permanent Black: Ranikhet, 2014.
- 2. Ishita Bannerjee-Dube, A History of Modern India, Cambridge University Press, 2014.
- 3. Bipan Chandra, India's Struggle for Independence 1857-1947, Penguin, 2016
- 4. Bipan Chandra, Amlesh Tripathi and Barun De: Modern India, NBT
- 5. Shekhar Bandopadhyaya, From Plassey to Partition, Orient Blackswan Private Limited, New Delhi

# Bengali books:

- 1. Ratan Kumar Biswas : Adhunik Bharater Itihas ( 2 volumes) ( Kolkata: Progressive Book Forum)
- 2. Suchibrata Sen and Amiya Ghosh: Adhunik Bharat 1885-1964 (Kolkata: Progressive Publishers)
- 3. Subodh Kumar Mukhopadhyay : Adhunik Bharat Palashi theke Nehru ( Kolkata: Progressive publishers)
- 4. Teslim Choudhury: Bharater Itihas: Adhunik Jug (1707-1964) (Kolkata: Progressive)

# B.A III Semester History 301 Paper-V(MAJOR)

# RISE OF THE MODERN WEST, MID 15TH TO LATE 18TH CENTURIES (Credits: 4)

# Course specific outcome:

After studying this course:

- 1. Students will learn about the decline of feudalism and onset of modernity in Europe
- 2. Students will learn about the important markers of modern world such as renaissance, religious reformation, nation states etc.
- 3. Students will have detailed knowledge about two major causes of transformation of Europe and they are the Industrial Revolution and the French Revolution.
- 4. Students will also learn about growth of both parliamentary democracy in England and royal absolutism in France

# **Course Content:**

#### UNIT-A:

- 1. Crisis and decline of Feudalism in Western Europe
- 2. Rise of absolute monarchies in England: reasons
- 3. Rise of absolute monarchies in France and Spain: Reasons
- 3. Thirty Years' War and Treaty of Westphalia- causes and significance.

#### **UNIT-B**:

- 1. Renaissance: Meaning, causes, nature, spread, limitations; growth of Humanism.
- 2. Reformation: origin, course, varieties, significance; Counter Reformation
- 3. Printing Revolution –impact
- 4. Geographical Explorations: motives and early voyages and beginnings of colonialism with special reference to Spain, Portugal

# UNIT-C:

- 1. Price Revolution: causes, nature and impact
- 2. Industrial Revolution in England: background and features.
- 3. Challenge to colonialism: American War of Independence- causes and significance.
- 4. Eighteenth century as Ag of Enlightenment: Features

# UNIT-D:

- 1. Political patterns- I: conflict between parliament and Crown in England in the 17th century; Glorious Revolution of 1688,
- 2. Growth of liberalism
- 3. Political patterns-II: Royal Absolutism in France, Louis XIV and his policies.
- 4. French Revolution: background, nature, course (1789-1799) and impact.

# **SUGGESTED READINGS:**

- 1. Rodney Hilton: Transition from Feudalism to Capitalism (Aakar Books, 2006)
- 2. J.D. Bernal: Science in History
- 3. Euan Cameron (ed.): Early Modern Europe: An Oxford History (OUP, Indian edition)
- 4. Eugene F. Rice and Anthony Grafton: The Foundations of Early Modern Europe, 1460-1559 (WW Norton & Company, Indian Edition)
- 5. Richard Dunn: The Age of Religious Wars, 1559-1715 (WW Norton & Company, Indian Edition)
- 6. Arvind Sinha: Europe in Transition: From Feudalism to Industrialism (Manohar)
- 7. Rila Mukherjee: Europe Transformed (Progressive)
- 8. Meenakshi Phukan: Rise of Modern West (Macmillan)
- 9. P. Deane: The First Industrial Revolution (Cambridge, Indian edition)
- 10. B.V. Rao: History of Europe, 1453-1815 (Sterling)
- 11. L. Mukherjee: A Study of European History 1453-1815 (J.N. Ghosh and Sons, Kolkata)
- 12. C.J. H. Hayes: Modern Europe to 1870 (Surject Publications)
- 13. Perry Anderson: Lineages of the Absolutist States (Verso)
- 14. K.C. Choudhury: British History (New Central Book Agency)
- 15. J.R. Tanner: English Constitutional Conflicts of the Seventeenth century (Cambridge)
- 16. Henry Bamford Parkes: A History of United States of America (Khosla Publishing House)

- 17. Bashobendra Basu, Adhunik Europer Biborton, Progressive Publishers.
- 18. Pulakesh Roy and Sayantan Das : L Uttaraner Pathe Europe ( Kolkata: Progressive Publishers)
- 19. Reela Mukherjee, Rupantorito Europe, Progressive Publishers.
- 20. Nirmal Chandra Datta : Madhyajug theke Europer Adhunikatay Uttaran, Progressive Publishers.
- 21. Ujjaal Roy: Bibartaner Pathe Europe (15-17 satabdi) (Kolkata: Setu)

# B.A III Semester History 302

# Paper-VI (MAJOR)

# MODERN EUROPE AND THE WORLD: C. 1800 A.D.-1939A.D. (Credits: 4)

# Course specific outcome:

After studying this course:

- 1. Students will learn about Napoleon Bonaparte, Politics of Conservatism, the Revolution of 1830 & 1848.
- 2. Students will learn about Nationalism in Europe, the Eastern Question, Russia in 1917 and about the American Civil War.
- 3. Students will have detailed knowledge about two major causes of the World War and the Post-War Crisis.
- 4. Students will also learn about growth of Industrialisation in Europe, Utopian and Marxian Socialism, Rise of Working Class and working Class Movement and about the Rise of new Imperialism.

#### **Course content:**

#### UNIT-A:

- 1. Napoleon Bonaparte: Rise, Reforms, Downfall and Assessment.
- 2. Politics of Conservatism: Congress of Vienna and Metternich System
- 3. The July Revolution of 1830: Causes and Results
- 4. The February Revolution of 1848: Causesand Results

## UNIT-B:

- 1. Nationalism in Europe: Unification of Italy- Mazzini, Garibaldi and Cavour; Unification of Germany-Role of Bismarck and his Diplomacy till 1890.
- 2. The Eastern Question: Background and Nature; Balkan Wars.
- 3. The Russian Revolution of 1917:Background and Impact.
- 4. American Civil War: Causes, Impact; Role of Abraham Lincoln

#### UNIT-C:

- 1. First World War: Background, Impact; Versailles Settlement- Assessment
- 2. Post War Crisis I- Economic Depression of 1929: Causes and Impact; Rise of Totalitarian Regimes in Germany, Italy
- 3. League of Nations: Formation and Performance.
- 4. Origins and impact of the Second World War

# UNIT-D:

- 1. Industrialisation in Europe: Differences between England and the Continent.
- 2. Utopian and Marxian Socialism.
- 3. Rise of Working Class and Working Class movement.
- 4. Rise of new Imperialism: Causes; Scramble for Africa

# **SUGGESTED READINGS:**

- 1. David Thomson: Europe Since Napoleon (Penguin),
- 2. E. Lipson: Europe in the 19<sup>th</sup> and 20<sup>th</sup> Centuries (Allied Publishers)
- 3. A.J.P. Taylor: The Struggle for Mastery in Europe (OUP)
- 4. A.J. P. Taylor: Origins of the Second World War
- 5. Georges Lefebvre: The Coming of the French Revolution (Routledge India)
- 6. E.H. Carr: International Relations between the Two World wars,1919-1939 (Palgrave)
- 7. David S. Mason: A Concise History of Modern Europe (Orient Blackswan)
- 8. L. Mukherjee: A Study of modern Europe and the World (J.N. Ghosh and Sons)
- 9. Ranjan Chakraborty: A History of the Modern World, An Outline (Primus Books)
- 10. B.V. Rao: History of Modern Europe, 1789-2010 (Sterling)
- 11. James Joll: Europe Since 1870 (Penguin)
- 12. C.J. Hayes: Modern Europe to 1870 (Surject Publications)
- 13. C.J. Hayes: Modern Europe since 1870 (Surject Publications)
- 14. Henry Bamford Parkes: A History of United States of America (Khosla Publishing House)

- 15. P.Maity, Europer O Viswa Itihas, (Sreedhar Prakashani)
- 16. Samar Kumar Mallik, Noboruper Europe, (West Bengal Publisher)
- 17. Samar Kumar Mallik, Europer Biplober Kal, (West Bengal Publisher)
- 18. Subodh Kumar Mukhopadhyay : Adhunik Europe ( Progressive)
- 19. Chitra Adhikari : Adhunik Europe ( Progressive)
- 20. Sidharta Guha Roy: Adhunik Europe (Progressive)
- 21. Mrinal Kanti Chattopadhyay: Europer Itihas 1789-1945 (Progressive Book Forum)

# B.A IV Semester History 401 Paper-VII (MAJOR)

# HISTORY OF NORTH –EAST INDIA, 1826 A.D.-1949 A.D. (Credits: 4)

# Course specific outcome:

# After studying this course:

- 1. Students will know about the First Anglo- Burmese War, the British annexation policy in Northeast India, British relation with Manipur and the Economic Changes under British rule in Northeast India.
- 2. Students will know about the growth of National Movement in Assam.
- 3. The student will learn about the Princely Tripura, British relation with Chakla Roshanabad and Hill Tripura, Resistance Movements in the 19<sup>th</sup> century and about Revolt of 1857 and Tripura.
- 4. Students will learn about the Social and political movements in Tripura, Rabindranath Tagore, World War I & II and its impact in Tripura and about integration of Tripura to Indian Union

# **Course Content:**

#### UNIT-A:

- 1. First Anglo- Burmese War and the Treaty of Yandaboo;
- 2. British annexation of Cachar, Khasi, Naga and Mizo Hills.
- 3. British relation with Manipur till 1891
- 4. Economic Changes under British rule: Tea Plantation and Railways.

#### UNIT-B:

- 1. Spread of western education and cultural awakening in Assam-press, literature and organisations-Jorhat Sarbajonik Sabha
- 2. Revolt of 1857 and Assam;
- 3. Non-Cooperation, Civil Disobedience and Quit India Movements in Assam.
- 4. Cabinet Mission and Independence; Integration of Manipur into the IndianUnion.

# UNIT-C:

- 1. British relation with Hill Tripura;
- 2. Appointment of Political Agent.
- 3. Resistance Movements in the 19<sup>th</sup> century- Tipra (1850), Kuki (1860-61), Jamatia (1863).
- 4. Revolt of 1857 and Tripura

## UNIT-D:

- 1. Era of modernisation and reformative measures Birchandra Manikya.
- 2. Reang Uprising and Janashiksha Movement
- 3. Rabindranath Tagore and Tripura; Contribution of Princely Court towards development of Bengali language and literature.
- 4. World War I & II and Tripura; integration of Tripura to Indian Union

# **SUGGESTED READINGS:**

- 1. Edward Gait: A History of Assam (Eastern Book House)
- 2. Priyam Goswami: A History of Assam(Orient Blackswan)
- 3. H.K. Barpujari: Assam in the Days of the Comapany (NEHU)
- 4. H.K. Barpujari: Political History of Assam Vol-I (Assam Publication Board)
- 5. A.C. Bhuyan: Political History of Assam, Vols II and III (Assam Publication Board)
- 6. R. M. Lahiri: Annexation of Assam (Firma KLM)
- 7. Amalendu Guha: Planter Raj to Swaraj (Tulika)
- 8. Jyotirmoy Roy: A History of Manipur (Firma KLM)
- 9. David Syiemlieh: British Adminisaration in Meghalaya (Heritage)
- 10. Piketo Sema: British Policy and Administration in Nagaland (Scholar)
- 11. C. Nunthra: Mizoram: Society and Polity (Indus)
- 12. N.R. Roychudhury: Tripura Through the Ages (Sterling)
- 13. H.K. Sur: British Relations with the State of Tripura (Naba Chandana)
- 14. Banikantha Bhattacharjee: Tripura Administration (Mittal)
- 15. Dipak Kumar Choudhury: Political Agents and native Raj (Mittal)
- 16. Ranjit Kumar De: Socio-political Movement in India: A Historical Study of Tripura (Mittal)
- 17. Lincoln Reang, History of the Reang (Bru), Eastern Book House, Guwahati.

- 18. Mahadev Chakraborty, Assamer Itihas (In two volume), (Progresive Publisher)
- 19. Mahadev Chakrabarti : Uttarpurba : Sedin o Aaaj ( Progressive Publishers)
- 20. Dipak Choudhury, Tripurer Orthonitik Itihas, (Gyan Bichitra)
- 21. Dipak Choudhury, Political Agent O Deshiyo Rajyo, (Progresive Publisher)
- 22. Nalini Ranjan Ray Choudhury, Manikyo Sashanadhine Tripura, (Gyan Bichitra)
- 23. Hiren Kumar Sur: Assam o Tripurar Itihas (Parul Prakashani)
- 24. Dwijendra Goswami: Adhunik Tripura : Prasanga Maharaja Birchandra Manikya ( Aksar Prakhasani)
- 25. Dwijendra Goswami: AdhunikTripura: Prasanga Maharaja Radha Kishore Manikya( Aksar Prakhasani)
- 26. Dwijendra Goswami: Adhunik Tripura: Prasanga Maharaja Birendra Kishore Manikya( Aksar Prakhasani)
- 27. Dwijendra Goswami: Adhunik Tripura: Prasanga Maharaja Bir Bikram Kishore Manikya (Aksar Prakhasani)

# B.A IV Semester History 402 Paper-VIII (MAJOR)

# HISTORY OF CHINA AND JAPAN, C.1840 A.D. - 1949 A.D. (Credits: 4)

# Course specific outcome:

# After studying this course:

- 1. Students will know about the rise and transformation of Japan and China in the 19th and 20 centuries.
- 2. Students will know about the growth of nationalism and communism in China.
- 3. The student will learn about the process of modernisation experienced by Japan and how Japan became a modern industrialised country.
- 4. Students will learn about the role of China and Japan during the Second World War.

#### **Course Content:**

#### UNIT-A:

- 1. Chinese society and economy in the pre modern world; influence of Confucius
- 2. European expansion and opening of China: Opium Wars and Unequal treaties
- 3. Response of the Chinese: Taiping Rebellion, Hundred Days' Reform, Boxer Rebellion
- 4. Revolution of 1911: causes and results, role of Sun Yat Sen;

# UNIT-B:

- 1. May Fourth Movement.
- 2. Kuomintang and the 1<sup>st</sup> United Front; politics of warlordism.
- 3. Chinese Communist party: origin & growth; Role of Mao Tse Tung.
- 4. Chinese Revolution of 1949- causes and significance

# UNIT-C:

- 1. Society, economy and polity under Tokugawa Shogunate;
- 2. The Perry Mission and Opening of Japan, decline of Shogunate
- 3. Meiji Restoration; Meiji constitution of 1889.
- 4. Modernisation of Japan under Meijis- features and impact

## UNIT-D:

- 1. Sino-Japanese War (1894), Anglo-Japanese Alliance (1902), Russo-Japanese War (1904-05)
- 2. Rise of Japanese militarism-causes;
- 3. Manchurian crisis-causes, international repercussion.
- 4. Japan and Second World War.

# **SUGGESTED READINGS:**

- 1. H. M. Vinacke: History of far East in Modern Times (kalyani)
- 2. Archana Tewari: The History of China and Japan (Pearson India)
- 3. James McClain: Japan: A Modern History (WW Norton & Co.)
- 4. Amit Bhattacharyya: Transformation of Japan ( Setu)
- 5. Amit Bhattacharyya: Transformation of China ( Setu)
- 6. J.K. Fairbank and M. Goldman: China: A New History (Prentice Hall India)
- 7. Immanuel Hsu: The Rise of Modern China (OUP)

- 8. Dr. Ratan Kr. Biswas, Adhunik Purba Asia Uthan O Rupantor, Progresive Book Forum
- 9. Sidharth Guha Ray, Adhunik Purba Asia Chin O Japaner Itihas, Progresive Publishers
- 10. Amit Bhattacharyya: Japaner Rupantarer Itihas (Kolkata: Setu Prakashani)
- 11. Amit Bhattacharyya: Chinar Rupantarer Itihas (Kolkata: Setu Prakashani)
- 12. Mrinal Kanti Chattopadhyay : Chin o Japaner Itihas ( Kolkata: Progressive)

# TRIPURA UNIVERSITY

# **SYLLABUS**

**FOR** 

# UNDER GRADUATE IN HISTORY (SEMESTERS-I TO VIII)

MINOR( ELECTIVE)

**CBCS PATTERN (NEP-2020)** 

# TRIPURA UNIVERSITY

# UNDER GRADUATE SYLLABUS IN HISTORY

# MINOR (ELECTIVE)

SEMESTER	PAPER	NAME OF PAPER	CREDIT
I	I	IDEA OF BHARATA	04
II	II	ANCIENT INDIA ( 2500BCE-1206CE)	04
III	III	MEDIEVAL INDIA ( 1206 CE-1757 CE)	04
IV	IV	MODERN INDIA (175CE-1947 CE)	04
V	V	RISE OF THE MODERN WEST, MID 15TH TO LATE 18TH CENTURIES	04
VI	VI	MODERN EUROPE AND THE WORLD: C. 1800 A.D1939A.D.	04
VII	VII	HISTORY OF NORTH –EAST INDIA, 1826 A.D1949 A.D.	04
VIII	VIII	HISTORY OF CHINA AND JAPAN, C.1840 A.D 1949 A.D.	04

# BA I SEMESTER History Paper-I (MINOR) The Idea of Bharata (Credits: 4)

# **Course Specific Outcome:**

After studying this course:

- 1. Students will acquire knowledge regarding the cultural life of the people of ancient India
- 2. They can gather knowledge about the society, religion and political life of ancient India.
- 3. They will also acquire the knowledge of scientific traditions in ancient India.

## **Course Content:**

# <u>UNIT</u> A

- 1. Concept of Unity in Diversity
- 2. Indian concept of time and space
- 3. The glory of Indian Literature: Ved, Vedanga, Upanishads, Epics, Jain and Buddhist Literature, Smriti, Puranas Etc.
- 4. Evolution of language and Script: Brahmi, Kharoshiti, Pali, Prakrit, Sanskrit

# <u>UNIT B</u>

- 1. Salient features of Indian Art & Architecture
- 2. Indian Society: family, marriage and other institutions
- 3. Indian educational system
- 4. Philosophical systems in Ancient India

# <u>UNIT C</u>

- 1. Polity and governance in ancient India: Mauryas and Guptas
- 2. The concept of Janapada & Gram Swarajya
- 3. Indian economic thoughts: kautilya
- 4. Maritime Trade

# UNIT D

- 1. Science and Technology in Ancient India
- 2. Environmental conservation: Indian View
- 3. Health consciousness of (Science of Life): Ayurveda Yoga and Naturopathy,
- 4. Indian numeral system and Mathematics.

- 1. A.l Basham: The Wonder that was India, Rupa, Delhi 1994
- 2. A.S Altekar, Education in Ancient India, Nand Kishore & Bros, Varanasi 1944
- 3. Balbir Singh Sihag: Kautilya: The true founder of Economics, Vitasta Publishing Pvt. Ltd, Delhi, 2014
- 4. Dharampal: The Beautiful Tree, Other India press, Delhi 1995
- 5. Faith Robertson Elliott: Gender Family and Society, St. Martin press, New York, 1996
- 6. Radha Kumud Mookerji: Indian Shipping, Pub. South Asia Books, 1999
- 7. R.K Mookherjee: The Fundamental Unity of India
- 8. Upinder Singh: A History of Ancient and Early Medieval India, Pearson, New Delhi, 2008.
- 9. Ranabir Chakravarti, Exploring Early India: Upto 1300 A.D., Ratna Sagar, New Delhi, 2016.
- 10. R.C. Majumdar. et. al.(ed), The History and Culture of the Indian People (Vols I- VI), Bharatiya Vidya Bhawan Series, Delhi, 1945-1960, latest editions

# **BA II SEMESTER**

# History

# Paper-II (MINOR)

# Ancient India (2500BCE -1206 CE)

(Credits: 4)

# Course specific outcome:

*After studying this course:* 

- 1. Students will learn about the sources of ancient Indian history, Paleolithic, Mesolithic, Neolithic cultures and Harappan Civilization
- 2. Students will learn about the Vedic Age, Jainism, Buddhism, rise of Mahajanapadas and the Macedonian invasion of India.
- 3. Students will learn about the Mauryan, Kushana, Satavahana and Gupta history, Harshavardhana.

# **Course Content:**

## Unit A

- 1. Sources literary and archaeological
- 2. Harappan Civilization-origin, distribution, features and decline.
- 3. Vedic Age: Social, Political, Economic life of the Early Vedic Aryans and Later Vedic Aryans.
- 4. Jainism, Buddhism: Life & Teachings of Mahavira & Gautama Buddha

## Unit B

- 1. Mahajanpadas
- 2. Macedonian invasion- causes and impact.
- 3. The Mauryas: Conquests & achievements of Chandragupta Maurya and Ashoka,
- 4. Causes of decline of the Mauryan Empire,

#### Unit C

- 1. Kushanas: Kanishka-conquests & achievements,
- 2. The Satavahanas: Gautamiputra Satakarni
- 3. The Gupta period: foundation, Chandragupta and Samudragupta.
- 4. Cultural life during the Gupta period

# Unit: D

- 1. Harshavardhana: emergence and estimate.
- 2. South India: Sangam Age, Pallava art and architecture;
- 3. The Cholas: political history
- 4. The Tripartite Struggle: Palas, Pratiharas and Rashtrakutas

- 1. Upinder Singh, A History of Ancient and Early Medieval India, Pearson, New Delhi, 2008.
- 2. Irfan Habib, A People's History of India relevant volumes, Tulika Books
- 3. R.S. Sharma, India's Ancient Past, Oxford University Press, New Delhi, 2009.
- 4. Ranabir Chakravarti, Exploring Early India: Upto 1300 A.D., Ratna Sagar, New Delhi, 2016.
- 5. Romila Thapar, A History of India, Vol I, Penguin Books, New Delhi, 1996 (Reprint)
- 6. Romila Thapar, Early India From the Origins to AD 1300, Penguin Books, New Delhi, 2002.
- 7. Romila Thapar, Asoka and the Decline of the Mauryas, Oxford University Press (3<sup>rd</sup> Edition), New Delhi, 2012.
- 8. A.L. Basham, The Wonder that was India, Rupa & Co, New Dehi, 2002 (Reprint).
- 9. R.C. Majumdar. et. al.(ed), The History and Culture of the Indian People (Vols I- VI), Bharatiya Vidya Bhawan Series, Delhi, 1945-1960, latest editions.
- 10. D.N. Jha, Ancient India in Historical Outline, Manohar Publishers, New Delhi, 2020.
- 11. K.A. Nilkantha Shastri, A History of South India, OUP, Delhi, 1966

# Books in Bengali:

- 1. P.Maity, Prachin Bharater Itihas, Sreedhar Prakashani
- 2. Dr.Ratan Kumar Biswas, Prachin Bharater Itihas (1<sup>st</sup> & 2<sup>nd</sup> Volume) Kolkata: Progressive Book forum
- 3. Ranabir Chakraborty, Bharat Itihaser Adiparva, Orient Blackswan
- 4. Subodh Kumar Mukhupadhayay, Prachin Bharat, Progressive Publisher
- 5. Nikhilesh Guha and Madhumita Baidik: Bharater Itihaser Porbantar (Kolkata: Setu)
- 6. Amit Bhattacharyya: Prachin Bharater Itihas (1st Volume) (Kolkata: Setu)
- 7. Ashok Roy and Subrata Roy: Bharater Itihas: prakoitihas jug theke sorasha kristabda (Progressive Publishers)
- 8. Gopal Chandra Sinha: Bharatbarsher Itihas (2 Volumes), (Kolkata: Progressive publishers)
- 9. Teslim Choudhury: Bharater Itihas, Adi Madhya theke madhyajug (Progressive)

# B.A III Semester History Paper-III (MINOR)

# Medieval India (1206 CE- 1757 CE) (Credits: 4)

# Course specific outcome:

After studying this course:

- 1. Students will learn about the history of the Delhi Sultanate period and Vijayanagar and Bahamani kingdoms.
- 2. The course provides information about sources of Mughal India.
- 3. It discusses the Mughal and Afghan fight for supremacy in India and analyses the administration of Sher Shah Suri as well as that of the various policies under the various kings of Mughal India like Babur, Humayun, Akbar, Jahangir, Shah Jahan and Aurangazeb.
- 4. Students will learn about the rise of the Marathas, Bhakti and Sufi Movements.

# **Course Content:**

## Unit: A

- 1. The Arab Invasion of India: Causes and Impact.
- 2. Sources of Delhi Sultanate.
- 3. The Beginnings of the Delhi Sultanate: The political history of the Slave dynasty.
- 4. The Khaljis and the Tughlags.

#### UNIT B

- 1. The Rise of the Vijayanagar kingdom.
- 2. The Rise of the Bahamani kingdoms.
- 3. The Revenue (Iqta) System of the Delhi Sultanate.
- 4. The Market Policy of Alauddin Khalji.

# UNIT C

- 1. The Decline of the Delhi Sultanate.
- 2. Sources of Mughal History.
- 3. Mughal-Afghan contest for supremacy. Sher Shah's administrative reforms.
- 4. Establishment ,Expansion and consolidation of the Mughal Rule: Babur, Akbar, Aurangzeb

#### UNIT D

- 1. The Rise of the Marathas: role of Shivaji, Mughal Maratha Conflict
- 2. Sufi and Bhakti traditions,
- 3. Growth of Sikhism.
- 4. The Decline of the Mughal Empire-causes

- 1. Satish Chandra, History of Medieval India, Orient Blackswan, New Delhi, 2009
- 2. Satish Chandra, Medieval India: From Sultanate to the Mughal-Delhi Sultanate Part I, Har Anand Publications, New Delhi, 1997.
- 3. Vipul Singh, Interpreting Medieval India, Vol. I, Laxmi Publications, New Delhi, 2009.
- 4. Salma Ahmed Farooqui, A Comprehensive History of India Vol. V, 1206-1526: The Delhi Sultanate, PPH, Delhi, 1987.
- 5. Aniruddha Ray, The Sultanate of Delhi (1206-1526), Manohar Publishers, New Delhi, 2019
- 6. B. Jackson: The Delhi Sultanate (Cambridge, Foundation Books)
- 7. Irfan Habib: Medieval India, NBT

- 1. Subodh Kumar Mukhopadhyay, Aadi Madhyujug o Modhujuger Itihas, Progressive Publishers.
- 2. Anirudhha Roy: Mughal Samrajyer Utthan Pataner Itihas, (Kolkata: Progressive)
- 3. Subodh Kumar Mukhopadhyay, Mughal Smrajya theke British Raj, Kolkata: Progressive Publishers.
- 4. P. Maity, Bharat Itihash Parikroma, Sridhar Publishers.
- 5. Teslim Choudhury: Bharater Itihas : Mughal jug theke adhunik juge uttaran ( Progressive)
- 6. Gorishankar Dey: Bharater Itihas: Turko Afghan Jug (Kolkata: Progressive)
- 7. Soumitra Srimani: Sultani Rajattya kale Bharat (Kolkata: Progressive)
- 8. Irfan Habib : Madhyajuger Bharat (NBT)

# B.A IV Semester History Paper-IV (MINOR)

# Modern India (1757 CE-1947 CE) (Credits: 4)

# **Course specific outcome:**

# After studying this course:

- 1. The course will also analyze the developments leading to the coming of the English East India Company and how it consolidated its position in India
- 2. Students will learn about the Revolt of 1857.
- 3. The students will get a glimpse of the economic experience of India under the colonial rule.
- 4. The students will get a basic idea about the different aspects of the National Movement in India.

# **Course Content:**

#### UNIT A:

- 1. Arrival of European companies: Rivalry for Control in the Carnatic
- 2. Ascendancy of English East India Company: Battle of Buxar and Plassey; Their effects
- 3. Anglo Maratha, Anglo- Mysore and Anglo- Sikh relations
- 4. Revolts of 1857 causes, nature and impact.

# **UNIT-B**

- 1. Land revenue settlements: Permanent and Ryotwari
- 2. Progress of English Education- Macualey's Minute
- 3. Socio-religious reform movements: Young Bengal, Rammohun Roy, Vidyasagar
- 4. Vivekananda and Sir Syed Ahmad Khan.

## UNIT C

- 1. Drain of Wealth
- 2. Deindustrialization of traditional industries;
- 3. Emergence of modern industries and transportation facilities-iron and Steel and railways.
- 4. Government of India Acts of 1909 and 1919

#### Unit: D

- 1. Indian National Congress formation, Moderates and Extremists,
- 2. Swadeshi Movement.
- 3. Gandhian Movements: Non-cooperation, Civil Disobedience, Quit India Movements; women's participation.
- 4. B. R. Ambedkar; Subhash Chandra Bose and his role, Circumstances leading to the partition of India.

- 1. Sumit Sarkar, Modern Times: India 1880s to 1950s, Permanent Black: Ranikhet, 2014.
- 2. Ishita Bannerjee-Dube, A History of Modern India, Cambridge University Press, 2014.
- 3. Bipan Chandra, India's Struggle for Independence 1857-1947, Penguin, 2016
- 4. Bipan Chandra, Amlesh Tripathi and Barun De: Modern India, NBT
- 5. Shekhar Bandopadhyaya, From Plassey to Partition, Orient Blackswan Private Limited, New Delhi

# Bengali books:

- 1. Ratan Kumar Biswas : Adhunik Bharater Itihas ( 2 volumes) ( Kolkata: Progressive Book Forum)
- 2. Suchibrata Sen and Amiya Ghosh: Adhunik Bharat 1885-1964 (Kolkata: Progressive Publishers)
- 3. Subodh Kumar Mukhopadhyay : Adhunik Bharat Palashi theke Nehru ( Kolkata: Progressive publishers)

# B.A III Semester History Paper V (MINOR)

# Paper-V (MINOR)

# RISE OF THE MODERN WEST, MID 15TH TO LATE 18TH CENTURIES (Credits: 4)

# Course specific outcome:

After studying this course:

- 1. Students will learn about the decline of feudalism and onset of modernity in Europe
- 2. Students will learn about the important markers of modern world such as renaissance, religious reformation, nation states etc.
- 3. Students will have detailed knowledge about two major causes of transformation of Europe and they are the Industrial Revolution and the French Revolution.
- 4. Students will also learn about growth of both parliamentary democracy in England and royal absolutism in France

#### **Course Content:**

## UNIT-A:

- 1. Crisis and decline of Feudalism in Western Europe
- 2. Rise of absolute monarchies in England: reasons
- 3. Rise of absolute monarchies in France and Spain: Reasons
- 3. Thirty Years' War and Treaty of Westphalia- causes and significance.

# **UNIT-B**:

- 1. Renaissance: Meaning, causes, nature, spread, limitations; growth of Humanism.
- 2. Reformation: origin, course, varieties, significance; Counter Reformation
- 3. Printing Revolution –impact
- 4. Geographical Explorations: motives and early voyages and beginnings of colonialism with special reference to Spain, Portugal

# **UNIT-C**:

- 1. Price Revolution: causes, nature and impact
- 2. Industrial Revolution in England: background and features.
- 3. Challenge to colonialism: American War of Independence- causes and significance.
- 4. Eighteenth century as Ag of Enlightenment: Features

#### UNIT-D:

- 1. Political patterns- I: conflict between parliament and Crown in England in the 17th century; Glorious Revolution of 1688,
- 2. Growth of liberalism
- 3. Political patterns-II: Royal Absolutism in France, Louis XIV and his policies.
- 4. French Revolution: background, nature, course (1789-1799) and impact.

# **SUGGESTED READINGS:**

- 1. Rodney Hilton: Transition from Feudalism to Capitalism ( Aakar Books, 2006)
- 2. J.D. Bernal: Science in History
- 3. Euan Cameron (ed.): Early Modern Europe: An Oxford History (OUP, Indian edition)
- 4. Eugene F. Rice and Anthony Grafton: The Foundations of Early Modern Europe, 1460-1559 (WW Norton & Company, Indian Edition)
- 5. Richard Dunn: The Age of Religious Wars, 1559-1715 (WW Norton & Company, Indian Edition)
- 6. Arvind Sinha: Europe in Transition: From Feudalism to Industrialism (Manohar)
- 7. Rila Mukherjee: Europe Transformed (Progressive)
- 8. Meenakshi Phukan: Rise of Modern West (Macmillan)
- 9. P. Deane: The First Industrial Revolution (Cambridge, Indian edition)
- 10. B.V. Rao: History of Europe, 1453-1815 (Sterling)
- 11. L. Mukherjee: A Study of European History 1453-1815 (J.N. Ghosh and Sons, Kolkata)
- 12. C.J. H. Hayes: Modern Europe to 1870 (Surject Publications)
- 13. Perry Anderson: Lineages of the Absolutist States (Verso)
- 14. K.C. Choudhury: British History (New Central Book Agency)
- 15. J.R. Tanner: English Constitutional Conflicts of the Seventeenth century (Cambridge)
- 16. Henry Bamford Parkes: A History of United States of America (Khosla Publishing House)

- 17. Bashobendra Basu, Adhunik Europer Biborton, Progressive Publishers.
- 18. Pulakesh Roy and Sayantan Das : L Uttaraner Pathe Europe ( Kolkata: Progressive Publishers)
- 19. Reela Mukherjee, Rupantorito Europe, Progressive Publishers.
- 20. Nirmal Chandra Datta : Madhyajug theke Europer Adhunikatay Uttaran, Progressive Publishers.
- 21. Ujjaal Roy: Bibartaner Pathe Europe (15-17 satabdi) (Kolkata: Setu)

# B.A IV Semester History Paper-VI (MINOR)

# MODERN EUROPE AND THE WORLD: C. 1800 A.D.-1939A.D. (Credits: 4)

# Course specific outcome:

After studying this course:

- 1. Students will learn about Napoleon Bonaparte, Politics of Conservatism, the Revolution of 1830 & 1848.
- 2. Students will learn about Nationalism in Europe, the Eastern Question, Russia in 1917 and about the American Civil War.
- 3. Students will have detailed knowledge about two major causes of the World War and the Post-War Crisis.
- 4. Students will also learn about growth of Industrialisation in Europe, Utopian and Marxian Socialism, Rise of Working Class and working Class Movement and about the Rise of new Imperialism.

#### Course content:

#### UNIT-A:

- 1. Napoleon Bonaparte: Rise, Reforms, Downfall and Assessment.
- 2. Politics of Conservatism: Congress of Vienna and Metternich System
- 3. The July Revolution of 1830: Causes and Results
- 4. The February Revolution of 1848: Causesand Results

#### UNIT-B:

- 1. Nationalism in Europe: Unification of Italy- Mazzini, Garibaldi and Cavour; Unification of Germany-Role of Bismarck and his Diplomacy till 1890.
- 2. The Eastern Question: Background and Nature; Balkan Wars.
- 3. The Russian Revolution of 1917:Background and Impact.
- 4. American Civil War: Causes, Impact; Role of Abraham Lincoln

# UNIT-C:

- 1. First World War: Background, Impact; Versailles Settlement- Assessment
- 2. Post War Crisis I- Economic Depression of 1929: Causes and Impact; Rise of Totalitarian Regimes in Germany, Italy
- 3. League of Nations: Formation and Performance.
- 4. Origins and impact of the Second World War

# UNIT-D:

- 1. Industrialisation in Europe: Differences between England and the Continent.
- 2. Utopian and Marxian Socialism.
- 3. Rise of Working Class and Working Class movement.
- 4. Rise of new Imperialism: Causes; Scramble for Africa

# **SUGGESTED READINGS:**

- 1. David Thomson: Europe Since Napoleon (Penguin),
- 2. E. Lipson: Europe in the 19<sup>th</sup> and 20<sup>th</sup> Centuries (Allied Publishers)
- 3. A.J.P. Taylor: The Struggle for Mastery in Europe (OUP)
- 4. A.J. P. Taylor: Origins of the Second World War
- 5. Georges Lefebvre: The Coming of the French Revolution (Routledge India)
- 6. E.H. Carr: International Relations between the Two World wars,1919-1939 (Palgrave)
- 7. David S. Mason: A Concise History of Modern Europe (Orient Blackswan)
- 8. L. Mukherjee: A Study of modern Europe and the World (J.N. Ghosh and Sons)
- 9. Ranjan Chakraborty: A History of the Modern World, An Outline (Primus Books)
- 10. B.V. Rao: History of Modern Europe, 1789-2010 (Sterling)
- 11. James Joll: Europe Since 1870 (Penguin)
- 12. C.J. Hayes: Modern Europe to 1870 (Surject Publications)
- 13. C.J. Hayes: Modern Europe since 1870 (Surject Publications)
- 14. Henry Bamford Parkes: A History of United States of America (Khosla Publishing House)

- 15. P.Maity, Europer O Viswa Itihas, (Sreedhar Prakashani)
- 16. Samar Kumar Mallik, Noboruper Europe, (West Bengal Publisher)
- 17. Samar Kumar Mallik, Europer Biplober Kal, (West Bengal Publisher)
- 18. Subodh Kumar Mukhopadhyay : Adhunik Europe ( Progressive)
- 19. Chitra Adhikari : Adhunik Europe ( Progressive)
- 20. Sidharta Guha Roy: Adhunik Europe (Progressive)
- 21. Mrinal Kanti Chattopadhyay: Europer Itihas 1789-1945 (Progressive Book Forum)

# B.A V Semester History Paper-VII (MINOR)

# HISTORY OF NORTH –EAST INDIA, 1826 A.D.-1949 A.D. (Credits: 4)

# Course specific outcome:

# After studying this course:

- 1. Students will know about the First Anglo- Burmese War, the British annexation policy in Northeast India, British relation with Manipur and the Economic Changes under British rule in Northeast India.
- 2. Students will know about the growth of National Movement in Assam.
- 3. The student will learn about the Princely Tripura, British relation with Chakla Roshanabad and Hill Tripura, Resistance Movements in the 19<sup>th</sup> century and about Revolt of 1857 and Tripura.
- 4. Students will learn about the Social and political movements in Tripura, Rabindranath Tagore, World War I & II and its impact in Tripura and about integration of Tripura to Indian Union

#### **Course Content:**

#### UNIT-A:

- 1. First Anglo- Burmese War and the Treaty of Yandaboo;
- 2. British annexation of Cachar, Khasi, Naga and Mizo Hills.
- 3. British relation with Manipur till 1891
- 4. Economic Changes under British rule: Tea Plantation and Railways.

# UNIT-B:

- 1. Spread of western education and cultural awakening in Assam-press, literature and organisations-Jorhat Sarbajonik Sabha
- 2. Revolt of 1857 and Assam;
- 3. Non-Cooperation, Civil Disobedience and Quit India Movements in Assam.
- 4. Cabinet Mission and Independence; Integration of Manipur into the IndianUnion.

# UNIT-C:

- 1. British relation with Hill Tripura:
- 2. Appointment of Political Agent.
- 3. Resistance Movements in the 19th century- Tipra (1850), Kuki (1860-61), Jamatia (1863).
- 4. Revolt of 1857 and Tripura

## UNIT-D:

- 1. Era of modernisation and reformative measures Birchandra Manikya.
- 2. Reang Uprising and Janashiksha Movement
- 3. Rabindranath Tagore and Tripura; Contribution of Princely Court towards development of Bengali language and literature.
- 4. World War I & II and Tripura; integration of Tripura to Indian Union

# **SUGGESTED READINGS:**

- 1. Edward Gait: A History of Assam (Eastern Book House)
- 2. Priyam Goswami : A History of Assam(Orient Blackswan)
- 3. H.K. Barpujari: Assam in the Days of the Comapany (NEHU)
- 4. H.K. Barpujari: Political History of Assam Vol-I (Assam Publication Board)
- 5. A.C. Bhuyan: Political History of Assam, Vols II and III (Assam Publication Board)
- 6. R. M. Lahiri: Annexation of Assam (Firma KLM)
- 7. Amalendu Guha: Planter Raj to Swaraj (Tulika)
- 8. Jyotirmoy Roy: A History of Manipur (Firma KLM)
- 9. David Syiemlieh: British Adminisaration in Meghalaya (Heritage)
- 10. Piketo Sema: British Policy and Administration in Nagaland (Scholar)
- 11. C. Nunthra: Mizoram: Society and Polity (Indus)
- 12. N.R. Roychudhury: Tripura Through the Ages (Sterling)
- 13. H.K. Sur: British Relations with the State of Tripura (Naba Chandana)
- 14. Banikantha Bhattacharjee: Tripura Administration (Mittal)
- 15. Dipak Kumar Choudhury: Political Agents and native Raj (Mittal)
- 16. Ranjit Kumar De : Socio-political Movement in India: A Historical Study of Tripura (Mittal)
- 17. Lincoln Reang, History of the Reang (Bru), Eastern Book House, Guwahati.

- 18. Mahadev Chakraborty, Assamer Itihas (In two volume), (Progresive Publisher)
- 19. Mahadev Chakrabarti : Uttarpurba : Sedin o Aaaj ( Progressive Publishers)
- 20. Dipak Choudhury, Tripurer Orthonitik Itihas, (Gyan Bichitra)
- 21. Dipak Choudhury, Political Agent O Deshiyo Rajyo, (Progresive Publisher)
- 22. Nalini Ranjan Ray Choudhury, Manikyo Sashanadhine Tripura, (Gyan Bichitra)
- 23. Hiren Kumar Sur : Assam o Tripurar Itihas ( Parul Prakashani)
- 24. Dwijendra Goswami: Adhunik Tripura : Prasanga Maharaja Birchandra Manikya ( Aksar Prakhasani)
- 25. Dwijendra Goswami: AdhunikTripura: Prasanga Maharaja Radha Kishore Manikya( Aksar Prakhasani)
- 26. Dwijendra Goswami: Adhunik Tripura: Prasanga Maharaja Birendra Kishore Manikya( Aksar Prakhasani)
- 27. Dwijendra Goswami: Adhunik Tripura: Prasanga Maharaja Bir Bikram Kishore Manikya (Aksar Prakhasani)

# B.A VI Semester History Paper-VIII (MINOR)

# HISTORY OF CHINA AND JAPAN, C.1840 A.D.- 1949 A.D. (Credits: 4)

# Course specific outcome:

# After studying this course:

- 1. Students will know about the rise and transformation of Japan and China in the 19th and 20 centuries.
- 2. Students will know about the growth of nationalism and communism in China.
- 3. The student will learn about the process of modernisation experienced by Japan and how Japan became a modern industrialised country.
- 4. Students will learn about the role of China and Japan during the Second World War.

### **Course Content:**

#### UNIT-A:

- 1. Chinese society and economy in the pre modern world; influence of Confucius
- 2. European expansion and opening of China: Opium Wars and Unequal treaties
- 3. Response of the Chinese: Taiping Rebellion, Hundred Days' Reform, Boxer Rebellion
- 4. Revolution of 1911: causes and results, role of Sun Yat Sen;

## UNIT-B:

- 1. May Fourth Movement.
- 2. Kuomintang and the 1<sup>st</sup> United Front; politics of warlordism.
- 3. Chinese Communist party: origin & growth; Role of Mao Tse Tung.
- 4. Chinese Revolution of 1949- causes and significance

# UNIT-C:

- 1. Society, economy and polity under Tokugawa Shogunate;
- 2. The Perry Mission and Opening of Japan, decline of Shogunate
- 3. Meiji Restoration; Meiji constitution of 1889.
- 4. Modernisation of Japan under Meijis- features and impact

# UNIT-D:

- 1. Sino-Japanese War (1894), Anglo-Japanese Alliance (1902), Russo-Japanese War (1904-05)
- 2. Rise of Japanese militarism-causes;
- 3. Manchurian crisis-causes, international repercussion.
- 4. Japan and Second World War.

# **SUGGESTED READINGS:**

- 1. H. M. Vinacke: History of far East in Modern Times (kalyani)
- 2. Archana Tewari: The History of China and Japan (Pearson India)
- 3. James McClain: Japan: A Modern History (WW Norton & Co.)
- 4. Amit Bhattacharyya: Transformation of Japan ( Setu)
- 5. Amit Bhattacharyya: Transformation of China (Setu)
- 6. J.K. Fairbank and M. Goldman: China: A New History (Prentice Hall India)
- 7. Immanuel Hsu: The Rise of Modern China (OUP)

- 8. Dr. Ratan Kr. Biswas, Adhunik Purba Asia Uthan O Rupantor, Progresive Book Forum
- 9. Sidharth Guha Ray, Adhunik Purba Asia Chin O Japaner Itihas, Progresive Publishers
- 10. Amit Bhattacharyya : Japaner Rupantarer Itihas ( Kolkata :Setu Prakashani)
- 11. Amit Bhattacharyya: Chinar Rupantarer Itihas (Kolkata: Setu Prakashani)
- 12. Mrinal Kanti Chattopadhyay : Chin o Japaner Itihas ( Kolkata: Progressive)

### TRIPURA UNIVERSITY

#### **SYLLABUS**

**FOR** 

# UNDER GRADUATE IN HISTORY (SEMESTERS-I,III & IV)

### INTERDISCIPLINARY COURSES

**CBCS PATTERN (NEP-2020)** 

### TRIPURA UNIVERSITY

#### UNDER GRADUATE SYLLABUS IN HISTORY

### **INTERDISCIPLINARY COURSES**

Year	SEMEST ER	PAPER	NAME OF PAPER	CREDIT
I	I	Ι	Aspects of History of India ( 2500 BCE to 1947 CE)	03
П	III	II	Aspects of History of North East India ( 1826-1949)	03
	IV	III	Aspects of Modern World History (1453-1945)	03

# B.A I Year (Semester I) History Paper-I (INTERDISCIPLINARY COURSE)

## Aspects of History of India (2500 BCE to 1947 CE) (Credits: 3)

#### **Course specific outcome:**

After studying this course:

- 1. This paper provides a thematic overview of the major aspects of Indian history from ancient to modern periods.
- 2. Students will learn about the aspects of ancient Indian history focusing on Harappan Culture, Vedic period, Jainism, Budhhism and contribution of Mauryas and the Guptas.
- 3. Students will learn about the aspects of the history of the Sultanate and Mughal periods including Bhakti and Sufi Movements of the mediaeval times
- 4. Students will learn about the aspects of modern Indian history from the time of the expansion of the English power to India and the resistance of the Indians.
- 5. Students will learn about the socio political changes happening in India during the colonial period including the growth of Indian national Movement leading to Independence.

#### Course Content:

#### Unit: A:

- 1. Indus Valley Civilisation: Features, Decline
- 2. The Vedic Period: early and later: Features
- 3. Jainism and Buddhism: Origin, tenets
- 4. Mauryas and Guptas: Overview of political history, cultural contribution

#### Unit: B:

- 1. The Delhi Sultanate: formation, Slave dynasty and Khaljis
- 2. The Mughals: Akbar; Decline.
- 3. The Sufi and Bhakti Movements
- 4. Art and Architecture: under the Cholas and the Mughals

#### Unit: C:

- 1. Expansion and Consolidation of British power: Battle of Plassey, Anglo Maratha, Anglo- Mysore and Anglo- Sikh relations.
- 2. Land revenue settlements: Permanent, Ryotwari
- 3. Revolts of 1857 causes, nature and impact.
- 4. Socio-religious reform movements: Young Bengal, Rammohun Roy, Vidyasagar, Vivekananda and Sir Syed Ahmad Khan.

#### Unit: D:

- 1. Indian National Congress formation and early phase; Swadeshi Movement and Revolutionaries.
- 2. Gandhian Movements: Non-cooperation, Civil Disobedience, Quit India Movements; women's participation.
- 3. B. R. Ambedkar; Subhash Chandra Bose and his role,
- 4. Circumstances leading to the partition of India.

#### **References:**

- 1. D.N. Jha, Ancient India in Historical Outline, Manohar Publishers, New Delhi, 2020.
- 2. K.A. Nilkantha Shastri, A History of South India, OUP, Delhi, 1966.
- 3. Satish Chandra, History of Medieval India, Orient Blackswan, New Delhi, 2009
- 4. A.L. Basham: The Wonder that was India, Vol –I (Rupa)
- 5. S.A.A. Rizvi: The Wonder that was India, Vol-II (Rupa) 4.
- 6. Upinder Singh: A History of Ancient and Early Medieval India (Pearson)
- 7. Irfan Habib: Medieval India (NBT)
- 8. Bipan Chandra, India's Struggle for Independence 1857-1947, Penguin, 2016
- 9. Shekhar Bandopadhyaya, From Plassey to Partition, Orient Blackswan Private Limited, New Delhi, 2014.
- 10. B R Grover: A New Look into the History of Modern India (S. Chand, 2020)

#### Bengali Books:

- 1. Dr.Ratan Kumar Biswas, Prachin Bharater Itihas (1<sup>st</sup> & 2<sup>nd</sup> Volume) Kolkata: Progressive Book forum
- 2. Gorishankar Dey: Bharater Itihas: Turko Afghan Jug (Kolkata: Progressive)
- 3. Irfan Habib : Madhyajuger Bharat (NBT)
- 4. Ratan Kumar Biswas : Adhunik Bharater Itihas ( 2 volumes) ( Kolkata: Progressive Book Forum
- 5. Subodh Kumar Mukhopadhyay, Mughal Smrajya theke British Raj, Kolkata: Progressive Publishers.

#### B.A II Year (Semester III) History Paper-II (INTERDISCIPLINARY COURSE)

### Aspects of History of North East India (1826-1949) (Credits: 3)

#### Course specific outcome:

#### After studying this course:

- 1. Students will know about the First Anglo- Burmese War, the British annexation policy in Northeast India, British relation with Manipur and the Economic Changes under British rule in Northeast India.
- 2. Students will know about the growth of National Movement in Assam.
- 3. The student will learn about the Princely Tripura, British relation with Chakla Roshanabad and Hill Tripura, Resistance Movements in the 19<sup>th</sup> century and about Revolt of 1857 and Tripura.
- 4. Students will learn about the Social and political movements in Tripura, Rabindranath Tagore, World War I & II and its impact in Tripura and about integration of Tripura to Indian Union

#### **Course Content:**

#### UNIT-A:

- 1. First Anglo- Burmese War: causes and results;
- 2. British annexation of Khasi, Naga and Mizo Hills.
- 3. British relation with Manipur till 1891
- 4. Economic Changes under British rule: Tea Plantation and Railways.

#### UNIT-B:

- 1. Spread of western education and cultural awakening in Assam-press, literature.
- 2. Revolt of 1857 and Assam;
- 3. Non-Cooperation, Civil Disobedience and Quit India Movements in Assam.
- 4. Integration of Manipur into the IndianUnion.

#### UNIT-C:

- 1. British relation with Hill Tripura;
- 2. Appointment of Political Agent.
- 3. Resistance Movements in the 19th century- Tipra (1850), Kuki (1860-61), Jamatia (1863).
- 4. Revolt of 1857 and Tripura

#### UNIT-D:

- 1. Era of modernisation and reformative measures Birchandra Manikya.
- 2. Reang Uprising and Janashiksha Movement
- 3. Rabindranath Tagore and Tripura; Contribution of Princely Court towards development of Bengali language and literature.
- 4. Integration of Tripura to Indian Union

#### **References:**

- 1. Edward Gait: A History of Assam (Eastern Book House)
- 2. Priyam Goswami : A History of Assam(Orient Blackswan)
- 3. N.R. Roychudhury: Tripura Through the Ages (Gyan Bichitra)
- 4. H.K. Sur: British Relations with the State of Tripura (Naba Chandana)

#### Bengali Books

- 1. Mahadev Chakraborty, Assamer Itihas (In two volume), (Progresive Publisher)
- 2. Mahadev Chakrabarti : Uttarpurba : Sedin o Aaaj ( Progressive Publishers)
- 3. Dipak Choudhury, Political Agent O Deshiyo Rajyo, (Progresive Publisher)
- 4. Nalini Ranjan Ray Choudhury, Manikyo Sashanadhine Tripura, (Gyan Bichitra)
- 5. Hiren Kumar Sur: Assam o Tripurar Itihas (Parul Prakashani)

# B.A II Year (Semester IV) History Paper-III (INTERDISCIPLINARY COURSE)

#### Aspects of Modern World History (1453-1945) (Credits: 3)

#### Course specific outcome:

After studying this course:

- 1. Students will learn about the decline of feudalism and beginning of modernity in Europe
- 2. Students will learn about the important markers of modern world such as renaissance, religious reformation, etc.
- 3. Students will have detailed knowledge about two major causes of transformation of Europe and they are the Industrial Revolution and the French Revolution.
- 4. Students will learn about the colonialism and imperialism.
- 5. Students will also learn about the First and Second world wars.

#### Course Content:

#### Unit: A:

- 1. Decline of Feudalism in Europe: causes
- 2. Renaissance: Meaning, causes, nature, spread
- 3. Reformation: origin, course, varieties, significance; Counter Reformation
- 4. Geographical Explorations: motives and role of Portugal and Spain

#### Unit: B

- 1. Industrial Revolution in England: background and features.
- 2. American War of Independence- causes and significance.
- 3. French Revolution: background, nature, course (1789-1799) and impact.
- 4. Napoleon Bonaparte: Rise, Reforms, Downfall and Assessment

#### Unit: C

- 1. The July Revolution of 1830: Causes and Results
- 2. The February Revolution of 1848: Causesand Results
- 3. Unification of Italy- Mazzini, Garibaldi and Cavour;
- 4. Unification of Germany-Role of Bismarck

#### Unit: D

- 1. Rise of new Imperialism: Causes; Scramble for Africa
- 2. First World War: Background, Impact; Versailles Settlement- Assessment
- 3. League of Nations: Formation and Performance.
- 4. Origins and impact of the Second World War: Formation of UNO

#### **References:**

- 1. B.V. Rao: History of Europe, 1453-1815 (Sterling)
- 2. 11. L. Mukherjee: A Study of European History 1453-1815 (J.N. Ghosh and Sons, Kolkata)
- 3. David Thomson: Europe Since Napoleon (Penguin),
- 4. David S. Mason: A Concise History of Modern Europe (Orient Blackswan)
- 5. L. Mukherjee: A Study of modern Europe and the World (J.N. Ghosh and Sons)
- 6. Ranjan Chakraborty: A History of the Modern World, An Outline (Primus Books)
- 7. B.V. Rao: History of Modern Europe, 1789-2010 (Sterling)

#### Bengali Books:

- 1. Bashobendra Basu, Adhunik Europer Biborton, Progressive Publishers.
- 2. Pulakesh Roy and Sayantan Das : L Uttaraner Pathe Europe (Kolkata: Progressive Publishers)
- 3. Mrinal Kanti Chattopadhyay : Europer Itihas 1789-1945 ( Progressive Book Forum)
- 4. P.Maity, Europer O Viswa Itihas, (Sreedhar Prakashani)
- 5. Sidharta Guha Roy: Adhunik Europe (Progressive)



### **Tripura University**

(A Central University)
Suryamaninagar, Agartala, West Tripura, 799022

### **Syllabus and Course Structure**

For

**Under Graduate (UG) programme** 

in

### **Education**

(For both TU Campus and affiliated colleges)

2023-24

(As per Tripura University Common Minimum Syllabus Guidelines (Meeting on 16.05.2023) in accordance with NEP-2020 w.e.f. the session 2023-2024)

### **Syllabus**

#### 1ST SEMESTER

Programme/Class: Certificate		Year: <b>First</b>	Semester: First
		Subject: <b>Education</b>	
Course Code: ED-101C		Course Title: Philos	sophical and Sociological
		Foundation of Educat	ion
Credits: 4	Major (Core )	Core Compulsory	Max. Marks: 100 (60+40)
			•

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the Concept of Education and its relationship with Philosophy
- Identify areas of philosophy and narrate their educational implication
- Describe the meaning and nature of Educational Sociology, Sociology of
- Education and social organizations
- Analyze the Group dynamics, social interaction, social change and the contribution of education to these aspects.

#### **COURSE CONTENTS**

#### **Unit-1: Concept of Education**

- Meaning, Nature and Scope of Education
- Aims of Education: Individual and Social
- The Functions of Education. Factors of Education
- Four Fundamental Pillars of Education as proposed by Delors Commission (1997), UNESCO
- Bases of Education: Biological, Psychological, Sociological and Economical

#### Unit-II: Introduction to Philosophy of Education

- Meaning and Concept of Philosophy; Characteristics of Indian Philosophy
- Relation between Education and Philosophy
- Areas of Philosophy and their Educational Implication—Metaphysics, Epistemology and Axiology.
- Western schools of Philosophy and their educational implication: Idealism, Naturalism, Realism and Pragmatism-their contributions to present day Education
- Indian Schools of Philosophy and their Educational implications-Vedanta, Buddhism, Jainism and Islamic Tradition

#### **Unit-III: Basics of Sociology of Education**

- Meaning, Nature and Scope of Educational Sociology
- Relationship between Sociology and Education
- Meaning and Nature of Educational Sociology and Sociology of Education

- Education as a social sub-system-Specific Characteristics
- Meaning, Characteristics and types of society Agricultural, Industrial, Rural and Urban

#### **Unit-IV: Education and Social System**

- Concept, Meaning and Nature of Social Change
- Education with reference to Social Stratification and Social Mobility
- Education with reference to Social equity and equality of Educational Opportunities
- Factors and Problems of Social Change in India
- Culture Concept, Characteristics and types
- Cultural Lag and Acculturation; interrelationship between education and value system

- Aggarwal, J.C. (2011). Theory & Principles of Education. New Delhi: Vikas Publishing House.
- Aggarwal, S. (2007). Philosophical Foundations of Education. Delhi: Author's Press.
- Bhatia, K.K., (2011), Philosophical and Sociological Foundation of Education. New Delhi: Kalyani Publishers.
- Bhattacharya, D. C. (2016). Sociology. Kolkata: Vijoya Publishing House.
- Chakraborty, J.C (1992). Modern Education: Its Aims and Principles. Kolkata: Usha Publishing House.
- Chatterjee, S. & Datta, D. (2015). An Introduction to Indian Philosophy. New Delhi: Rupa Publication.
- Chaube, S.P. & Chaube, A. (2009). Foundation of Education. New Delhi: Vikas Publishing House Pvt. Ltd.
- Cook, L. A. & cook, e. (1970). Sociological Approach to Education. New York: McGraw Hill.
- Dash, B.N. (2011). Foundation of Education. New Delhi: Kalyani Publishers.
- Durkheim, E. (1966). Education and Sociology. New York: The Free Press.
- Ghosh, G. C. (2012). Bharatiya Darshan. Kolkata: Mitrom.
- Roy, S. (2013). Siksha Tattvaa O Siksa Darshan. Kolkata: soma Book Agency.
- Ruhela, S. P., 7 Nayak, R. K. (2014). Philosophical Foundation of Education. Agra: Agrawal Publications.
- Saxena, N.R. S. (2012). Theory of Education. Meerut: R. Lall Book Depot.
- Sekhon, S. S., & Kaur, A. (2011). Philosophical and Sociological Bases of Education. New Delhi: Kalyani Publication.
- Sharma, C. (2013). A critical Survey of Indian Philosophy. Delhi: Motilal Banarsidass Publishers.
- Wynne, J. P. (1999). Theories of Education: An introduction to the Foundations of Education. New York: Harper and Row.

## Syllabus for B.A. in Education Major

#### 1st SEMESTER

Programme/	Class: <b>Certificate</b>	Year: <b>First</b>	Semester: <b>First</b>
		Subject: Education	
Course Code: ED-102C		Course Title: <b>Develop</b> :	ment of Education in India
Credits: 4	Major (Core )	Core Compulsory	Max. Marks: 100 (60+40)

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Outline the Special features of Education in Vedic, Brahmanic Buddhistic and Islamic Education
- Discuss about the Education System In Pre-Independence India
- Illustrate various Educational Provision enshrined in the Constitution of India.
- Describe the significant points of selected education commissions & national policy of education in independent India.
- Compare and contrast the Vedic, Buddhist, Medieval and Contemporary systems of Education
- Identify the recent reforms and development of Education in Present India.

#### **COURSE CONTENTS**

#### Unit-l: Education in ancient and medieval India

- Vedic Education
- Brahmanic
- Buddhistic
- Islamic

(Special features of the system, aim, curriculum, teaching method, teacher-pupil relation, Merits and limitations of the system, relevancy of the system in present day education)

#### Unit-II: Education In Pre-Independence India (1800 – 1946)

- Educational activities of Serampore Mission and Fort William College— Sreerampore trio and their contribution in the field of education
- Charter Act of 1813,
- Maculay's Minute 1835.
- Adams Report & its recommendations.
- Wood's Despatch 1854.
- Hunter Commission 1882.
- Lord Curzon's Educational Policy 1904.
- National Education Movement.
- Sadler Commission 1997.
- Hartog Committee Report 1929.

- Wardha Scheme of Education 1937.
- Sargent Report 1944.

#### Unit-III: Education in India after independence

- Education and Constitution of India
- Radhakrishnan Commission (aim, curriculum of higher education, rural university)
- Mudaliar Commission (aim, structure and curriculum of secondary education)
- Kothari Commission (aim, structure and curriculum of primary and secondary education)
- National Policy of Education, 1968, 1986, POA 1992.

#### Unit-IV: Education in recent two decades

- Knowledge Commission Report
- Right to Education Act
- SSA and RMSA and Their integration to form Samagra Shiksha Abhiyan Role, functions and activities.
- RUSA—its Role and Functions
- NEP-2020
- Education in Tripura Recent Reforms and Initiatives
- Issues and challenges of Secondary and Higher Education in Tripura

- Dash, B.N.(1991). Development of Education in India. New Delhi: Ajanta Prakashan.
- Das, K.K. (1993). Development of Education in India. New Delhi: Kalyani Publisher.
- Aggarwal, J.C. (2010). Landmarks in the History of Modern Indian Education. New Delhi: Vikas Publishing Pvt. Ltd.
- Chaube and Chaube. (2006). Education in ancient and medieval India. New Delhi: Vikas publication.
- Seeley, L. (2016). History of Education. Wentworth Press.
- Rawaat, P. L. (2019). History of Indian Education. Agra: Ram Prasad Publication.

## Syllabus for B.A. in Education (Minor) Elective/Minor Course

#### (From any faculty except Major)

#### 1ST SEMESTER

#### 1ST YEAR

Programme/Class: Certificate	Year: <b>First</b>	Semester: First
	Subject: Education	
Course Code: ED-101M	Course Title: <b>Basics of Education</b>	
Credits: 4 Elective/Minor	Open Elective	Max. Marks: 100 (60+40)

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the meaning, nature, scope and aims of education
- Outline the function of education towards individual, society and nation.
- Discuss about the Factors of Education and their interrelationship
- Illustrate various forms of education and their characteristics.
- Describe different agencies of education that influence education.
- Analyze the role of education in social change and equality of educational opportunities
- Identify the relationship between education and culture.

#### **COURSE CONTENTS**

#### Unit-1: Understanding the Basic Concept of Education

- Concept of Education Narrow and broader concept of education; concept of education as a discipline
- Nature and Scope of Education
- Aims of Education individual, social, vocational and democratic.
- Concept of Philosophy and educational Philosophy their role in framing the superstructure of education (Aims, Methods and Curriculum)
- Aims of modern education with special reference to Delor's Commission.
- The Functions of Education Towards Individual, Society and Nation

#### Unit-II: Factors and Dimensions of Education

- Factors of Education and their interrelation
- Child / learner: Concept of child centricism in education Characteristics and significance of child centricism in education.
- Teacher: qualities and duties of a good teacher.
- Curriculum: concept, types and Needs; Principles of curriculum construction.
- Educational institutions: Types of educational institution--Early childhood (Preschool, Kindergarten, Nursery); Primary; Secondary; Further and higher education.

#### **Unit-III: Forms and Agencies of Education**

• Formal Education:- School—Functions and responsibility of School, relationship between school and society.

- Informal education: Family--Educational role of family; Community—as an agency of Education.
- Non formal Education -Distance and open education.
- Other agencies: Mass-media- television, radio, cinema and newspaper and social media.

#### **Unit-IV: Education and Society**

- Sociological bases of education, Nature and Scope of Educational Sociology
- Relationship between Sociology and Education
- Education as an agency of social change; Factors and Problems of Social Change in India
- Education as a social sub-system
- Education and Social Stratification and Social Mobility
- Education and Social equity and equality of Educational Opportunities
- Education and Culture

- Aggarwal, J.C. (2011). Theory & Principles of Education. New Delhi: Vikas Publishing House.
- Aggarwal, J.C. (2013). Basic Ideas in Education. New Delhi: Shipra Publication
- Bhatia & Bhatia.(2011). Theory and principles of Education. New Delhi, Doaba House.
- Bhattacharya, D. C. (2016). Sociology. Kolkata: Vijoya Publishing House.
- Chakraborty, J.C (1992). Modern Education: Its Aims and Principles. Kolkata: Usha Publishing House.
- Chaube, S.P. & Chaube, A. (2009). Foundation of Education. New Delhi: Vikas Publishing House Pvt. Ltd.
- Cook, L. A. & cook, e. (1970). Sociological Approach to Education. New York: McGraw Hill.
- Dash, B.N. (2011). Foundation of Education. New Delhi: Kalyani Publishers.
- Durkheim, E. (1966). Education and Sociology. New York: The Free Press.
- Mohanty, J. (1982). Indian Education in emergency society, New Delhi, starling Publishers.
- Roy, S. (2013). Siksha Tattvaa O Siksa Darshan. Kolkata: soma Book Agency.
- Saxena, N.R. S. (2012). Theory of Education. Meerut: R. Lall Book Depot.
- Sekhon, S. S., & Kaur, A. (2011). Philosophical and Sociological Bases of Education. New Delhi: Kalyani Publication.

#### **2ND SEMESTER**

Programme/Class: Certificate		Year: <b>First</b>	Semester: Second
		Subject: <b>Education</b>	
Course Code: ED-103C		Course Title: Education	onal Psychology
Credits: 4	Major (Core )	Core Compulsory	Max. Marks: 100 (60+40)

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the Concept of Educational Psychology and the relationship between Education and Psychology
- Describe the meaning and nature of personality and its theory
- Enumerate the concept of intelligence and its theory
- Elucidate the meaning, nature and theories of learning and motivation
- Outline the concept of individual difference and its educational implication.

#### **COURSE CONTENTS**

#### Unit-1: Concept and Methods of Educational Psychology

- Meaning, nature and scope of educational psychology
- Relation between Education and Psychology
- Methods of Educational Psychology
- Application of Educational Psychology in Teaching-Learning Process
- Concept of Growth and Development; Differences between growth and development; Principles of child development.
- Individual differences: concept, types, determinants and educational implications

#### **Unit-II: Learning and Motivation**

- Concept of learning.
- Factors associated with learning
- Theories of Learning: Trial and Error, Classical Conditioning: Operant Conditioning, Insightful learning, Constructivist approaches to learning.
- Motivation: Concept, types, determinants of motivation;
- Maslow's Theory of Motivation and its educational implication

#### **Unit-III: Intelligence and Creativity**

- Concept of Intelligence
- Theories of Intelligence: Two Factor, Thomson's theory, SOI (Guilford),
- Gardner's Theory of Multiple Intelligence
- Measurement of Intelligence : Verbal, Non-verbal and Performance Test
- Creativity: Meaning and nature; characteristics of creative person
- Identification of creative person
- Nurturing creative student

#### **Unit-IV: Developmental Psychology**

- Personality: development, types and Traits theory
- Piaget's Theory of Development
- Bruner's & Vygotsky's Theories of Development
- Kohlberg's Theory of Moral Development,

#### • Educational implication of Developmental Theories

- Aggarwal, J. C. (2015). Essentials of Educational Psychology. New Delhi: Vikash Publishing House.
- Baron, R. A. (2017). Psychology. New Delhi: Pearson.
- Bhat, B.D. & Sharma, (2011). Educational Psychology. New Delhi: Kanishka Publishing House
- Bigge, M. L. (1999). Psychological Foundations of Education. New York: Harper and Row.
- Bruner, J.(1977). The Process of Education, USA: Harvard University Press.
- Chaube, S.P. (2001). Development Psychology. New Delhi: Vikas Publishing House
- Chauhan, S.S. (1998). Advanced Educational Psychology. New Delhi: Vikash Publishing House,
- Choube, S.P. & Choube. (1996). Educational Psychology and Experiments. New Delhi: Himalay Publishing House.
- Crow, & Crow, (1964). Educational Psychology. New Delhi: Eurasia Publishing House
- Dash, M. (2004). Educational Psychology. New Delhi: Deep & Deep Publishing Pvt. Ltd.
- Gardner, H.(1983). Frames of Mind: The theory of multiple intelligence. New York: Basic Books
- Mangal, S. K. (2014). Essentials of Educational Psychology. New Delhi: PHI Pvt. Ltd.
- Martin, D.J. & Kimberly S. Loomis. (2006). Building Teachers: A constructivist approach to introducing education. USA: Wadsworth Publishing.
- Maslow, A.H.(1970).Motivation and Personality (2nd Edition). New York: Harper and Row.
- Roy, S. (2013). Shiksha Manovidya. Kolkata: Soma Book Agency.
- Sharma, R.N. (1996). Advanced Educational Psychology: Guwahati: Eastern Book House.
- Vygotsky, L.(1986). Thought and language (A. Kazulin, Trans). Cambridge, M.A: MIT Press.
- Vygotsky, L.S. (1978) Mind in Society: The Development of Higher Order Psychological Processes, USA: Harvard University Press.
- Vygotsky, L.S. (1999) Educational Psychology, M/S S.K.Enterprise, Book Seller and Distributors, Shillong.
- Walla, J.S. (1997). Foundations Educational Psychology. Jalandha: Jalandhar Publishing.
- Woolfolk, A. (2011). Educational Psychology. New Delhi: Pearson.

## Syllabus for B.A. in Education Major

#### 2<sup>nd</sup> SEMESTER

Programme/Class: Certificate		Year: <b>Second</b>	Semester: Second
		Subject: Education	
Course Code: ED-104C		Course Title: Contemporary Trends and Issues in	
		Education	
Credits: 4	Major (Core)	Core Compulsory	Max. Marks: 100 (60+40)

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the concept of Early Childhood Care and Education and its importance.
- Describe various new trends and issues in Higher Education.
- Identify the issues and challenges regarding school education and social progress.
- Illustrate the recent trends in Education and their challenges to be implemented.
- Analyse the relevance of skill enhancement and vocational courses in education.

#### **COURSE CONTENTS**

#### **Unit-1: Schooling and Education**

- Concept of Early Childhood Care and Education Need and Importance issues and Challenges.
- Universal and compulsory education: Issues and challenges
- Wastage and stagnation in education Issues and probable way-out
- Existing school structure in India; School education Structure by NEP 2020
- Language problem and medium of education.
- National Integration and education.
- Integrated child Development Service(ICDS)

#### Unit-II: Trends and Issues in Higher Education

- Centralized and decentralized educational administration.
- Non-formal and part time education.
- Academic freedom and University autonomy.
- Examination system.
- Standards of Education
- Expansion of higher Education
- Quality in Higher Education
- Issues related to Students Unrest
- Approach towards Dual degrees
- NEP-2020 and Higher Education

#### Unit-III: Education, Gender and Society

- Gender issues in society; Women's and girl's education—their empowerment, issues and challenges
- Equalizing educational opportunities.
- Problems of Urban & Rural Education
- Problems of Unemployment

#### **Unit-IV: Recent Trends in Education**

- Privatization
- Globalization
- Internationalization
- Population Education.
- Environmental Education
- Value Based Education
- Skill Enhancement Activities and Work experience
- Vocationalization of Education
- Community Engagement/participation and community based education

- Aggarwal. J. C. (1992). Development and Planning of Modern Education: New Delhi: Vikas Publishing House Pvt. Ltd.
- Amartya Sen, and Jean Dreze (1997). India: Economic Development and Social Opportunity, Oxford India: Delhi. Select Chapters.
- Anand, S. P. (1993). The Teacher & Education in Emerging Indian Society, New Delhi: NCERT.
- Bhat. B. D. (1996). Educational Documents in India, New Delhi: Arya Book Depot.
- Bhatia, K. & Bhatia, B. (1997): The Philosophical and Sociological Foundations, New Delhi Doaba House.
- Biswas. A. (1992): Education in India, New Delhi: Arya Book Depot.
- Biswas. A. and Aggarwal, J.C. (1992). Education in India, New Delhi: Arya Book Depot.
- Chakravarty, Sukhamoy (1987). Development Planning: The Indian Experience, Oxford University press: New Delhi.

## Syllabus for B.A. in Education (Minor) Elective/Minor Course

# (From any faculty except Major) 2nd SEMESTER

#### 1ST YEAR

Programme/Class: Certificate	Year: <b>First</b>	Semester: <b>Second</b>
	Subject: <b>Education</b>	
Course Code: ED102M	Course Title: Education	al Psychology
Credits: 4 Elective/Minor	Open Elective	Max. Marks: 100 (60+40)

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the meaning, nature, scope and goals of educational Psychology
- Outline the Applications of Educational Psychology in Teaching and Learning Process.
- Identify the relationship between Education and Psychology
- Discuss the concept of individual difference and its educational implication.
- Illustrate different Theories of Human development & Learning Process
- Describe the meaning and nature of personality and its theory
- Enumerate the concept of intelligence and its theory
- Elucidate the meaning, nature and theories of motivation

#### **COURSE CONTENTS**

#### Unit-1: Introduction to Psychology and Educational Psychology

- Psychology its meaning, nature and scope;
- Concept of Educational Psychology its Meaning, Nature, Scope & Need;
- Relationship between Education and Psychology,
- Methods of Educational Psychology—basics methods & design in studying learners behaviour
- Research Methods in Child and Adolescent Development
- Applications of Educational Psychology in Teaching and Learning Process.
- Role of educational Psychology in understanding Learner Differences and Learning Needs Learning and Thinking Styles, Exceptional learners

#### Unit-II: Understanding the Learner and their Development

- Students as Learners their Development and the Learning Process
- Human Growth and development meaning, nature and basic principles
- Stages of development Infancy, Childhood and Adolescence
- Human development in the physical, social, emotional, moral, speech/language, and cognitive domains
- Individual Differences among learner-- concept, dimension and educational implications, Socio-cultural diversity,
- Students with Learning Challenges (Communication Disorders, Emotional or Behavioural Difficulties, Intellectual Disabilities),

#### **Unit-III: Theories of Human development & Learning Process**

- Theoretical foundations about how learning occurs: how students construct knowledge, acquire skills, and develop habits of mind
- Theories of development—Piaget's Cognitive development, Vygotsky's Sociocultural Perspective, Bronfenbrenner's bio-ecological model of development, Kohlberg's Theory of Moral Development
- Development of Self Concept and Self Identity—Erikson's Stages of Psychosocial Development
- Learning Process its meaning, nature and influencing factors,
- Theories of Learning: Trial & Error, Classical and Operant Conditioning and Gestalt Theory of Learning

#### Unit-IV: Mental Abilities, Motivations and Personality

- Intelligence—meaning and nature, Concepts of Social intelligence, Spiritual intelligence, emotional intelligence
- Theories of Intelligence—Sternberg's Triarchic theory, Gardner's Theory of Multiple intelligences,
- Measuring Intelligence, some commonly used intelligence test, concept of IQ
- Creativity--Concept and Nature, Characteristics of a creative person, Fostering Creativity, Metacognition and Creativity
- Motivation—meaning, nature, & importance, Five General Approaches to Motivation, Maslow's Hierarchy of Needs
- Meaning and nature of Personality, Type and Trait Approaches to Personality,
   Factors Influencing Personality Development

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- Baron, R. A. (2017). Psychology. New Delhi: Pearson.
- Bhat, B.D. & Sharma, (2011). Educational Psychology. New Delhi: Kanishka Publishing House
- Bigge, M. L. (1999). Psychological Foundations of Education. New York: Harper and Row.
- Bruner, J.(1977). The Process of Education, USA: Harvard University Press.
- Chauhan, S.S. (1998). Advanced Educational Psychology. New Delhi: Vikash Publishing House,
- Choube, S.P. & Choube. (1996). Educational Psychology and Experiments. New Delhi: Himalay Publishing House.
- Crow, & Crow, (1964). Educational Psychology. New Delhi: Eurasia Publishing House
- Dash, M. (2004). Educational Psychology. New Delhi: Deep & Deep Publishing Pvt. Ltd.
- Gardner, H.(1983). Frames of Mind: The theory of multiple intelligence. New York: Basic Books
- Mangal, S. K. (2014). Essentials of Educational Psychology. New Delhi: PHI Pvt.
   Ltd
- Maslow, A.H.(1970).Motivation and Personality (2nd Edition). New York: Harper and Row.
- Roy, S. (2013). Shiksha Manovidya. Kolkata: Soma Book Agency.

- Sharma, R.N. (1996). Advanced Educational Psychology: Guwahati: Eastern Book House.
- Vygotsky, L.(1986). Thought and language (A. Kazulin, Trans). Cambridge, M.A: MIT Press.
- Vygotsky, L.S. (1999) Educational Psychology, M/S S.K.Enterprise, Book Seller and Distributors, Shillong.
- Woolfolk, A. (2011). Educational Psychology. New Delhi: Pearson.

# Syllabus for B.A. in Education Interdisciplinary Course 1st/2nd SEMESTER 1ST YEAR

Programme/Class: Certificate	Year: First	Semester: First/ Second
	Subject: Education	
Course Code: ED-1011D	Course Title: Psychology of Learning and	
	<b>Instruction</b>	
Credits: 3	Interdisciplinary/	Max. Marks: 100 (60+40)
	MOOC Course	

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the meaning, nature, scope and goals of educational Psychology
- Outline the Applications of Educational Psychology in Teaching and Learning Process.
- Discuss the concept of individual difference and its educational implication.
- Illustrate different Theories of Human development & Learning Process
- Describe the meaning, nature and importance of psychology of Instruction
- Enumerate the concept of lesson plan and micro teaching
- Elucidate the different techniques and approaches of teaching.
- Differentiate between instruction and teaching
- Describe the different teaching methods and strategies.

#### **COURSE CONTENTS**

#### **Unit-1: Introduction to Educational Psychology**

- Concept of Educational Psychology—its Meaning, Nature, Scope & Need;
   Relationship between Learning and Psychology,
- Methods of Educational Psychology—basics methods & design in studying learners behaviour
- Applications of Educational Psychology in Teaching and Learning Process.

- Role of Educational Psychology in understanding Learner Differences and Learning Needs
- Individual differences among learner-- concept, dimension and educational implications.

#### **Unit-II: Understanding the Learner and their Development**

- Students as Learners their Development and the Learning Process
- Human Growth and development meaning and basic principles
- Stages of development Infancy, Childhood and Adolescence
- Human development in the physical, social, emotional, and cognitive domains
- Theories of development Piaget's Cognitive development, Vygotsky's Socio-Cultural Perspective & Kohlberg's Theory of Moral Development.

#### **Unit-III: Theories of Learning & its Implication**

- Learning its meaning, nature and factors influencing learning
- Kinds or types of learning & need of theory of learning
- E. L Thorndike's theory or Trial & Error Learning
- Learning by conditioning:
  - (a) Classical Conditioning (Pavlov)
  - (b) Operant Conditioning (Skinner)
- Learning by Insight (Gestalt)
- Discovery Learning (Bruner)
- Hierarchy of Learning types and condition (Gagne)

#### **Unit-IV: Psychology of Instruction**

- Psychology of Instruction: Its meaning, importance & difference between teaching and instruction.
- Instructional objectives: Blooms Taxonomy (Cognitive Domain)
- Instruction for problem solving, creativity and Discovery learning
- Concept of instructional Technology and instructional media
- Concept and principles of Teaching, Criteria of good teaching
- Lesson Plan, Criteria of good lesson plan, steps and types of lesson plan; Art of Questioning

- Aggarwal, J. C. (2015). Essentials of Educational Psychology. New Delhi: Vikash Publishing House.
- Baldin, A. L. (1970). Theories of Child Development. New York: John Wiley & Sons
- Baron, R. A. (2017). Psychology. New Delhi: Pearson.
- Bhat, B.D. & Sharma, (2011). Educational Psychology. New Delhi: Kanishka Publishing House
- Chauhan, S. S. (2008). Innovations in Teaching-learning Process. New Delhi: Vikash Publishing House Pvt. Ltd.
- Chauhan, S.S. (1998). Advanced Educational Psychology. New Delhi: Vikash Publishing House,
- Choube, S.P. & Choube. (1996). Educational Psychology and Experiments. New Delhi: Himalay Publishing House.

- Crow, & Crow, (1964). Educational Psychology. New Delhi: Eurasia Publishing House
- Dash, M. (2004). Educational Psychology. New Delhi: Deep & Deep Publishing Pvt. Ltd.
- Joshi, A. (). Models of Teaching. Agra: H.P. Bhargava, Book House
- Joyce, B., & Weil, M. (2005). Models of Teaching. New Delhi: PHI Pvt. Ltd.
- Kochhar, S. K. (1996). Methods and Techniques of Teaching. New Delhi: Sterling Publishers Pvt. Ltd.
- Mangal, S. K. (2014). Essentials of Educational Psychology. New Delhi: PHI Pvt. Ltd.
- Passi, B.K. (1976). Becoming Better teacher-Micro Teaching Approach. Ahmedabad: SahityaMudranalaya
- Piaget, J. (1971). Science of Education and the Psychology of the Child. New York: The Viking Press.
- Roy, S. (2013). Shiksha Manovidya. Kolkata: Soma Book Agency.
- Sharma, R.A. (2000). Teaching Foundation of Education. Meerut: R. Lall Book Depot
- Sharma, R.N. (1996). Advanced Educational Psychology: Guwahati: Eastern Book House.
- Siddiqui, M.H.(2008).Models of teaching. New Delhi: APH Publishing Corporation
- Singh, Amarjit (2006): Classroom Management, New Delhi: Kanishka Publishers
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# **Syllabus**

# DIPLOMA IN EDUCATION (SECOND YEAR)

### 3<sup>rd</sup> SEMESTER

Semesters	Course Code	Course Type	Course Title	Theory/ Practical	Course Credit	Class Per week
	ED-301C	Major	Technology and Education	Theory	4	Min.4 Class (each class one hour duration)
3 <sup>rd</sup> Sem	ED-302C	Major	Management and Planning in Education	Theory	4	Min.4 Class (each class one hour duration)
	ED-301M	Minor/Elective	History of Indian Education	Theory	4	Min.4 Class (each class one hour duration)
	ED-301ID	Interdisciplinary/ MOOC Course	Technology Integrated Education	Theory	3	Min.3 Class (each class one hour duration)

#### 3rdSEMESTER

#### Major ED-301C

Programme/Class: <b>Diploma</b>	Year: <b>Second</b>	Semester: Third
	Subject: <b>Education</b>	
Course Code:ED-301C	Course Title: <b>Technology</b>	
	and Education	
Credits:4	Core Compulsory	Max. Marks: 100 (60+40)

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the meaning, nature & scope of Educational Technology.
- Describe the concept of Educational Technology as discipline.
- Discuss about the Concept, nature and components of ICT
- Illustrate the application of ICT in teaching and learning.
- Discuss about the Meaning, Nature and characteristics of e learning
- Outline various aspects of Communication and classroom interactions
- Describe the concept and need of system approach
- Enumerate differentInstructional techniques & approaches
- Identify the Technology for Interaction and classroom Communication.
- Describe about different Models of teaching
- Utilize Online Learning Resources in their academic life

#### **COURSE CONTENTS**

#### Unit-1: Basics of Educationand Technology

- Concept of Technology-meaning and nature, Concept of education with reference to modern era
- Educational technology-Meaning, nature and characteristics; its Importance for the student and the teacher.
- Need, scope and limitation of technology in education
- Components of Educational Technology- Hardware and Software
- Instructional Technology-Difference between Educational Technologyand Instructional Technology,

#### **Unit-II: ICT and e-learning**

- Concept, nature and components of ICT
- Application of ICT in teaching-learning, ICT integration in teaching learning,
- Challenges in Integrating ICT in teaching learning
- Concept of e-learning Meaning, Nature and characteristics, advantages and limitation
- Massive Open Online Course (MOOC)
- System approach- concept, need, Classification and components
- Computer and its role in education,

#### Unit-III: Technology for Interaction and classroom Communication

- Communication and classroom interactions- concept, element and process
- Principles of Communication, Marks of effective classroom communication

- Modes (Verbal and Non-Verbal) and Barriers of effective classroom communication
- Virtual and Smart Classroom-Concept, Elements, Advantages and Limitations
- Online Learning Resources: e-Library, Websites, Apps, and Web 2.0 Technology, Computer network and internet, EDUSAT, INFLIBNET and social media
- Teaching Aids: Types &used

#### Unit-IV: Instructional Techniques&Approaches

- Teaching & Instruction meaning, nature and principles
- Difference between teaching and instruction
- Mass instructional technique- characteristics and types
- Personalised instructional techniques- characteristics and types
- Models of teaching- concept, components and significance
- Different approaches- Programmed Instruction, Computer Assisted Instructions(CAI), Team teaching, Collaborative teaching, Cooperative mastery learning, Project based learning,

- Aggarwal J.C. (2005). Educational Technology. New Delhi: Vikash Publishing House Pvt. Ltd.
- Barton, R. (2004). Teaching Secondary Science with ICT. McGraw-Hill International
- Bhaskara Rao, Digumarti (2013): Vidya -SamacharaSankethikaSastram (ICT in Education). Guntur: Master Minds, Sri Nagarjuna Publishers.
- Chauhan, S. S. (2008). Innovations in Teaching-learning Process. New Delhi: Vikash Publishing House Pvt. Ltd.
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- Joshi, A. (). Models of Teaching. Agra: H.P. Bhargava, Book House
- Kochhar, S. K. (1996). Methods and Techniques of Teaching. New Delhi: Sterling Publishers Pvt. Ltd.
- Kumar, K.L. (2000). Educational Technology. New Delhi: New Age International Pvt. Ltd.
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- Mangal, S.K. and Mangal, Verma (2009). Essentials of Educational Technology. New Delhi: PHI Learning Pvt. Ltd.
- Passi, B.K. (1976). Becoming Better teacher-Micro Teaching Approach. Ahmedabad: SahityaMudranalaya
- Sharma, R.A. (2000). Teaching Foundation of Education. Meerut: R. Lall Book Depot
- Siddiqui, M.H.(2008).Models of teaching. New Delhi: APH Publishing Corporation

- Singh, Amarjit (2006): Classroom Management, New Delhi: Kanishka Publishers
- T. & Taylor, P.H. (2001). Managing ICT in the Secondary Schools. Heinemann: Oxford.

#### 3rd SEMESTER

#### Major ED-302C

Programme/Class: <b>Diploma</b>	Year: <b>Second</b>	Semester: Third
	Subject: <b>Education</b>	
Course Code:ED-302C	Course Title:Management and Planning	
	in Education	
Credits:4	Core Compulsory	Max. Marks: 100 (60+40)

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the meaning, nature & scope of Educational Management.
- Describe the objectives, principles and types of Educational Management.
- Discuss about the Concept, Nature and Importance of educational planning
- Illustrate the role of Educational Supervision in educational institution.
- Discuss about the Meaning, Nature and Principles of Educational Administration.
- Outline various aspects of Institutional Planning & Leadership
- Enumerate differentstrategies& approaches to educational planning
- Identify the Recent Trends in educational Management

#### **COURSE CONTENTS**

#### **Unit-l: Introduction to Educational Management**

- Meaning, nature and scope of Educational Management
- Objectives/Purpose of Educational Management
- Principles of Educational Management
- Types of Educational Management—Centralized and Decentralized, Autocratic and Democratic
- Functions of Educational Management- Planning, Organizing, Directing, Supervising and controlling
- Classroom Management- Principles, Strategies and Techniques.
- Concept of organization
- Concept of educational organization
- Concept of school organization

#### Unit-II: Educational Planning& Educational Administration

- Meaning, Nature and Importance of educational planning
- Types and approaches of educational planning
- Principles of educational Planning
- Central State Relationship in Educational Planning & Administration
- Central and StateEducational Advisory Bodies& their roles—MoE, UGC, NCERT, SCERT
- Meaning, Concept and Types of Educational Administration.
- Administration vs. Management.
- Principles of Educational Administration.
- Administrative Skills.

• Functions of Educational Administration – POSDCORB

#### Unit-III: Institutional Planning&Leadership

- Concept, Nature, and Scope of Institutional Planning
- Institutional planning in practice
- Institutional Planning for Infrastructural Development and PersonnelDevelopment
- Procedure of Institutional Planning
- Organisation of Time Table and Co-curricular Activities
- Leadership in administration--Meaning and Nature, Skills and qualities of Effective Leadership and types/styles of leadership
- Factors Affecting Managerial Behaviour Personal, Social, Cultural, Political, Institutional

#### Unit-IV: Educational Supervision, Financing and Recent Trends in Management

- Meaning, Nature and significance of EducationalSupervision.
- Inspection vs. Supervision.
- Types of Educational Supervision.
- Concept of Educational Finance
- Sources of Educational Finance
- Principles of Educational Finance
- Significance of Educational Finance
- Recent Trends in Educational Management--Total Quality Management, SWOT Analysis

- Mukhopadhyay, B.(1994). Motivation in Educational Management: Issues and Strategies. New Delhi: Sterling Publishers.
- Singh, H. M. (1995). Fundamental of Educational Management. New Delhi: Vikas Publication.
- Report On Workshops on Educational Management and Educational Technology (1990). State Council of Higher Education, Andhra Pradesh,
- Guruge, A. W. P. (1984). Principles and Problems of Educational Management UNESCO, Paris.
- Report of the U.G.C. Committee: Towards New Educational Management (1990). New Delhi.
- Mukhopadhyay, B. (1994). Motivation in Educational Management: Issues and Strategies. New Delhi: Sterling Publications.
- Goode, John M. (1973). Readings in Educational Management. New York: Amacom.
- Pareek, Udai (1981). Handbook for Trainers in Educational Management:

- With Special Reference to countries in Asia and the Pacific.Bangkok: UNESCO Regional Office for Education in Asia.
- Handy, H. W. (1969). Network Analysis for Educational Management. Engle Wood Cliffs: Prentice Hall.
- Dennison, Bill (1987). Challenges in Educational Management Principles into Practice., London: Croom Helm Publishers.
- Johson, Daphne (1994). Research Methods in Educational Management. England: Longman Information & Reference.
- Preedy, Margaret (1989). Teacher's Case Studies in Educational Management. London: Paul Chapman Publishing.
- Bush, Tony (1999). Educational Management: Redefining Theory Policy and Practice. London: Paul Chapman Publish

# Elective/Minor Course (From any faculty except Major)

#### 3rd SEMESTER

Programme/Class: Diploma	Year: 2nd	Semester: Third
	Subject: Education	
Course Code: ED-301M	se Code: <b>ED-301M</b> Course Title: <b>History of Indian Ed</b>	
course code. 22 com	000000000000000000000000000000000000000	

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Outline the Special features of Education in Vedic, Brahmanic Buddhistic and Islamic Education
- Discuss about the Education System in Pre-Independence India
- Illustrate various Educational Provision enshrined in the Constitution of India.
- Describe the significant points of selected education commissions & national policy of education in independent India.
- Compare and contrast the Vedic, Buddhist, Medieval and Contemporary systems of Education
- Describe educational thoughts of Rammohan, Vidyasagar, Vivekananda, Gandhiji, Tagore, Aurobindo, Radhakrishnan,

#### **COURSE CONTENTS**

#### Unit-1: Education in ancient and medieval India

- ❖ Basic Ideas, objectives, Curriculum, Methods of Teaching & Role of Teachers of the following Systems-
  - Vedic Education
  - Brahmanic Education
  - Buddhistic System of Education
  - Islamic Education

#### Unit-II: Education in Colonial India (1813-1944)

- Chartar Act (1813)
- Macaulay's Minute (1835)
- Wood's Despatch (1854)
- Hunter's Commission (1882)
- Indian University Commission (1902)
- Sadler's Commission (1917)
- Hartog Committee (1929)
- Sargent Report (1944)

#### Unit-III: Education in Post-Independence India

- Education in the Indian Constitution
- University Education Commission (1948-49)
- Secondary Education Commission (1952-1953)
- Indian Education Commission (1964-66) with Reference to School Education
- Knowledge Commission Report (2007) with Reference to School Education

- Right to Education
- National Policy of Education (1986) POA (1992), NEP 2020

#### Unit-IV: Some great educators and their role in Framing Indian education

- Educational Thoughts of
  - o Raja Rammohan Roy (1772–1833)
  - o Iswar Chandra Vidyasagar (1820–1891)
  - o Rabindranath Tagore (1861 1941)
  - o Swami Vivekananda (1863 1902)
  - o Mahatma Gandhi (1869–1948)
  - Sri Aurobindo (1872 1950)
  - o Dr. Sarvepalli Radhakrishnan (1888-1975)

- Agarwalla, S. (2020), Great Educators & Educational Thoughts, Indore: Mahaveer Publications
- Agarwalla. J. C. Great Philosopher & Thinker on Education: New Delhi: Shipra Publication Pvt. Ltd. 2006.
- Ahmad, S. (2007). Educational Thinkers of India. Anmol Publisher.
- Babu, R. B., & Ghanta, R. (2011). Education and Ideology of Gandhi & Ivan Illich. New Delhi: Neekamal Publications.
- Garg, J., & Dutt, B. (2012). Educational Thinkers: A Brief Survey. Global Publications.
- Kriplani, K. (1980), Rabindranath Tagore: A Biography, Shantiniketan: Viswa Bharathi.
- Mete, J. (2019) Great Educators and their Educational Thoughts, Chennai: Notion Press
- Pathak, R. P. (2018). The Educational Thinkers of East and West. Delhi: Kanishka Publishers Distributors.
- Purkait, B. R. (2011) Great Educators and Their Philosophies, Pune: New Central Book Agency.
- Dash, B.N.(1991). Development of Education in India. New Delhi: Ajanta Prakashan.
- Das, K.K. (1993). Development of Education in India. New Delhi: Kalyani Publisher.
- Aggarwal, J.C. (2010). Landmarks in the History of Modern Indian Education. New Delhi: Vikas Publishing Pvt. Ltd.
- Chaube and Chaube. (2006). Education in ancient and medieval India. New Delhi: Vikas publication.
- Seeley, L. (2016). History of Education. Wentworth Press.
- Rawaat, P. L. (2019). History of Indian Education. Agra: Ram Prasad Publication.

# **Syllabus**

# DIPLOMA IN EDUCATION (SECOND YEAR)

### 4<sup>TH</sup> SEMESTER

Semester s	Course Code	Course Type	Course Title	Theory/ Practical	Course Credit	Class Per week
	Couc			Tractical	Credit	1 CI WCCK
	ED-401C	Major	Guidance and Counselling	Theory	4	Min.4
						Class (each class
						one hour duration)
	ED-402C	Major	Education for Special	Theory	4	Min.4
		-	Children	_		Class (each class
						one hour duration)
4 <sup>th</sup> Sem	ED-401M	Minor/Elective	Emerging Trends and	Theory	4	Min.4
			Issues in Education	_		Class (each class
						one hour duration)
	ED-401ID	Interdisciplinary/	Evaluation in Education	Theory	3	Min.3
		MOOC Course				Class (each class
						one hour duration)

#### 4th SEMESTER

#### Major ED-401C

Programme/Class: <b>Diploma</b>	Year: <b>Second</b>	Semester: Fourth	
	Subject: <b>Education</b>		
Course Code:ED-401C	Course Title: Guidance and Counselling		
Credits:4	Core Compulsory	Max. Marks: 100 (60+40)	

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the meaning, nature, scope and objectives of guidance.
- Discuss about the Concept, nature and types of counselling.
- Outline the various types of guidance and their importance
- Describe the concept ofguidance service and its various aspects.
- Illustrate the importance and significance of guidance programme in academic institution.
- Utilize Tools and techniques for collecting information on pupil for guidance.
- Enumerate the Role of the Head of the institution and parents in guidance and counselling
- List the qualities of a good counsellor

#### **COURSE CONTENTS**

#### **Unit-l: Introduction to Guidance**

- Meaning, objectives and scope of guidance
- Need, significance and principles of guidance
- Individual Guidance Meaning, advantages and disadvantages
- Group Guidance Meaning and Advantages and disadvantages
- Other types of guidance and their importance: Educational guidance, Vocationalguidance, Personal guidance, Socialguidance, Health guidance

#### **Unit-II: Introduction to Counselling**

- Meaning, objectives and scope of counselling
- Need and principles of counselling
- Approaches to counselling: Directive, Non-directive and Eclectic counselling
- Individual and Group Counselling –Meaning, Importance
- Relation between Guidance and Counselling
- Difference between Guidance and Counselling

#### Unit-III: Organization of guidance service

- Meaning of guidance service
- Need and principles of organizing guidance service
- Components of guidance service: counselling service, techniques of counselling service, Follow-up Services
- Qualities of a good counsellor
- Role of the Head of the institution and parents in guidance and counselling

• Challenges and functions of the teacher as guidance provider/ counsellor

#### Unit-IV: School guidance programme

- School guidance programme--Need for guidance in secondary schools and requisites of a good school guidance programme
- Guidance needs of students in relation to home-centred and school-centredproblems
- Importance of guidance and counselling cells in educational institutions--Guidance for CWSN, School Guidance Clinic
- Basic data necessary for *school* Guidance programme
- Tools and techniques for collecting information on pupil: testing and nontesting techniques, Cumulative Record Card&Anecdotal Record Card

- Agarwal, R (2010).Educational, Vocational guidance and Counselling, Principles, Techniques and programmes. New Delhi: Shipra Publication.
- Aggarwal J.C. (1989):Educational and Vocational Guidance and Counselling.
   New Delhi: Doaba House.
- Bhatia,K.K.(2009). Principles of Guidance and Counselling. New Delhi: Kalyani Publishers
- Kochhar, S.K. (2010). Educational and vocational guidance in secondary schools. New Delhi: Starling Publishers Pvt. Ltd.
- Sharma, R.N. (2006). Guidance and counselling. Delhi. Surjeet Publication
- Chauhan, S.S. (2009). Principles and Techniques of Guidance. New Delhi,
   Vikas publishing House Pvt. Ltd.
- Kochar, S.K. (1987). Educational and Vocational Guidance in Secondary Schools. New Delhi: Sterling publishers Ltd.
- Pal, D. (2005). Nirdesana O Paramarsa. Kolkata. Central Library.
- Vimchandra Mandal (2011). Nirdesana O ParamarsadanerRuprekha. Kolkata.
   Rita Publication.
- Bhatia, K.K. (2002). Principles of Guidance & Counselling. New Delhi.
   Kalyani publishers.

#### 4th SEMESTER

#### **Major**

#### ED-402C

Programme/Class: <b>Diploma</b>	Year: <b>Second</b> Semester: <b>Fourth</b>		
	Subject: <b>Education</b>		
Course Code:ED-402C	Course Title: Education for Special Children		
Credits:4	Core Compulsory	Max. Marks: 100 (60+40)	

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the meaning, nature, principles and scope of Inclusive Education.
- Describe the concept of Exceptional children.
- Discuss about various policy and provision regarding Inclusive Education.
- Illustrate the Concept, characteristics and way of education the creative and gifted children.
- Identify the creative and gifted children, Children with intellectual and learning disability.
- Describe the Concept, types, characteristics and way of educating the Children with intellectual and learning disability

#### **COURSE CONTENTS**

#### **Unit-1: Introductory Concept**

- Concept of Special Children and Special Education, Interrelationship between impairment, disability & handicap.
- Distinctions between inclusive education, special education and integrated education
- Inclusive Education—meaning, nature, objectives, Need, Importance, and principles
- Factors affecting inclusion, Obstacles/barriers in Inclusion, Elements necessary for creating an inclusive society

#### **Unit-II: Paradigm and Policy Perspectives**

- Historical development of inclusive education from special education
- The contemporary trends in inclusion/inclusive education
- Policy perspective: Initiatives to promote inclusive education- equity and equality;
- International Focus: Salamanca Statement (1994) and UNCRPD (2006),
- National Focus: Constitutional compulsion, RTE 2009, NPE(1986-92), PWD Act 1995-96 and revised PWD Bill 2012, NCF-2005 and Right of Person with Disabilities Act 2016, NEP 2020

#### Unit-III: Education of the gifted & creative children

- Addressing learners from diverse backgrounds including disadvantaged and deprived—socially and culturally;
- Concept of exceptional children and children with special needs (CWSN— Meaning, Types, Identification and characteristics

- Creative Children—Concept, characteristics, Identification, Educational provision, Role of Teacher
- Gifted children—Concept, characteristics, Identification, Educational provision, Role of Teacher

#### Unit-IV: Education of children with learning and Intellectual disability

- Children with intellectual disability—Concept, types, characteristics, Identification, Role of Teacher
- Children with learning disability —Concept, types, characteristics, Identification, Role of Teacher
- Educating children with learning and Intellectual disability—Issues & Challenges

- Ainscow, M., Dyson, A. and Booth, T. (2006) Improving Schools, Developing Inclusion, London:Routledge.
- Ainscow, M. and Booth, T (2002). Index for Inclusion: Developing Learning and Participation in Schools. Bristol: CSIE.
- Hegarty, S. and Mithu Alur (2002) Education and Children with Special Educational Needs-Segregation to Inclusion, New Delhi: Sage Publication India Pvt. Ltd Julka. A, Index of Inclusion (2012) NCERT, New Delhi.
- Jha.M.(2002) Inclusive Education for All: Schools Without Walls, Heinemann Educational publishers, Mult vista Global Ltd, Chennai
- Julka, A (2006) Meeting special needs in schools" A manual, NCERT, New Delhi UNICEF(2003) Examples of Inclusive Education, UNICEF ROSA, Kathmandu
- Julka, A. (2014) Teachers Creating Inclusive Classrooms: Issues and Challenges A Research Study
- Julka, A. (2014) Including Children with Special Needs: Primary Stage
- Julka, A. (2015) Including Children with Special Needs: Upper Primary Stage
- Mangal. S. K. (2009). Educating Exceptional Children: An Introduction to Special education. New Delhi: PHI Learning Pvt. Ltd.
- MHRD (2009), The Right of Children to Free and Compulsory Education Act, 2009. Ministry of Human Resource Development, New Delhi
- NCERT(2006), Position Paper: National Focus Group on Education of children with Special Needs, NCERT; DEGSN, New Delhi
- NCERT (2006), Position Paper: National Focus Group on Problems of Scheduled Castes and Scheduled Tribe Children NCERT, DEGSN, New Delhi.
- World Bank (2003) Inclusive Education: Achieving Education for All including those with Disabilities and Special Educational Needs.
- Ysseldyke, J.E. and Algozzine, B. (1998) Special Education A Practical approach for Teachers, New Delhi: Kanishka Publishers Distributors.
- Panda K. C. (1997). Education of the Exceptional Children. New Delhi: Vikas

Publications Ltd.

- Aggarwal, Rashmi (2010). Education for disabled children. New Delhi: Vikas Publication House.
- Bassa, Sayat (2017). Inclusive Education. New Delhi: N.D. Publisher.
- Allur, M. (2002). Education of children with special needs from segregation to inclusion. New Delhi: Sage Publisher.

Elective/Minor Course (From any faculty except Major)

#### 4th SEMESTER

#### **MINOR**

Programme/Class: <b>Diploma</b>	Year: 2nd	Semester: Fourth	
	Subject: Education		
Course Code: ED-401M	Course Title: Emergi	ng Trends and Issues in	
	Education		
Credits: 4	Open Elective	Max. Marks: 100 (60+40)	

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Describe the existing pattern and structure of school education in India.
- Illustrate the Scheme of Pre-Schooling and Proposed School education Structure by NEP 2020.
- Explain the Emerging trends and issues in education
- Outline the Trends and Issues in Higher Education
- Discuss about Emerging policy and practices in education
- Elaborate the various aspects and features of NEP-2020.

#### **COURSE CONTENTS**

#### Unit-1: Pre-Schooling and Elementary Education

- Existing school structure in India Pre-Primary, Primary, Secondary
- Types of Pre-Primary Schools—Anganwadi, Balwadi, Creches, Day Care Centres,
- Scheme of Pre-Schooling and Proposed School education Structure by NEP 2020
- Integrated Child Development Service(ICDS) and its role
- Early Childhood Care and Education—Need and Importance, issues and Challenges.
- Universalization of Elementary Education: Issues and challenges

#### Unit-II: Trends and Issues in Secondary Education

- Secondary education: its status, problems and aims
- Universalization of secondary education with special reference to Tripura
- Samagra Shiksha Abhiyan objectives, features and outcomes
- Vocationalization of Secondary Education
- Role of NCERT & SCERT
- Navodaya Vidhyalayas: Objectives and Quality Concerns

#### Unit-III: Trends and Issues in Higher Education

- Quality & Excellence in Higher Education
- Role and functions of different regulatory bodies in higher education: UGC, NAAC, NCTE, NIEPA, ICSSR and AICTE
- Efforts for upgrading the quality of Higher Education through RUSA
- NEP-2020 and Higher Education
- Approach towards Dual degrees, Non-formal, Continuing and Distance Education
- Academic freedom and University autonomy.
- Examination system credit system, national credit framework,

#### Unit-IV: Emerging policy and practices in education

• Privatization, Globalization and Liberalization

#### Unit-IV:Recent Trends and Practices in Assessment and Evaluation

- Recent trends and practices in assessment and evaluation-Scholastic, coscholastic, non-scholastic evaluation,
- Assignments, projects, seminars, group discussion, portfolios, rubrics, Online Examination
- Student profile, Poster assessment, open book exam, participatory assessment, peer assessment
- Grading, Credit and Semester System—Concept, characteristics, procedures, merits and demerits
- Continuous and Comprehensive Evaluation (CCE)—its concept and procedures
- Computer in Evaluation, Computer Based Test (CBT)

- Aggrawal, J.C (1997). Essentials of Examination System, Evaluation, Test and Measurement. New Delhi: Vikas Publishing House
- Anastasi, A. (1983), Psychological Testing, 6th Ed. New York: The Macmillan Co.
- Bloom, B.S.: Taxonomy of Educational Objectives; New York Longman.
- Cronbach, L.G. (1964), Essentials of Psychological Testing, New York: Harper.
- Gregory, R. J. (2005). Psychological Testing: History, principles, and Applications. Fourth ed. Delhi: Pearson Education Pte. Ltd.
- Grownlund, N.E.(1981), Measurement and Evaluation in Teaching, New York: MacMillan.
- Hopkins, KD. (1998). Educational & Psychological Measurement and Evaluation. Bostom: Allyn and Bacon.
- J. Swarupa Rani, Educational Measurement and Evaluation, Discovery Publishing House, 2004
- Karmel, L.C. and Karmel M.C. (1978), Measurement and Evaluation in Schools, New York: MacMillan.
- Mangal, S.K(2008) Statistics in Education System, Evaluation; Test & Measurement. New Delhi: Vikas Publishing Pvt. Ltd.
- Mehren, W.A. and Lehmann, I.J. (1984), Measurement and Evaluation in Education and Psychology, New York: Holt. Rinehart, Winston.
- Sharma, R. A. (2004). Essentials of Measurement in Education and Psychology. Meerut: R. Lall Book Depot.
- Sidhu, K. S. (2005). New Approaches to Measurement and Evaluation. New Delhi: Sterling Publishers Pvt. Ltd.

# Syllabus for B.A. in Education Interdisciplinary Course 1st SEMESTER 1ST YEAR

Programme/Class: Certificate	Year: <b>First</b>	Semester: First/Second	
	Subject: <b>Education</b>		
Course Code: ED-101ID	Course Title: Psycho	ology of Learning and	
	Instruction		
Credits:3	Interdisciplinary/	Max. Marks: <b>100 (60+40)</b>	

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the meaning, nature, scope and goals of educational Psychology
- Outline the Applications of Educational Psychology in Teaching and Learning Process.
- Discuss the concept of individual difference and its educational implication.
- Illustrate different Theories of Human development & Learning Process
- Describe the meaning, nature and importance of psychology of Instruction
- Enumerate the concept of lesson plan and micro teaching
- Elucidate the different techniques and approaches of teaching.
- Differentiate between instruction and teaching
- Describe the different teaching methods and strategies.

#### **COURSE CONTENTS**

#### **Unit-1: Introduction to Educational Psychology**

- Concept of Educational Psychology—its Meaning, Nature, Scope& Need; Relationship between Learning and Psychology,
- Methods of Educational Psychology—basics methods & design in studying learners behaviour
- Applications of Educational Psychology in Teaching and Learning Process.
- Role of Educational Psychology in understanding Learner Differencesand Learning Needs
- Individual differences among learner--concept, dimension and educational implications.

#### Unit-II: Understanding the Learner and their Development

- Students as Learners their Development and the Learning Process
- Human Growth and development meaning and basic principles
- Stages of development Infancy, Childhood and Adolescence
- Human development in the physical, social, emotional, and cognitive domains
- Theories of development—Piaget's Cognitive development&Vygotsky's Socio-Cultural Perspective

#### Unit-III: Theories of Learning & its Implication

- Learning its meaning, nature and factors influencing learning
- Kinds or types of learning &need of theory of learning
- E. L Thorndike's theory or Trial & Error Learning
- Learning by conditioning:
  - (a) Classical Conditioning (Pavlov)
  - (b) Operant Conditioning (Skinner)
- Learning by Insight (Gestalt)
- Discovery Learning (Bruner)
- Hierarchy of Learning types and condition (Gagne)

#### **Unit-IV: Psychology of Instruction**

- Psychology of Instruction: Its meaning, importance & difference between teaching and instruction.
- Instructional objectives: Blooms Taxonomy (Cognitive Domain)
- Instruction for problem solving, creativity and Discovery learning
- Concept and principles of Teaching, Criteria of good teaching
- Lesson Plan, Criteria of good lesson plan, steps and types of lesson plan; Art of Questioning

- Aggarwal, J. C. (2015). Essentials of Educational Psychology. New Delhi: Vikash Publishing House.
- Baldin, A. L. (1970). Theories of Child Development. New York: John Wiley & Sons
- Baron, R. A. (2017). Psychology. New Delhi: Pearson.
- Bhat, B.D. &Sharma, (2011). Educational Psychology. New Delhi: Kanishka Publishing House
- Chauhan, S. S. (2008). Innovations in Teaching-learning Process. New Delhi: VikashPublishing House Pvt. Ltd.
- Chauhan, S.S. (1998). Advanced Educational Psychology. New Delhi: Vikash Publishing House,
- Choube, S.P. & Choube. (1996). Educational Psychology and Experiments. New Delhi: Himalay Publishing House.
- Crow, & Crow, (1964). Educational Psychology. New Delhi:Eurasia Publishing House
- Dash, M. (2004). Educational Psychology.New Delhi: Deep & Deep Publishing Pvt. Ltd.
- Joshi, A. (). Models of Teaching. Agra: H.P. Bhargava, Book House
- Joyce, B., & Weil, M. (2005). Models of Teaching. New Delhi: PHI Pvt. Ltd.
- Kochhar, S. K. (1996). Methods and Techniques of Teaching. New Delhi: SterlingPublishers Pvt. Ltd.
- Mangal, S. K. (2014). Essentials of Educational Psychology. New Delhi: PHI Pvt. Ltd.
- Passi, B.K. (1976). Becoming Better teacher-Micro Teaching Approach. Ahmedabad:SahityaMudranalaya

- Piaget, J. (1971). Science of Education and the Psychology of the Child. New York: The Viking Press.
- Roy, S. (2013). Shiksha Manovidya. Kolkata: Soma Book Agency.
- Sharma, R.A. (2000). Teaching Foundation of Education. Meerut: R. Lall Book Depot
- Sharma,R.N. (1996). Advanced Educational Psychology: Guwahati: Eastern Book House.
- Siddiqui, M.H.(2008).Models of teaching. New Delhi: APH Publishing Corporation
- Singh, Amarjit (2006): Classroom Management, New Delhi: Kanishka Publishers
- Vygotsky, L.S. (1999) Educational Psychology, M/S S.K.Enterprise, Book Seller and Distributors, Shillong.
- Woolfolk, A. (2011). Educational Psychology. New Delhi: Pearson.

# INTERDISCIPLINARY COURSE 2nd YEAR

#### 3rd SEMESTER

Programme/Class: <b>Diploma</b>	Year: <b>Second</b>	Semester: <b>Third</b>	
	Subject: Education		
Course Code: ED-301ID	Course Title: Technology Integrated Education		
Credits: 3	Interdisciplinary/	Max. Marks: 100 (60+40)	
	MOOC Course		

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the concept, nature & significance of Educational Technology.
- Discuss the theory and history of educational technology.
- Enumerate the components and process of Technology integration in Education.
- Describethe various innovations in Educational Technology.
- Illustratethe Concept and application of ICT in Education
- Identify the security issues, ethics and trends in Educational Technology.

#### **COURSE CONTENTS**

#### Unit-l: Basics of Educational Technology

- Concept, nature and significance of Educational Technology
- History of Educational Technology
- Theory and Practice--Foundations for Effective Technology Integration, Theorists of Educational Technology
- Benefits and Criticism of Educational Technology

- Components of educational Technology—Hardware, Software, System Analysis
- Concept of Technology Integrated Education

#### Unit-II: Integrating Technology into Classroom Instruction

- Integrating technology in teaching learning-techniques and procedures
- ICT Concept and application
- Instructional Technology, Instructional Design, Instructional Technique
- Technology in/for the classroom, smart classroom
- Turn-around Technology Integration Pedagogy and Planning (TTIPP) Model; Instructional Software for Student Learning
- Technology Device and Software Resources for Classroom Productivity
- Teaching Aids types and uses, Psychology of using teaching Aids,

#### Unit-III: The Technology Integrated learning

- Communications, Networks, the Internet, and the World Wide Web, Search Techniques, and Search Tools for Education
- Social media as learning platform merits and demerits, Digital Citizenship
- Technology Integration Workshop, Rubric, Situated Learning,
- Virtual Learning Environment, Virtual Field Trips
- Technology Integrated Curriculum Concept & Application

#### Unit-IV: Security Issues, Ethics, and Emerging Technologies in Education

- Issues and challenges regarding Technology, Digital Media
- Safety and security issues in using technology in education; Ethics, Copyright and Professional Responsibilities
- Security threats and measures, Cyber privacy and Netiquette; ethical practices in cyber space; cyber laws and child safety.
- Artificial Intelligence & it's Uses in the field of Education
- Role of Technology in assessment--web based assessment, computerised test construction, electronic support as a tool in assessment process, advantage and disadvantage of Technology based assessment
- Programmed Learning/Instruction, Linear Programming, Branching Programming, Mathetics Programming, Development of Programmed Study

- Aggarwal, J. C. (2015). Essentials of Educational Technology. New Delhi: Vikash Publishing House.
- Integrating Technology and Digital Media in the Classroom. Shelly, Gunter, Gunter. Sixth Edition, Copyright 2010. ISBN# 9781439078358
- Roblyer, M. & Doering, A. 2016, Integrating Educational Technology into Teaching, Enhanced Pearson E-Text with Loose-Leaf Version -- Access Card Package (7th Edition), ISBN: 9780134046914
- Kulkarni, S. S. (1986). Introduction to Educational Technology. Oxford & IBH
- Kumar, K. L. (1997). Educational Technology. New Age International (p) Ltd.

# INTERDISCIPLINARY COURSE 2<sup>nd</sup> YEAR 4<sup>th</sup> SEMESTER

Programme/Class: Diploma	Year: Second	Semester: Fourth	
	Subject: Education		
Course Code: ED-401ID	Course Title: <b>Evaluation in Education</b>		
Credits: 3	Interdisciplinary/	Max. Marks: 100 (60+40)	
	MOOC Course		

#### **Course Learning Outcomes:**

On Completion of the course the students shall be able to:

- Explain the concept of measurement, assessment and evaluation.
- Differentiate measurement, assessment and evaluation.
- Explain different approaches of assessment.
- Use wide range of assessment tools and techniques and construct these appropriately.
- Classify educational objectives in terms of specific behavioural form
- Prepare a good achievement test on any school subject
- Explain the characteristics of good measuring instruments.
- Illustrate different types of assessment techniques

#### **COURSE CONTENTS**

#### Unit-1: Introduction to Measurement, Assessment and Evaluation

- Concepts of Educational measurement –Its nature, functions
- Evaluation-Its meaning, Characteristics, basic principles, importance
- Concept of Assessment its nature and functions
- Difference between assessment, measurement and evaluation.
- Scope and Need of Educational Measurement and Evaluation
- Relation between Measurement, Assessment and Evaluation.
- Scales of Measurement- Nominal, Ordinal, Interval and Ratio.
- Understanding the relative terms measurement, Test, Examination and evaluation

#### Unit-II: Tool and techniques of Assessment

- Classifications of Tests Standardized & Teacher-Made Test
- Achievement Test—concept, characteristics and uses
- Diagnostic test—construction and usefulness
- Other non-testingtechniques/devices (assignment, projects, observation, interview etc) & their features and uses
- Significance of Bloom's Taxonomy of Educational Objectives with special reference to cognitive Domain
- Feedback-its components, necessities and characteristics

#### Unit-III: Test Construction and Criteria of a Good Tests

- General principles of test constructions and standardization
- Criteria of a Good Tests
- Reliability—it's meaning, methods of determining reliability; factors influencing reliability.
- Validity: Meaning, types of validity & determination, threats to validity
- Objectivity- Concept
- Norms- Meaning & types

#### Unit-IV:Recent Trends and Practices in Assessment and Evaluation

- Recent trends and practices in assessment and evaluation-Scholastic, coscholastic, non-scholastic evaluation,
- Assignments, projects, seminars, group discussion, portfolios, rubrics, Online Examination
- Student profile, Poster assessment, open book exam, participatory assessment, peer assessment
- Grading, Credit and Semester System—Concept, characteristics, procedures, merits and demerits
- Continuous and Comprehensive Evaluation (CCE)—its concept and procedures
- Computer in Evaluation, Computer Based Test (CBT)

- Aggrawal, J.C (1997). Essentials of Examination System, Evaluation, Test and Measurement. New Delhi: Vikas Publishing House
- Anastasi, A. (1983), Psychological Testing, 6th Ed. New York: The Macmillan Co.
- Bloom, B.S.: Taxonomy of Educational Objectives; New York Longman.
- Cronbach, L.G. (1964), Essentials of Psychological Testing, New York: Harper.
- Gregory, R. J. (2005). Psychological Testing: History, principles, and Applications. Fourth ed. Delhi: Pearson Education Pte. Ltd.
- Grownlund, N.E.(1981), Measurement and Evaluation in Teaching, New York: MacMillan.
- Hopkins, KD. (1998). Educational & Psychological Measurement and Evaluation. Bostom: Allyn and Bacon.
- J. Swarupa Rani, Educational Measurement and Evaluation, Discovery Publishing House, 2004
- Karmel, L.C. and Karmel M.C. (1978), Measurement and Evaluation in Schools, New York: MacMillan.
- Mangal, S.K(2008) Statistics in Education System, Evaluation; Test & Measurement. New Delhi: Vikas Publishing Pvt. Ltd.
- Mehren, W.A. and Lehmann, I.J. (1984), Measurement and Evaluation in Education and Psychology, New York: Holt. Rinehart, Winston.
- Sharma, R. A. (2004). Essentials of Measurement in Education and Psychology.
   Meerut: R. Lall Book Depot.
- Sidhu, K. S. (2005). New Approaches to Measurement and Evaluation. New Delhi: Sterling Publishers Pvt. Ltd.

## TRIPURA UNIVERSITY

#### **SYLLABUS**

#### **FOR**

#### UNDER GRADUATE IN KOKBOROK

(SEMESTER- I TO IV)

MAJOR DISCIPLINE SPECIFIC COURSES (CORE)

**CBCS PATTERN (NEP-2020)** 

# TRIPURA UNIVERSITY UNDER GRADUATE SYLLABUS IN KOKBOROK

# MAJOR DISCIPLINE SPECIFIC COURSES

# (CORE)

SEMESTER	PAPER	NAME OF PAPER	CREDIT
	I	Growth and Development of Kokborok Language	04
I	II	Kokborok Poetry-I	04
	III	Introduction to Kokborok Language	04
II	IV	Kokborok Short Story-I	04
	V	History of Kokborok Literature-I	04
III	VI	Kokborok Novel-I	04
	VII	Linguistics-I	04
IV	VIII	Kokborok Drama-I	04

## B.A I SEMESTER

#### Kokborok (Major)

Paper-I

#### **Growth and Development of Kokborok Language**

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about the history of Kokborok language and classification of Sino-Tibetan languages by various scholars
- 2. Students will learn about the history of Kokborok language from 1841 to 1980
- 3. Students will learn about Kokborok language from 1981 to till date
- 4. Students will learn about status of Kokborok language and writing system

#### **Course Content:**

Unit-1: **Historical Development of Kokborok:** Genetic classification, Sino-Tibetan Language family- Its classification, Place of Kokborok in Sino-Tibetan Language family and within Bodo-Garo/Bodo-Garo-Koch sub-group of Tibeto-Burman language family

Unit-2: **History of Kokborok Language:** Kokborok Language from 1841 to 1980

Unit-3: **History of Kokborok Language:** Kokborok Language from 1981 to till date

Unit-4: **Status of Kokborok Language and Writing system:** Roman and Bengali Orthography, Standardization and Script issue

- 1. Ahmed, Kaji Daulat and Mohammed Umar. 1897. Kokboroma. Comilla: Amar Jantra.
- 2. Anderson, J.D. 1885. A short List of Words of the Hill Tepperah Language, with their English Equivalents. Also of words of the Language spoken by Lushais of the Sylhet Frontier. Shillong: Assam Secretariat Press.
- 3. Chatterji, Suniti Kumar. 1998. Kirata-Jana-Kriti. Rep. Calcutta: The Asiatic Society.
- 4. Choudhury, Kumud Kundu. 2001. *Kokborok Bhasa O Sahitya*. 2<sup>nd</sup> Edn. Agartala: Akshar Publication.
- 5. Debbarma, Binoy. 2017. *Tipra Dopha Kwmama Rutukma Songchama*. Agartala: Kokborok Tei Hukumu Mission.
- 6. Debbarma, Binoy. 2018. *The Tipra*. Agartala: Kokborok Tei Hukumu Mission.
- 7. Debbarma, Rabindra Kishore. 2005. *Kokborok Dhadha*. Agartala: Tribal Research and Cultural Institute

- 8. Debbarma, Rabindra Kishore. 2023. *Kokborok Kokma Tei Dalberem Laibuma*. Agartala: Khumpui Bijap Karima Nok.
- 9. Debnath, Rupak. 2014. *Kokborok: Language Origin and Development*. Khumulwng: Language Wing.
- 10. Dev Varma, Naresh Ch. 2010. *Kokborok Bhasha -Sahityer Kramabikash*. Agartala: Nabachandana Prakashani.
- 11. Dev Varma, Naresh Ch. 2014. Kokborok Kokni Sinimung. Agartala: Jora Publications.
- 12. Endle, Rev. S. 1884. Outline Grammar of the Kachari (Bara) Language: An Spoken in District Darrang, Assam; with illustrative sentences, notes, reading lessons, and a short Vocabulary. Shillong: Assam Secretariat Press.
- 13. Grierson, G.A. 1903-28. *Linguistic Survey of India*, Vol. III Part II. Reprinted 1967-68, Delhi-Varanasi, Patna: Motilal Banarsidass.
- 14. Hunter, W.W. 1976. A Statistical Account of Bengal. London: Trubner& Co.
- 15. Lewin, Thomas H. 1869. *The Hill Tracks of Chittagong and the Dwellers Therein; with Comparative Vocabularies of the Hill Dialects*. Calcutta: Bengal Printing Company limited.
- 16. Thurgood, G and R.J. LaPolla. Ed., 2003. *The Sino-Tibetan languages*. London: Routledge.

#### B.A I SEMESTER

#### Kokborok (Major)

Paper-II

#### Kokborok Poetry-I

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about the Kokborok poems written by Bangshi Thakur, Ram Kumar Debbarma, Jugendra Chandra Debbarma
- 2. Students will learn about the Kokborok poems written by Shyamlal Debbarma, Nanda Kumar Debbarma, Chandrakanta Murasingh
- 3. Students will learn about the Kokborok poems written by Sunacharan Debbarma
- 4. Students will learn about the Kokborok poems written by Bodhrai Debbarma, Sefali Debbarma, Sudhanya Tripura

#### **Course Content:**

Unit-1: a) Dongoino Ringdi by Bangshi Thakur

b) Tii-Tun by Ram Kumar Debbarma

c) Ogo Sa Kwrwini Nukhung by Jugendra Chandra Debbarma

Unit-2: a) Hachwk Gwnangwi Maichwlwi Pino Chwng by Shyamlal Debbarma

b) Kamini Lama by Nanda Kumar Debbarma

c) Holong Kok Sao Bolong Bisingo by Chandra Kanta Murasingh

Unit-3: Phirogwi Phaidi by Sunacharan Debbarma

Unit-4: a) Norogno Khulumjao by Bodhrai Debbarma

b) Ang Bwrwi Ongmabai by Sefali Debbarma

c) Gairing Khungsani Kothoma by Sudhanya Tripura

- 1. Debbarma, Bodhrai. 1997. Kolomtwi Rungkhu. Agartala: Chokhereng Publication.
- 2. Debbarma, Sefali. 2001. Hor Diporo Rwchapmung. Agartala: Kokborok Sahitya Samsad.
- 3. Dev Varma, Naresh Ch. and Shyamlal Debbarma. Ed. 1983. *Kogborok Koklob Bwchab*. Agartala: Kokborok Sahitya Prakashani.
- 4. Dev Varma, Naresh Ch. Ed. 2013. Phirogwi Phaidi. Agartala: Jora Publications.
- 5. Murasingh, Chandrakanta.1995. *Holong Kok Sao Bolong Bisingo*. Agartala: Kokborok Sahitya Sangskriti Samsad.
- 6. Tripura, Sudhanya. 2004. Bichar Mukhtiyarni Nogo. Agartala: Akshar Publication.

#### **B.A II SEMESTER**

#### Kokborok (Major)

Paper-III

#### **Introduction to Kokborok Language**

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about the Kokborok dialects and its distribution
- 2. Students will learn about the Kokborok phonology
- 3. Students will learn about the Kokborok morphology
- 4. Students will learn about Kokborok syntax and semantics

#### **Course Content:**

Unit-1: Kokborok Dialect: Comparative study of Kokborok Dialects, Demography Area of Kokborok Speaking Community

Unit-2: Phonology: Phonemic Inventory; Vowel and Consonants, Syllabic Structure

Unit-3: Morphology: Types of Morpheme, Affixes, Word Class, Word Formation, Case Marking

Unit-4: Syntax and Semantics: Word Order, Sentence and its different types, Thematic Role

- 1. Acharya, Nitai. 2015. Saral Kokborok Byakaran. Agartala: Yakhrai Publication.
- 2. Debbarma, Rabindra Kishore. 2002. *Kokborok Kokma Kwtal*. Agartala: Tribal Research & Cultural Institute.
- 3. Debbarma, Rabindra Kishore. 2023. *Kokborok Kokma Tei Dalberem Laibuma*. Agartala: Khumpui Bijap Karima Nok.
- 4. Dev Varma, Naresh Chandra 2012. *Kokborok Kokni Sinimung*. Agartala: Jora Publications.
- 5. Jacquesson, François. 2008. *A Kokborok Grammar: Agartala dialect.* Agartala: Kokborok Tei Hukumu Mission.
- 6. Karapurkar, Pushpa. 1972. *Tripuri Phonetic Reader*. Mysore, Central Institute of Indian Languages.
- 7. Karapurkar, Pushpa P. 1976. *Kokborok Grammar*. Mysore: Central Institute of Indian Languages.

#### **B.A II SEMESTER**

#### Kokborok (Major)

Paper-IV

#### Kokborok Short Story-I

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about the Kokborok Short Story written by Thakur Radhamohan Debbarma, Manmohan Debbarma, Ashwathama Jamatia
- 2. Students will learn about the Kokborok Short Story written by Nagendra Jamatia, Shyamlal Debbarma, Haripada Debbarma
- 3. Students will learn about the Kokborok Short Story written by Binoy Debbarma, Sunil Debbarma, Sudhanya Tripura
- 4. Students will learn about the Kokborok Short Story written by Rabindra Kishore Debbarma, Narendra Debbarma, Kunja Bihari Debbarma

#### **Course Content:**

Unit-1: a) Radha by Thakur Radhamohan Debbarma

b) Bayap by Manmohan Debbarma

c) Purnima Hor by Ashwathama Jamatia

Unit-2: a) Hathairai by Nagendra Jamatia

b) Hatal Ransama Molo by Shyamlal Debbarma

c) Agulini Hamjwk by Haripada Debbarma

Unit-3: a) Swmai by Binoy Debbarma

b) Bolongni Khum by Sunil Debbarma

c) Chandoramni Raidang by Sudhanya Tripura

Unit-4: a) Lamkaham Naitugwi by Rabindra Kishore Debbarma

b) Imangni Yakhilik by Narendra Debbarma

c) Basulam by Kunja Bihari Debbarma

- 1. Chaudhury, Suranjan Kundu. 2016. *Hachukni Sampili*. Agartala: Jora Publications.
- 2. Debbarma, Binoy. 1989. Nakhrai. Agartala: Presina.
- 3. Debbarma, Dipra Kishor. 2024. Bisirani Maikhul. Agartala: Kokborok Sahitya Sabha.
- 4. Debbarma, Dipra Kishor. 2024. Kwtal Kothoma. Agartala: Kokborok Sahitya Sabha.
- 5. Debbarma, Haripada. 1989. *Elemni Bibi*. Agartala: Yakhwrai Publication.

- 6. Debbarma, Kunja Bihari. 2001. Basulam. Agartala: Kokborok Sahitya Sanskriti Samsad.
- 7. Debbarma, Narendra. 2001. Imangni Yakhilik. Agartala: Hachukni Khorang Publishers.
- 8. Debbarma, Rabindra Kishore. 2002. *Hachukni Muktwi*. Agartala: Hachukni Khorang Publishers.
- 9. Debbarma, Shyamlal.1984. *Dundurukma*. Agartala: Yakhili Publication.
- 10. Debbarma, Sudhanwa. 1365 Tripurabdo. Ktal Kothoma. Vol.2.2. Agartala: Janasiksha Press.
- 11. Debbarma, Sunil. 1996. Bolongni khum. Agartala: Kokborok Sahitya Sanskriti Samsad.
- 12. Debbarman, Karabi. 1995. *Thakur Radha Mohan Deb Barman-Jiban O Samagra Rachana*. Agartala: Tripura Dorpan
- 13. Jamatia, Nagendra. 1978. Hathai. Agartala: Tripura Publishers.
- 14. Tripura, Sudhanya. 1999. Dongor Kamini Ochai. Agartala: Lampwra O Pohor Prakashani.

## B.A III SEMESTER

#### Kokborok (Major)

Paper-V

#### History of Kokborok Literature-I

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about the Oral literature
- 2. Students will learn about written literature history of early Kokborok literature up to 1950
- 3. Students will learn about written literature: poems, short stories, novels, dramas, literary essays (1951-1970)
- 4. Students will learn about poems, short stories, novels, dramas, literary essays (1971-1990)

#### **Course Content:**

Unit-1: Oral Literature: Concept, Meaning and Importance

Unit-2: Written Literature: History of Early Kokborok Literature up to 1950

Unit-3: Written Literature: Poems, Short Stories, Novels, Dramas, Literary Essays (1951-

1970)

Unit-4: Written Literature: Poems, Short Stories, Novels, Dramas, Literary Essays (1971-

1990)

- 1. Ahamed, Kaji Daulat & Mohammed Umar. 1897. Kokborma. Comilla: Amar Jantra.
- 2. Chaudhury, Kumud Kundu. 2012. *Kokborok Bhasa O Sahitya*. 2<sup>nd</sup> Edn. Agartala: Askhar Publication.
- 3. Debbarma, Binoy. 2017. *Tipra Dopha Kwmama Rutukma Songchama*. Agartala: Kokborok Tei Hukumu Mission.
- 4. Debbarma, Thakur Radhamohan. 1900. Kokborokma. Comilla: Chitanya Jantra.
- 5. Dev Varma, Naresh Ch. 2012. Kokborok Kokni Sinimung. Agartala: Jora Publications.
- 6. Dev Varma, Naresh Chandra. 2010. *Kokborok Bhasha-Sahityer Kramabikas*h. Agartala: Naba Chandana Prakashani.
- 7. Tripura, Alindralal. 1996. *Troipur Sanghita*. 2<sup>nd</sup> Edn. Agartala: Tribal Research and Cultural Institute.
- 8. Tripura, Khushi Krishna. 1976. *Ratan Manir Gan Reang Bidruher Adhatik Patabhumi*. Gomati Magazine, ICAT.

#### B.A III SEMESTER Kokborok (Major) Paper-VI

#### Kokborok Novel-I

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about Novel definition, types, feature and its importance.
- 2. Students will learn about Hachuk Khurio-I novel by Sudhanwa Debbarma
- 3. Students will learn about Rung-I novel by Nanda Kumar Debbarma
- 4. Students will learn about Srikanta-I novel translated by Shyamlal Debbarma

#### **Course Content:**

Unit-1: Novel: Definition, Types, Feature and Importance

Unit-2: Hachuk Khurio-I by Sudhanwa Debbarma

Unit-3: Rung-I by Nanda Kumar Debbarma

Unit-4: Srikanta-I by Shyamlal Debbarma Translated from the Srikanta-I by Sarat

Chandra Chattopadhyay

- 1. Chattopadhyay, Kuntal. 2018. *Sahityer Rup-Riti O Anyanya Prasanga*. Kolkata: Dey's Publishing.
- 2. Chaudhury, Kumud Kundu. 1999. *Kokborok Bhasa O Sahitya*. Agartala: Akhsar Publication.
- 3. Debbarma, Nanda Kumar. 2001. Rung. Agartala: Hachukni Khorang Publishers.
- 4. Debbarma, Shyamlal. 2009. *Sarat Chandra Chattopadhyayni Srikanta-I*. Khumulwng: Language Wing.
- 5. Debbarma, Sudhanwa. Ed. 2014. *Hachuk Khurio*. Khumulwng: Language Wing, Education Department.
- 6. Dev Varma, Nareshchandra. 2010. *Kokborok Bhasha-Sahitya Kramabikash*. Agartala: Nabachanda.
- 7. Dev Varma, Nareshchandra. 2014. Kokborok Kokrwbai. Agartala: Akshar Publication.

# B.A IV SEMESTER Kokborok (Major) Paper-VII

#### **Linguistics - I**

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about language and linguistic and its branches
- 2. Students will learn about phonetics and phonology
- 3. Students will learn about morphology and its branches
- 4. Students will learn about syntax and semantics

#### **Course Content:**

Unit-1: Language & Linguistics: Definition; Scope of Linguistics; different branches of Linguistics; Characteristics of human Language; Animal and Human Communication

Unit-2: Phonetics & Phonology: Air Stream Mechanism (Vowels & Consonant); Place of Articulation & Manner of Articulation; Phone, Phoneme; Allophone; Syllable.

Unit-3: Morphology: Definition and Concept, Morph, Morpheme, Allomorph, Affixes; Word Formation; Inflection & Derivation

Unit-4: Syntax and Semantics: Types of Sentence Structure; Phrase; Types of Semantical Meaning (Antonyms, Synonyms, Homonyms etc.)

- 1. Akmajian, Adrian, & et. Al. 2001. *Linguistics: An Introduction to Language and Communication*. 5<sup>th</sup> Edn. New Delhi: PHI.
- 2. Haque, Mohammad Daniul. 2002. Bhasha bigyaner Kotha. Dhaka: Mowla Brothers.
- 3. Prasad, Tarni. 2009. A Course in Linguistics. New Delhi: PHI.
- 4. Sethi, J and Dhamija P.V, 2007. *A course in Phonetics and Spoken English*. 2<sup>nd</sup> Edn. Prentice hall of India.
- 5. Syal, Pushpinder & D.V. Jindal. 2014. *Introduction to Linguistics: Language, Grammar and Semantics*. New Delhi: PHI.
- 6. Thakur, D. 1997. *Linguistics Simplified Morphology*. Delhi: Bharati Bhawan Publishers & Distributers.
- 7. Thakur, D. 2017. *Linguistics Simplified Syntax*. Delhi: Bharati Bhawan Publishers & Distributers.

- 8. Thakur, D. 2021. *Linguistics Simplified Semantics*. Delhi: Bharati Bhawan Publishers & Distributers.
- 9. Yule, George. 2017. *The Study of Language*. 6<sup>th</sup> Edn. London: Cambridge University Press.

# B.A IV SEMESTER Kokborok (Major)

#### Paper-VIII Kokborok Drama- I

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about drama definition, types, characteristics and its importance
- 2. Students will learn about Egiye Chalo drama by Sudhanwa Debbarma
- 3. Students will learn about Bengswnal-I drama by Shyamlal Debbarma
- 4. Students will learn about Veniceni Baniyasa drama translated by Jashuda Reang

#### **Course Content:**

Unit-1 Drama: Definition, Types, Characteristics and Importance

Unit-2 Agiye Chalo by Sudhanwa Debbarma

Unit-3 Bengswnal-I by Shyamlal Debbarma

Unit-4 Veniceni Baniyasa by Jashuda Reang Translated from the Merchant of Venice by William Shakespeare

- 1. Bhattacharjee, Bibhu. 2009. *Tripura Theatre*. Agartala.
- 2. Chattopadhyay, Kuntal. 2018. *Sahityer Rup-Riti O Anyanya Prasanga*. Kolkata: Dey's Publishing.
- 3. Debbarma, Dipra Kishor. 2022. *Thungnukni Hatalo Khakhamung*. Agartala: Penster Publications.
- 4. Debbarma, Nanda Kumar. 2018. *Thungnuk Koklam*. Agartala: Kokborok Sahitya Sabha.
- 5. Debbarma, Rabindra Kishore. 2013. *Kokborok Kokrwbaini Rukungo*. Agartala: Jora Publications
- 6. Debbarma, Sudhanwa. 1950-55. *Agiye Chalo*. Agartala: Kokborok Sahitya Sanskriti Samsad.
- 7. Reang, Jashuda. 2007. Veniceni Baniyasa. Khumulwng: Language Wing.

## TRIPURA UNIVERSITY

#### **SYLLABUS**

#### **FOR**

# UNDER GRADUATE IN KOKBOROK

(SEMESTER- I TO IV)

**MINOR/ELECTIVE** 

**CBCS PATTERN (NEP-2020)** 

# TRIPURA UNIVERSITY UNDER GRADUATE SYLLABUS IN KOKBOROK MINOR/ELECTIVE

SEMESTER	PAPER	NAME OF PAPER	CREDIT
I	I	Language Family	04
II	II	Kokborok Folk Literature	04
III	Ш	Introduction to Kokborok Language	04
IV	IV	Kokborok Poetry	04

#### B.A I SEMESTER

#### **Kokborok (Minor/Elective)**

Paper-I

#### **Language Family**

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about the Sino-Tibetan language family and languages
- 2. Students will learn about the Indo-European language family and languages
- 3. Students will learn about the Austro-Asiatic language family and languages
- 4. Students will learn about the Dravidian language family and languages

#### **Course Content:**

- Unit-1: Sino-Tibetan Language Family: Classification and Characteristics of Tibeto-Burman group of Languages (Bodo-Garo, Kuki-Chin, Lolo-Burmese etc.)
- Unit-2: Indo-Aryan Language Family: Classification and Characteristics of Classification of Indo-Aryan Languages (Eastern, Western, Southern etc.)
- Unit-3: Austro-Asiatic Language Family: Classification and Characteristics of Classification of Austro Asiatic group of Languages (Munda, Mon-Khmer etc)
- Unit-4: Dravidian Language Family: Classification and Characteristics of Dravidian group of Languages (Southern, Central, Northern etc.)

- 1. Cardona, G. and Jain, D. (Eds). 2003. *The Indo-Aryan Languages*. London & New York: Routledge.
- 2. Comrie, Bernard. Ed. 2018. *The World's Major Languages*. 3<sup>rd</sup> Edn. New York: Routledge.
- 3. Grierson, G.A. 1927. *Linguistic Survey of India*. Vol. I Part I. Ed. by Siddheswar Verma. Delhi: Motilal Banarsidass.
- 4. Jeny, Mathias and Paul Sidwell, Ed. 2015. *The Handbook of Austroasiatic Languages*. Vol. 1 & 2. Leiden/Boston: Brill.
- 5. Kapovic, Mate. 2017. *The Indo-European Languages*. 2<sup>nd</sup> Edn. New York/London: Routledge.
- 6. Krishnamurti, Bhadriraju. 2003. *The Dravidian Languages*. New York: Cambridge University Press.

- 7. Masica, Colin P. 1991. The Indo-Aryan Languages. New York: Cambridge University Press.
- Steever, Sanford B. 2020. *The Dravidian Languages*. 2<sup>nd</sup> Edn. New York: Routledge.
   Thurgood, Graham and Randy J. LaPolla. 2017. *The Sino-Tibetan Languages*. 2<sup>nd</sup> Edn. New York/London: Routledge.

#### **B.A II SEMESTER**

#### **Kokborok (Minor/Elective)**

#### Paper-II

#### **Kokborok Folk Literature**

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about the folklore and folk literature, its concept and background of folk study
- 2. Students will learn about the folktales such as: Chethuwang, Kuchuk Kherengbar, Yamroksa etc.
- 3. Students will learn about the folksongs such as: Mamita, Goria, Lebang Bumani, Jaduni etc.
- 4. Students will learn about the folk speech of Kokborok such as: idioms and phrases, proverbs and riddles etc.

#### **Course Content:**

Unit-1: Folklore and Folk Literature: Concept and background of Folk study

Unit-2: Folktales: Chethuwang, Kuchuk Kherengbar, Yamroksa etc.

Unit-3: Folksongs: Mamita, Goria, Lebang Bumani, Jaduni etc. and Ballad

Unit-4: Folk speech: Idioms and Phrases, Proverbs and Riddles etc.

- 1. Debbarma, Binoy, 2017. *Kokborokni Phumukmung*. Agartala: Kokborok Tei Hukumu Mission.
- 2. Debbarma, Birendra. 2021. *Kokborok Kokpholok*. Agartala: Directorate of Kokborok and Other Minority Languages.
- 3. Debbarma, Rabindra Kishore and Tarini Debbarma. 2002. *Kerang Kothoma*. Agartala: Tribal Research and Cultural Institute.
- 4. Debbarma, Rabindra Kishore. 2011. *Tipra Lukuhukumu*. Khumulwng: Language Wing.
- 5. Debbarma, Rabindra Kishore. 2019. *Tipra Barot*. Khumulwng: Language Wing.
- 6. Debbarma, Rabindra Kishore. Ed. 2021. *Kokborok Kokrwbam Kwtal*. Agartala: Tripura Bani Prakashani.

#### **B.A III SEMESTER**

#### **Kokborok (Minor/Elective)**

#### Paper-III

#### **Introduction to Kokborok Language**

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about the Kokborok dialects and its distribution
- 2. Students will learn about the Kokborok phonology
- 3. Students will learn about the Kokborok morphology
- 4. Students will learn about Kokborok syntax and semantics

#### **Course Content:**

Unit-1: Kokborok dialect: Comparative study of Kokborok Dialects, Demography Area of Kokborok Speaking Community

Unit-2: Phonology: Vowel and Consonants, Syllabic Structure

Unit-3: Morphology: Types of Morpheme, Affixes, Word Formation, Case Marking

Unit-4: Syntax and Semantics: Word Order, Sentence and its Different Types, Thematic Role

- 1. Acharya, Nitai. 2015. Saral Kokborok Byakaran. Agartala: Yakhrai Publication.
- 2. Debbarma, Rabindra Kishore. 2002. *Kokborok Kokma Kwtal*. Agartala: Tribal Research & Cultural Institute.
- 3. Debbarma, Rabindra Kishore. 2023. *Kokborok Kokma Tei Dalberem Laibuma*. Agartala: Khumpui Bijap Karima Nok.
- 4. Dev Varma, Naresh Chandra 2012. *Kokborok Kokni Sinimung*. Agartala: Jora Publications.
- 5. Jacquesson, François. 2008. *A Kokborok Grammar: Agartala dialect.* Agartala: Kokborok Tei Hukumu Mission.
- 6. Karapurkar, Pushpa. 1972. *Tripuri Phonetic Reader*. Mysore: Central Institute of Indian Languages.
- 7. Karapurkar, Pushpa Pai. 1976. *Kokborok Grammar*. Mysore: Central Institute of Indian Languages.

#### B.A IV SEMESTER

#### **Kokborok (Minor/Elective)**

Paper-IV

#### **Kokborok Poetry**

(Credits: 4, Classes: 04/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Student will learn about Kokborok poems written by Mahendra Debbarma, Bangshi Thakur, Ramesh Debbarma
- 2. Student will learn about Kokborok poems written by Shyamlal Debbarma, Nanda Kumar Debbarma, Chandrakanta Murasingh
- 3. Student will learn about Kokborok poems written by Gopi Ballav Kalai, Gitya Kumar Reang, Naba Kishore Jamatia
- 4. Student will learn about Kokborok poems written by Sefali Debbarma, Dipali Debbarma, Sabita Debbarma

#### **Course Content:**

Unit-1: a) Sabo Sa Chini Phan Kwrwi by Mahendra Debbarma

- b) Dongoi-no Ringdi by Bangshi Thakur
- c) Toke Bai Tokha by Ramesh Debbarma

**Ref:** 1. Dev Varma, Naresh Chandra and Shyamlal Debbarma, Ed.1983. *Kogborok Koglop Bwchab*. Agartala: Kokborok Sahitya Prakashani.

Unit-2: a) Kokthai Naitugna Tugkha by Shyamlal Debbarma

- b) Khulumo by Nanda Kumar Debbarma
- c) Lok Chethuwang Lok by Chandrakanta Murasingh

**Ref:** 1. Debbarma, Shyamlal and Sunil Debbarma. 1999. *Anji*. Khumulwng: Tribal Culture, Research, Publicity & Youth Programme.

Unit-3: a) Biyal by Gopi Vallab Kalai

- b) Blai Kkhrang by Gitya Kumar Reang
- c) Achaima Ha by Naba Kishore Jamatia

**Ref:** 1. Dev Varma, Naresh Chandra and Shyamlal Debbarma, Ed.1983. *Kogborok Koglop Bwchab*. Agartala: Kokborok Sahitya Prakashani.

2. Debbarma, Binoy. 2009. An Anthology of Kokborok Poems. Khumulwng: Language Wing

Unit-4: a) Hor Diporo Rwchapmung by Sefali Debbarma

- b) Hachwkni Bwrwi by Dipali Debbarma
- c) Barsa Khum by Sabita Debbarma

**Ref:** 1. Debbarma, Sabita. 2009. *Barsa Khum*. TTAADC Khumulwng: Language Wing, Education Department.

2. Debbarma, Sefali. 2001. *Hor Diporo Rwchapmung*. Agartala: Kokborok Sahitya Samsad. 3. Debbarma, Shyamlal and Sunil Debbarma. 1999. *Anji*. Khumulwng: Tribal Culture, Research, Publicity & Youth Programme.

- 1. Debbarma, Dipra Kishor. 2023. Bwkwrang. Agartala: Kokborok Sahitya Sabha.
- 2. Debbarma, Sabita. 2009. Barsa Khum. Khumulwng: Language Wing.
- 3. Debbarma, Sefali. 2001. Hor Diporo Rwchapmung. Agartala: Kokborok Sahitya Samsad.
- 4. Debbarma, Shyamlal and Sunil Debbarma. 1999. *Anji*. Khumulwng: Tribal Culture, Research, Publicity & Youth Programme.
- 5. Dev Varma, Naresh Chandra and Shyamlal Debbarma, Ed. 1983. *Kogborok Koglob Bwchab*. Agartala: Kokborok Sahitya Prakashani.
- 6. Murasingh, Chandrakanta and et all. 2021. *Khumpui Barrwrwk*. Agartala: Akshar Publications.

#### TRIPURA UNIVERSITY

#### **SYLLABUS**

## **FOR**

#### UNDER GRADUATE IN KOKBOROK

(SEMESTER- I TO IV)

**INTERDISCIPLINARY COURSES** 

**CBCS PATTERN (NEP-2020)** 

# TRIPURA UNIVERSITY UNDER GRADUATE SYLLABUS IN KOKBOROK INTERDISCIPLINARY COURSES

SEMESTER	PAPER	NAME OF PAPER	CREDIT
I	I	Kokborok Oral Literature	03
Ш	II	History of Kokborok Language	03
IV	III	History of Kokborok Literature	03

#### **B.A I SEMESTER**

#### **Kokborok (Interdisciplinary Courses)**

#### Paper-I

#### **Kokborok Oral Literature**

(Credits: 3, Classes: 03/Week)

#### **Course Specific Outcome:**

After studying this course

- 5. Students will learn about the concept, meaning, definition and its characteristics
- 6. Students will learn about the myths, legend, tale, ballad etc.
- 7. Students will learn about the folktale; varieties of folktales, role of folktales in society
- 8. Students will learn about the riddles, proverbs and its classification

#### **Course Content:**

Unit-1: Concept, Meaning, Definition and its Characteristics

Unit-2: Myths, Legend, Tale, Ballad etc.

Unit-3: Folktale; Varieties of Folktales, Role of Folktales in Society

Unit-4: Riddles, Proverbs and its Classification

- 1. Debbarma, Binoy. 2017. *Kokborokni Phumukmung*. Agartala: Kokborok Tei Hukumu Mission.
- 2. Debbarma, Birendra. 2021. *Kokborok Kokpholok*. Agartala: Directorate of Kokborok and Other Minority Languages.
- 3. Debbarma, Rabindra Kihore. 2007. *Kokborok Luku Kokrwbai*. Khumulwng: Language Wing.
- 4. Debbarma, Rabindra Kishore. 2005. *Kokborok Dhadha*. Agartala: Tribal Research and Cultural Institute.
- 5. Dev Varma, Naresh Chandra. 2012. Phirogwi Phaidi. Agartala: Jora Publications.
- 6. M. Dorson, Richard. 1972. Folklore and Folk life. Chicago: Chicago University Press.
- 7. Miruka, Okumba. 1994. *Encounter with Oral Literature*. Nairobi: East African Educational Publishers Ltd

#### **B.A III SEMESTER**

#### **Kokborok (Interdisciplinary Courses)**

#### Paper-II

#### History of Kokborok Language

(Credits: 3, Classes: 03/Week)

#### **Course Specific Outcome:**

After studying this course

- 1. Students will learn about the history of Kokborok language from 1841 to 1980
- 2. Students will learn about Kokborok language from 1981 to 2000
- 3. Students will learn about Kokborok language from 2001 to till date
- 4. Students will learn about status of Kokborok language and writing system

#### **Course Content:**

Unit-1: Development of Kokborok Language from 1841-1980

Unit-2: Development of Kokborok Language from 1981-2000

Unit-3: Development of Kokborok Language from 2001 to till date

Unit-4: Status of Kokborok Language and Writing system: Roman and Bengali

Orthography, Standardization and Script issue

- 1. Ahmed, Kaji Daulat and Mohammed Umar. 1897. *Kokboroma*. Comilla: Amar Jantra.
- 2. Anderson, J.D. 1885. A short List of Words of the Hill Tepperah Language, with their English Equivalents. Also of words of the Language spoken by Lushais of the Sylhet Frontier. Shillong: Assam Secretariat Press.
- 3. Chatterji, Suniti Kumar. 1998. *Kirata-Jana-Kriti*. Rep. Calcutta: The Asiatic Society.
- 4. Choudhury, Kumud Kundu. 2001. *Kokborok Bhasa O Sahitya*. 2<sup>nd</sup> Edn. Agartala: Akshar Publications.
- 5. Debbarma, Binoy. 2017. *Tipra Dopha Kwmama Rutukma Songchama*. Agartala: Kokborok Tei Hukumu Mission.
- 6. Debbarma, Binoy. 2018. *The Tipra*. Agartala: Kokborok Tei Hukumu Mission.
- 7. Debbarma, Rabindra Kishore. 2005. *Kokborok Dhadha*. Agartala: Tribal Research and Cultural Institute.
- 8. Debbarma, Rabindra Kishore. 2023. *Kokborok Kokma Tei Dalberem Laibuma*. Agartala: Khumpui Bijap Karima Nok.
- 9. Dev Varma, Naresh Ch. 2010. *Kokborok Bhasha-Sahityer Kramabikash*. Agartala: Nabachandana Prakasani.
- 10. Dev Varma, Naresh Ch. 2014. Kokborok Kokni Sinimung. Agartala: Jora Publications.

#### BA IV SEMESTER

## **Kokborok (Interdisciplinary Courses)**

## Paper-III

## **History of Kokborok Literature**

(Credits: 3, Classes: 03/Week)

## **Course Specific Outcome:**

After studying this course

- 1. Students will learn about the history of Kokborok literature from 1897-1950 (Daulat Ahammed, Thakur Radhamohan Debbarma, Samarendra Chandra Debbarma, Sadhukhushi Krishna etc.)
- 2. Students will learn about the history of Kokborok literature from 1951-1970 (Sudhanwa Debbarma Kwtal Kothoma, Sunacharan Debbarma Phirogwi Phaidi, Mahendra Debbarma, Ajit Bandhu Debbarma etc.)
- 3. Students will learn about the history of Kokborok literature from 1971-2000 (Alindralal Tripura, Nagendra Jamatia, Shyamlal Debbarma, Nanda Kumar Debbarma etc.)
- 4. Students will learn about the history of Kokborok literature from 2001 to till date (Naresh Chandra Debbarma, Rabindra Kishore Debbarma, Sunil Debbarma, Sefali Debbarma etc.)

## **Course Content:**

- Unit-1: Kokborok Literature from 1897-1950 (Daulat Ahammed, Thakur Radhamohan Debbarma, Samarendra Chandra Debbarma, Sadhukhushi Krishna etc.)
- Unit-2: Kokborok Literature from 1951-1970 (Sudhanwa Debbarma Kwtal Kothoma, Sunacharan Debbarma Phirogwi Phaidi, Mahendra Debbarma, Ajit Bandhu Debbarma etc.)
- Unit-3: Kokborok Literature from 1971-2000 (Alindralal Tripura, Nagendra Jamatia, Shyamlal Debbarma, Nanda Kumar Debbarma etc.)
- Unit-4: Kokborok Literature from 2001 to till date (Naresh Chandra Debbarma, Rabindra Kishore Debbarma, Sunil Debbarma, Sefali Debbarma etc.)

- 1. Ahamed, Kaji Daulat and Mahammed Umar. 1897. Kokborma. Comilla: Amar Jantra.
- 2. Dev Varma, Naresh Ch.2014. Kokborok Kokni Sinimung. Agartala: Jora Publication.
- 3. Dev Varma, Naresh Ch.2014. Kokborok Kokrwbai. Agartala: Akshar Publication.
- **4.** Debbarma, Dipra Kishor. 2024. Kwtal Kothoma. Agartala: Kokborok Sahitya Sabha.

## TRIPURA UNIVERSITY

## **SYLLABUS**

# **FOR**

# UNDER GRADUATE IN KOKBOROK

(SEMESTER- I TO IV)

**Interdisciplinary Courses** 

**CBCS PATTERN (NEP-2020)** 

# TRIPURA UNIVERSITY UNDER GRADUATE SYLLABUS IN KOKBOROK

# **Interdisciplinary Courses**

SEMESTER	PAPER	NAME OF PAPER	CREDIT
I	I	Oral Literature	03
III	II	Language Documentation	03
IV	III	Fieldwork	03

## B.A I Semester Kokborok Paper-I (Interdisciplinary Courses)

## **Oral Literature**

(Credits: 3, Classes: 03/Week)

## Course Specific Outcome:

After studying this course

- 1. Students will learn about the Concept Meaning, definition and its Characteristics.
- 2. Students will learn about the Myths, legend, tale, ballad etc.
- 3. Students will learn about the Folktale Varieties of Folktales, Role of Folktales in Society
- 4. Students will learn about the riddles, proverbs and its classification

## **Course Content:**

Unit-1: Concept – Meaning, definition and its characteristics.

Unit-2: Myths, legend, tale, ballad etc.

Unit-3: Folktale – Varieties of Folktales, Role of Folktales in Society

Unit-4: Riddles, proverbs and its classification

- 1. M. Dorson, Richard. 1972. Folklore and Folk life. Chicago: Chicago University Press.
- 2. Miruka, Okumba. 1994. Encounter with Oral Literature. Nairobi: East African Educational Publishers Ltd.



# TRIPURA UNIVERSITY

# Suryamaninagar

## **SYLLABUS**

## **FOR**

# UNDERGRADUATE PROGRAM

(BA IN PHILOSOPHY)

(In Accordance with the Guidelines of NEP 2020)

(SEMESTERS: I, II, III & IV)

MAJOR (CORE) and MINOR (ELECTIVE)

(Approved by BUGS meeting held on  $5^{th}$  July 2022)

# Tripura University Syllabus for

# Bachelor of Arts (BA)

Subject: Philosophy (In Accordance with the Guidelines of NEP 2020)

## Semester – I

Paper – I (MAJOR) Indian Philosophy – I (PL - 101C)

> Full Marks: 100 Credits: 4

- **Unit I:** (i) Introduction: Common characteristics and classifications of Indian Philosophical Schools: Astika and Nastika
- (ii) Carvaka School: Epistemology, Metaphysics and Ethics
- (ii) Jainism: Concepts of jiva, ajiva, Anekantavada, Syadvada and Nayavada, Bondage and Liberation and Ethical views
- (iii) Buddhism: (a) Theory of Dependent Origination, Four Noble Truths, Theory of Momentariness, Theory of No-Soul, (b) Four schools of Buddhism: Vaibhasika, Soutrantika, Yogacara and Madhyamika.
- **Unit II:** (i) Nyaya: Defination of Perception (Pratyaksa), Definition of Sannikarsa and its significance, Classification of Pratyaksa Ordinary Laukika, Extra-ordinary Alaukia, Indeterminate (Nirbikalpaka) and Determinate (Savikalpaka), Recognition (Pratvijna), Inference (Anumana), Comparison (Upamana), Testimony (Sabda), The individual self and it's liberation, The idea of God and proofs for its existence
- (ii) Vaisesika Philosophy Padartha, Dravya, Guna, Karma, Samanya, Visesa, Samavaya, Abhava
- **Unit III:** (i) Samkhya: Satkaryavada, Nature of Prakriti and its constituents- Theory of Evolution, Nature of Purusa and proofs for its existence, Plurality of Purusas.
- (ii) Yoga:Citta, Cittavrtti, Cittabhumi, Eightfold path of Yoga, God.
- (iii) PurvaMimamsa: Nature of Knowledge- the debates between Kumarila and Prabhakara about Anupalabdhi, Arthapatti and Pramanyavada.
- **Unit IV:** (i) Advaita Vedanta of Sankaracharya Sankara's view of Brahman, Maya, and Jiva, Three grades of Satta, Jiva, Jagat, Moksha.
- (ii) Visitadvaita Vedanta of Ramanuja: Nature of Brahman, Refutation of Sankara's doctrine of Maya, Jiva, Jagat, Moksa.

- 1. An Introduction to Indian Philosophy: D.M. Dutta and S.C. Chatterjee
- 2. Outlines of Indian Philosophy: M. Hiriyana
- 3. A Critical Survey of Indian Philosophy: C.D. Sharma
- 4. Indian Philosophy (Vol. I & Vol. III): S. Radhakrishnan
- 5. Central Philosophy of Buddhism: T.R.V. Murti
- 6. Reason and Tradition in Indian Philosophy: J.N. Mahanti
- 7. Studies in Philosophy: Vol. I: K.C. Bhattacharya
- 8. Sayan Madhaviya Sarva Darsan Saigraha: Satyajyoti Chakraborty
- 9. Bharatiya Darsan: Debabrata Sen
- 10. Bharatiya Darsan: Nirode Baran Chakraborty
- 11. Carvaka Darsan: Panchanan Sastri
- 12. Carvaka Darsan: Daksina Ranjan Sastri
- 13. Buddha Darsan: Panchanan Sastri
- 14. Nyaya Vaisesika Darsana: Karuna Bhattacharya
- 15. Sankhya Tattva Kaumudi: Narayan Goswami
- 16. Sankhya Patanjali Darsan: Kanak Prava Bhattacharya
- 17. Purva Mimansa Darsan: Sukhomay Bhattacharya
- 18. BharatiyaDarsan:Pradyot Kumar Mandal
- 19. Bharatiya DarsanerMarma Katha: HaridasBandupadhyaya
- 20. Bhartiya Darsan: Dipak Kumar Bagchi
- 21. Bhartiya Darsan: Samarendra Bhattacharjee

## Semester – I

Paper – II (MAJOR)

Western Philosophy – I (PL - 102C) Full Marks: 100 Credits: 4

- **Unit I**: (i) Plato: Theory of knowledge (episteme) and opinion (doxa), Theory of Forms
  - (ii) Aristotle: Critique of Plato's theory of Forms, Theory of Causation, Form and Matter, Potentiality and Actuality.
- **Unit II**: (i) Descartes: Method and need for Method in philosophy, Method of Doubt: Cogito Ergo Sum, types of Ideas, mind and matter, mind-body interactionism, God: nature and proofs for His existence.
  - (ii) Spinoza: Substance, attributes and modes, the concept of 'God or Nature', Pantheism, mind-body problem, three orders of knowing.
  - (iii) Leibnitz: Monadology, doctrine of pre-established harmony, truths of reason and truths of facts, innateness of all ideas, principles of non-contradiction, sufficient reason and identity of the indiscernible
- **Unit III**: (i) Locke: Ideas and their classification, refutation of innate ideas, knowledge and its grades, substance, qualities.
  - (ii) Berkeley: Rejection of abstract ideas, rejection of the distinction between primary and secondary qualities, immaterialism, *esse est percipii*.

- (ii) Hume: Impressions and ideas, judgments concerning relations of ideas and matters of fact, causality, skepticism.
- **Unit IV**: Kant: Conception of critical philosophy, classification of judgments: analytic, synthetic, apriori, aposteriori, possibility of synthetic apriori judgments, the forms of sensibility (space and time), categories of the understanding, the metaphysical deduction of categories, postulates of moral judgements, phenomena and noumena, postulates of moral judgements.

## **Suggested Readings:**

- 1. Greek Philosophy: Burnet
- 2. A History of Philosophy: F. Coplrston
- 3. A Critical History of Modern Philosophy: D.J.O'Connor
- 4. History of Modern Philosophy: Richard Falckenberg
- 5. A History of Modern Philosophy: W.K. Wright
- 6. A Critical History of Greek Philosophy: W.T. Stace
- 7. Locke, Berkeley, Hume: C.R. Morris
- 8. The Rationalists: John Cottinggham
- 9. Locke, Berkeley, Hume: Nirode Baran Chakraborty
- 10. Plato and Aristotle: Nirode Baran Chakraborty
- 11. Paschatya Darsaner Itihas (Plato O Aristotle): Debabrata Sen
- 12. Paschatya Darsaner Itihas (Descartes, Spinoza and Leibnitz): Chandradaya Bhattacharya
- 13. Paschatya Darsaner Itihas: Iksanbad (Locke, Berkeley, Hume): Chandradaya Bhattacharya
- 14. Critique of Pure Reason: Kant (Edited by N.K. Smith)
- 15. Kanter Darsan: Raj Vihari Das
- 16. A Handbook of Kant's Critique of Pure Reason: Raj Vihari Das
- 17. A Inquiry Concerning Human Understanding: Hume (edited by J.N. Mahanti)
- 18. Hume 'Inquiry': Rama Prasad Das

## Semester – I

## Paper – I (MINOR/ELECTIVE) Ethics and Environment – (PL - 101M) Full Marks: 100 Credits: 4

**Unit- I:** Nature, scope and significance of Ethics and Environment

Moral attitudes towards biotic and abiotic life-world: Man's responsibility towards biotic and abiotic life-world, conservation of abiotic world, population explosion, global warming and climate change, duties and responsibilities towards future generation.

Unit-II: Man-Nature Relationship: Biocentrism and Anthropocentrism

**Unit-III:** The Contemporary Indian perspective on Environment (M. K. Gandhi and Tagore)

Unit-IV: Environmental movements in India,

Eco-feminism: Feminists and environmental ethics.

- 1. Kuhse, H. and Singer, P.; *A Companion to Bio-ethics*, 2<sup>nd</sup> ed., Blackwell Publishing Ltd., 2009.
- 2. Callicut, J. B. and Frodeman, R., *Encyclopedia of Environmental Ethics and Philosophy*, Vol. I & 2, MacMillan, GALE, Cengage Learning, 2009.
- 3. Taylor, P. W.; *Respect for Nature*, Princeton University Press, Princeton and Oxford, 1989.

- 4. The Feminist Papers from Adams to De Beauvoir, North eastern University Press, Boston, 1988.
- 5. Preston, C. J. and Ouderkirk, W.; Nature, Value and Duty, Springer, 2007.
- 6. Singer, P.; Practical Ethics, Cambridge University Press, New York, 2011.

## Semester – I

**Subject : Philosophy (Inter-Disciplinary)** 

Paper – I

Paper Code: PL - 101 ID

**Introduction to Philosophy (Indian and Western)** 

Full Marks: 100 Credits: 3

#### Unit – I

1. Carvaka: Epistemology, Metaphysics

2. Jaina: Anekantavada, Syadvada

#### Unit – II

- 1. Nyaya: Perception, Inference
- 2. Vaisesika: Categories: Dravya, Samanya, Samavaya, Atomism

#### IInit-III

- 1. Theories of Knowledge: Empiricism, Rationalism, Critical Theory
- 2. Theories of Truth: Correspondence, Coherence, Prgamatic

#### Unit- IV

- 1. Idealism: Subjective and Objective
- 2. Realism: Naïve, Representative
- 3. Substance: Empiricist view and Rationalist view

## **Suggested Readings:**

- 1. C.D. Sharma, A Critical Survey of Indian Philosophy, Motilal Banarsidass, Delhi
- 2. Frank Thilly, A History of Philosophy, New Delhi,
- 3. Anthony Kenny, A New History of Western Philosophy, Vol. I-IV, Clarendon Press,
- 4. Dutta and Chatterjee, An Introduction to Indian Philosophy, Rupa
- 5. Indian Philosophy, Vol. I & II, Oxford University Press.

## Semester - II

Paper – III (MAJOR) Indian Philosophy – II (PL - 201C) Full Marks: 100 Credits: 4

Unit – I (Concept of Soul)

Concept of Soul (Ātman) in the Orthodox and the Heterodox schools of Indian Philosophy.

Unit – II (Concept of Liberation)

Concept of Liberation (Mokṣa) in the Orthodox and the Heterodox schools of Indian Philosophy.

Unit – III (Nyāya Epistemology)

Concept of Pakṣa, Sādhya, Hetu, Features of Sat Hetu, Svārthānumāna and Parārthānumāna, Kevalānvayee, Kevalavyātireki and Anvaya-vyātireki Anumāna.

Unit –IV (Indian Metaphysics)

Vaiśeṣika Paramānuvāda (Atomism), Satkāryavāda and Asatkāryavāda, Nirguna Brahman and Saguna Brahman.

## **Suggested Readings:**

- 1. An Introduction to Indian Philosophy D.M. Dutta & S.C. Chatterjee
- 2. An Outline of Indian Philosophy M. Hiriyana
- 3. A Critical Survey of Indian Philosophy C.D. Sharma
- 4. Reason and Tradition in Indian Philosophy J.N. Mohanti
- 5. Studies in Philosophy: Vol 1: K.C. Bhattacharya
- 6. Nyāya Vaiśeṣika Darśan Karuna Bhattacharya
- 7. Bhāratiya Darśan - Prodyot Kumar Mandal
- 8. Bhāratiya Darśaner Marma Kathā Haridas Bandopadhyaya
- 9. Bhāratiya Darśan Dipak Kumar Bagchi
- 10. Bhāratiya Darśan Samarendra Bhattacharjee

## Semester - II

Paper – IV (MAJOR)
Western Philosophy – II (PL - 202C)
Full Marks: 100
Credits: 4

Unit − I : (Pre- Socratic & Socratic thoughts)

Origin and Development of Early Greek thoughts, The problem of Substance (Thales, Anaximander, Anaximenes, Pythagoras), The problem of Change (Heraclitus, Xenophanes, Parmenides, Zeno), Problems of Knowledge and Conduct: Sophist (Progress of Thought, Theory of Knowledge, Greek enlightenment) & Socratic Problem, Socratic Method, Socratic Schools)

Unit – II : (Western Epistemology)

Theories of Knowledge (Empiricism, Rationalism and Criticism), Theories of Truth (Correspondence, Coherence and Pragmatic)

Unit – III : (Western Metaphysics)

Idealism (Subjective and Objective), Realism (Naïve and Representative), Theories of Causality (Regularity and Entailment)

Unit – IV : (Western Metaphysics)

Substance (Empiricist and Rationalist View), Mind – Body Relation (Interactionism, Parallelism and Identity Theory)

- 1. A History of Philosophy Frank Thilly
- 2. Greek Philosophy Burnet
- 3. An Introduction to General Philosophy S.P. Chakraborty
- 4. The Problems of Philosophy S.C. Chatterjee
- 5. Pāśchātya Darśan- Pramode Bandhu Sengupta
- 6. Pāśchātya Darśan Samarandra Bhattacharya
- 7. Pāśchātya Darśan Jagadiswar Sanyal

## **Semester - II**

## **Paper – II (MINOR/ELECTIVE)**

## Introduction to Western Philosophy – (PL - 201M)

Full Marks: 100 Credits: 4

Unit − I : (Western Epistemology)

Theories of Knowledge (Empiricism, Rationalism and Criticism), Theories of Truth (Correspondence, Coherence and Pragmatic)

Unit – II : (Western Metaphysics)

Idealism (Subjective and Objective), Realism (Naïve and Representative)

Unit – III: (Western Metaphysics)

Substance (Empiricist and Rationalist View), Theories of Causality (Regularity and Entailment)

Unit − IV : (Western Metaphysics)

Refutation of Innate Ideas (Locke), Mind – Body Relation (Interactionism, Parallelism and Identity Theory)

## **Suggested Readings:**

- 1. An Introduction to General Philosophy S.P. Chakraborty
- 2. The Problems of Philosophy S.C. Chatterjee
- 3. Pāśchātya Darśan- Pramode Bandhu Sengupta
- 4. Pāśchātya Darśan Samarandra Bhattacharya
- 5. Pāśchātya Darśan Jagadiswar Sanyal
- 6. Pāśchātya Darśaner Itihās (Descartes, Spinoza, Leibnitz) Chandrodaya Bhattacharya
- 7. Pāśchātya Darśaner Itihās (Locke, Berkley, Hume) Chandrodaya Bhattacharya

Semester – III Paper – V (MAJOR) Indian Ethics – (PL - 301C) Full Marks: 100

Credits: 4

Unit – I

Presuppositions of Indian Ethics, Varnāśrama dharma, Sādhārana dharma, Rta and Satya, Sreya and Preya.

Unit - II

Cārvāka Ethics, Puruṣārthas and their interrelation, Puruṣārtha Sādhana, The Law of Karma.

Unit – III

Buddhist Ethics: The Four Noble Truths. Sila.

Jaina Ethics: Bondage and Liberation of Jiva, Anuvrata, Mahāvrata, Tṛratna.

Unit – IV

The Gita: Niṣkāma Karma, Svadharma, Paradharma, Nitya karma, Yagñārtha Karma, Lokasamgraha, Abhyāsa and Vairāgya, Karmasannyāsa.

## **Suggested Readings:**

- 1. Introduction to Indian Philosophy D.M. Dutta & S.C. Chatterjee
- 2. A Critical Survey of Indian Philosophy C.D. Sharma
- 3. Purva Mimamsa Darsan Sukhomay Bhattacharya
- 4. Principles of Ethics Phani Bhusan Chatterjee
- 5. The Ethics of the Hindus S.K. Maitra
- 6. Carvaka Darsanam Panchanan Sastri
- 7. Carvak Darsan Daksina Ranjan Sastri
- 8. Bharatiya Darsan Pradyot Kumar Mandal
- 9. Bharatiya Darsan Nirod Baran Chakraborty
- 10. Bharatiya Darsan Dipak Kumar Bagchi
- 11. Buddha Darsan Panchanan Sastri
- 12. Nitividya Samarendra Bhattacharya
- 13. Nitividya Shibapada Chakraborty

Semester – III Paper – VI (MAJOR) Western Ethics - (PL- 302C) Full Marks: 100 Credits: 4

#### Unit - I

Nature and Scope of Ethics, Voluntary and Non-voluntary action, Motive and Intention.

## Unit – II

Nature and Object of Moral Judgment, Postulates of Moral Judgment, Theories of Punishment (Reformative, Preventive and Retributive).

Unit – III

Theories of Moral Standard (Hedonism, Rigorism, Perfectionism),

Unit - IV

Right & Duty, Classification of Duties, Conflict of Duties, Value (Intrinsic & Extrinsic, Subjective & Objective).

## **Suggested Readings:**

- 1. Manual of Ethics Mackenzie
- 2. An Introduction to Ethics William Lillie
- 3. Nitividya Samarendra Bhattacharya
- 4. Nitividyar Tattvakatha Somnath Chakraborty

Semester – III
Paper – III (MINOR/ELECTIVE)
General Concepts of Indian Ethics - (PL - 301M)
Full Marks: 100
Credits: 4

#### Unit – I

Pre-suppositions of Indian Ethics, Varnasrama dharma, Sadharana dharma.

#### Unit – II

Carvaka Ethics, Purusarthas and their interrelation, Purusartha Sadhana, The Law of Karma.

#### Unit – III

Buddhist Ethics: The Fouur Noble Truths. Jaina Ethics: Anuvrata, Mahavrata, Trratna.

#### Unit – IV

The Gita: Niṣkāma Karma, Svadharma, Paradharma, Lokasamgraha, Abhyāsa and Vairāgya, Karmasannyāsa.

## **Suggested Readings:**

- 1. Introduction to Indian Philosophy D.M. Dutta & S.C. Chatterjee
- 2. A Critical Survey of Indian Philosophy C.D. Sharma
- 3. Purva Mimamsa Darsan Sukhomay Bhattacharya
- 4. Principles of Ethics Phani Bhusan Chatterjee
- 5. The Ethics of the Hindus S.K. Maitra
- 6. Carvaka Darsanam Panchanan Sastri
- 7. Carvak Darsan Daksina Ranjan Sastri
- 8. Bharatiya Darsan Pradyot Kumar Mandal
- 9. Bharatiya Darsan Nirod Baran Chakraborty
- 10. Bharatiya Darsan Dipak Kumar Bagchi
- 11. Buddha Darsan Panchanan Sastri
- 12. Nitividya Samarendra Bhattacharya
- 13. Nitividya Shibapada Chakraborty

## **Semester: III**

Subject-Philosophy (Inter-Disciplinary)
Paper Code - PL - 301 ID
Ethics (Indian and Western)

#### **Unit-I:**

Indian Ethics: Purusarthas and their inter-relations, Purusartha Sadhana, Law of Karma, Carvaka Ethics.

## Unit-II:

Indian Ethics: Buddhist Ethics, The Four Noble Truths, Jaina Ethics: Anuvrata, Mahavrata, Triratna.

## **Unit-III:**

Western Ethics: Nature and scope of Ethics, Nature and Objects of Moral Judgement, Theories of Punishment- Preventive, reformative and Retributive)

#### Unit-IV:

Western Ethics: Theories of Moral Standard (Hedonism, Rigorism, Perfection).

Practical Ethics: Rights and Human Rights: Their Characteristics, Feminism (Liberal and Radical), Environmental Ethics.

## **Suggested Readings:**

- 1. Introduction to Indian Philosophy D.M. Dutta & S.C. Chatterjee
- 2. A Critical Survey of Indian Philosophy C.D. Sharma
- 3. A Manual of Ethics- Jadunath Sinha
- 4. Principles of Ethics Phani Bhusan Chatterjee
- 5. The Ethics of the Hindus S.K. Maitra
- 6. Carvaka Darsanam Panchanan Sastri
- 7. Carvak Darsan Daksina Ranjan Sastri
- 8. Bharatiya Darsan Pradyot Kumar Mandal
- 9. Bharatiya Darsan Nirod Baran Chakraborty
- 10. Bharatiya Darsan Dipak Kumar Bagchi
- 11. Nitishastra o Dharmadarshan- Pramod Bandhu Sengupta
- 12. Nitividya Samarendra Bhattacharya
- 13. Tattvagata Nitividya O Vyavaharik Nitividya Samarendra Bhattacharjee

## Semester – IV

Subject: Philosophy (Major)
Paper - VII
Paper Code – PL - 401C
Social & Political Philosophy (Indian)
Full Marks: 100 Credits: 4

**UNIT – I**: Some basic concepts of Ancient Indian Political Thought

Topics: Sources and features of Ancient Indian Political Thought, Nature of Ancient Indian State, Aim of State, Theories of Origin of State (Theory of Divine Origin, Contract Theory), Development of Indian Political Thought.

UNIT-II: Some basic Social-Political concepts of Pre Medieval and Medieval India

Topics: Pre-Medieval: Concept of Welfare State (Yogaksema) of Kautilya, Difference between Welfare State of Kautilya and Modern Welfare State.

Medieval: Nature of State, Theory of Sovereignty, Theory of Monarchy.

**UNIT – III:** Contemporary Thoughts

Rammohon Roy: Political Idea, Liberalism, Nationalism.

Swami Vivekananda: Nationalism, Social Justice, Socialist concept.

M. N. Roy: Society, Freedom, Nationalism.

**UNIT – IV**: Contemporary Thoughts

Bal Gangadhar Tilak: Social reform and Religion, Swaraj, Metaphysical and Religious Ideas.

Sri Aurobindo: Nationalism and Internationalism, Individual and Society, Freedom and Law.

Subhas Chandra Bose: Nationalism, Socialism, Synthesis of Temporal and Spiritual Soul.

- 1. Ancient Indian Social and Political Thought Sanjay Narula.
- 2. Ancient Indian Social History Some Interrelations Romila Thapar.
- 3. Political Thought in Ancient India Motilal Banarsidas.

- 4. Ancient Indian Political Thought and Institution Ravi Ranjan.
- 5. Men and Thought in Ancient India Radhakumud Mookerji.
- 6. Indian Political Thought: Ancient and Medieval Narendra Kumar.
- 7. Ancient and Medieval Indian Political Thought V. P. Varma.
- 8. Ancient and Medieval Indian Thought Themes and Traditions Ed. by Ankit Tomar & Suratha Kumar Malik.
- 9. India: Society Religion and Literature in Ancient and Medieval Periods Publication Division, Ministry of Information and Broadcasting, Government of India.
- 10. Principles of Social and Political Theory Ernest Barker.
- 11. Modern Indian Political Thought Dr. V. P. Varma.
- 12. Foundations of Indian Political Thought V. R. Mehta.
- 13. Bharatiya Rastracintar Itihas Vol 1& 2 (in Bengali) Subhas Chandra Som.
- 14. Bharatiya Rastradarsan (in Bengali) Anadi Kumar Mahapatra.

Semester – IV
Subject: Philosophy (Major)
Paper- VIII
Paper Code: PL - 402C
Social & Political Philosophy (Western)
Full Marks: 100 Credits: 4

#### UNIT-I:

Basic concepts: Nature and scope of social Philosophy, Community, Association, Institution, Law and Custom, Folkway and Mores, Religious code and Moral code

## **UNIT-II:**

Social group and its different forms, Characteristics of Modern family and its problems, Relation between Individual and society - Individualism and Socialism

#### UNIT-III :

Nature & scope of Political Philosophy, Relation between Social and Political Philosophy, Theories of Nature of state: Social Contact Theory, idealist Theory, Marxist theory

#### UNIT-IV

Political Ideas: Characteristics of Democratic ideals, Democracy and its different forms, Merits and demerits of Democracy, Socialism: (Utopian and Scientific), Liberty, Equality, Justice.

- 1. Society MacIver & Page.
- 2. Guide to Social Philosophy Jagadiswar Sanyal.
- 3. Samajtattva- Parimal Kar.
- 4. Samaj Sarsan Dipika Priti Bhushan Chatterjee.
- 5. Samaj Darsan O Rastra Darsan Dr. Samarendra Bhatterjee.
- 6. Bharatiya Rastra Darshan Anadi Kumar Mahapatra.
- 7. Bharatiya Rastrachintar Itihas Subhas Ch. Som(Vol-1,2).
- 8. Samaj Darsan O Rastra Darsan Promode Bandhu Sengupta.

- 9. Samajvijnan Bicitra Mrinal Kanti Ghosh Dastidar.
- 10. Bisoy Samajtattva Dr. Anadi Kumar Mahapatra.
- 11. Political Theory: Principles of Political Science R. C. Agarwal.
- 12. Political Theory: Ideas and Institutions Amal Ray & Mohit Bhattacharya.

## Semester - IV

**Subject : Philosophy (Minor/Elective)** 

Paper - IV

Paper Code: PL - 401M

**Western Ethics** 

Full Marks: 100 Credits: 4

#### UNIT-I:

Nature and Scope of Ethics, Moral and Non-moral action, Voluntary and Non-voluntary action, Motive and Intention.

#### UNIT – II:

Nature and Object of Moral Judgment, Postulates of Moral Judgment, Theories of Punishment (Reformative, Preventive and Retributive).

## **UNIT - III:**

Theories of Moral Standard: Hedonism and its different forms, Rigorism of Kant, Perfectionism)

## **UNIT - IV:**

Right & Duty, Classification of Duties, Conflict of Duties, Value (Intrinsic & Extrinsic, Subjective & Objective).

- 1. Manual of Ethics Mackenzie
- 2. An Introduction to Ethics William Lillie
- 3. A Manual of Ethics: Jadunath Sinha
- 4. Nitividya Samarendra Bhattacharya
- 5. Nitividyar Tattvakatha Somnath Chakraborty
- 6. Tattvagata Nitividya O Vyavaharik Nitividya: Samarendra Bhattacharya
- 7. Nitivijnana: Ramesh Ch. Munsi
- 8. Nitivijnana: Jagadisvar Sannyal
- 9. Nitividya: Dr. Diksit Gupta
- 10. Nitividya: Shibapada Chakraborty

## Semester – IV

**Subject: Philosophy (Inter Disciplinary)** 

Paper - III

Paper Code: PL - 401 ID Religion & Social Philosophy Full Marks: 100 Credits: 4

## **UNIT-I:** Philosophy of Religion

- (i) Theories of Origin of Religion: Animism, Totemism, Manavada, Ghost theory.
- (ii) Historical Development of Religion: Tribal Religion, National Religion and Universal Religion.

## **UNIT-II:** Philosophy of Religion

- (i) Theistic Theories of God: Deism, Pantheism, Theism.
- (ii) Atheistic Theories of God: Positivism, Agnosticism, Marxism.

## **UNIT-III:** Social Philosophy

Basic concepts: Nature and scope of social Philosophy, Community, Association, Institution, Law and Custom, Folkway and Mores.

## **UNIT-IV:** Social Philosophy

Social group and its different forms, Characteristics of Modern family and its problems, Relation between Individual and society- Individualism and Socialism.

- 1. The Philosophy of Religion: M. Edwards
- 2. An Introduction to Philosophy: J. Caird
- 3. Philosophy of Religion: John Hick
- 4. Dharmadarsan: Sushil Kumar Chakraborty
- 5. Dharmadarsan: Dr. Samarendra Bhattacharjee
- 6. Dharmadarsan: Ramesh Ch. Munsi
- 7. Dharmadarsan: Pramode Bandhu Sengupta
- 8. Dharmadarsan: Rabindranath Das
- 9. Society: MacIver & Page
- 10. Samajtattva: Parimal Kar
- 11. Samaj Sarsan Dipika: Priti Bhushan Chatterjee
- 12. Samaj Darsan O Rastra Darsan: Dr. Samarendra Bhatterjee
- 13. Bharatiya Rastra Darsan: Anadi Kumar Mahapatra
- 14. Bharatiya Rastrachintar Itihus: Subhas Ch. Som (Vol-1,2)

# TRIPURA UNIVERSITY

# 4 YEAR B.A. (HONOURS) IN ENGLISH

## LEARNING OUTCOMES BASED CURRICULUM FRAMEWORK

## **BA ENGLISH (HONS): 4-YEAR DEGREE PROGRAM**

## **Preamble**

The following global remarks may be taken into account by the faculty members, departments/schools, Boards of Studies in English, Institutes and Universities, while considering the recommendations for their use:

- i. The learning outcomes are designed to help learners understand the objectives of studying BA (Honours) in English, that is, to analyze, appreciate, understand and critically engage with literary texts written in English, approaching them from various perspectives and with a clear understanding of locations.
- ii. It is significant to mention here that the BA (Hons.) English syllabus under CBCS remains the point of reference for the LOCF recommendations. However, stakeholders (departments or universities or institutions) may make suitable alternations with justifications while selecting texts, finalizing objectives and organizing principles keeping in view global, national and regional contexts of analysis and appreciation.
- iii. To this end, the texts mentioned in the LOCF document are indicative. Similarly, the organization of divisions / themes / genres / periods / authors / areas, etc. is specific to contexts identified in the course(s) and does not pre-empt further rethinking or selection with clear justification for the choices exercised therein.
- iv. The organization of the courses/papers may be worked into semesters/years keeping in consideration the credit load in a given semester with the ultimate end of outcomes of the course/programme. However, it makes sense to include courses/papers that demand more attention in the second and third years (third to sixth semester as may be required) of the Honours course in English.
- v. Learning outcomes are modifiable with due justification in view of contexts, texts selected in the course and requirements of the stakeholders, which are as diverse as are regions in the country
- vi. The overarching concern of the LOCF committee in English is to have definite and justifiable course outcomes and their realization by the end of the course/programme.
- vii. The Department/Institute/University is expected to encourage its faculty concerned to make suitable pedagogical innovations, in addition to teaching/learning processes suggested in the LOC Recommendations, so that the Course/Programme learning outcomes can be achieved.

## **BA (HONS) IN ENGLISH (4-YEAR DEGREE PROGRAM)**

## Part I

## 1.1 Introduction

Outcome based learning is the principal end of pedagogical transactions in higher education in today's world in the light of exponential changes brought about in science and technology, and the prevalent utilitarian world view of the society. Since humanities is among the most questioned discipline, it is imperative to perspectivise literary studies in English at the UG and PG levels.

Humanities has ever been in crisis in the West, which has impacted social perception beyond the western shores including India, though the Indian mind, before the advent of colonization, related literature to 'kavya satya' (poetic truth), which was different from other forms of truth, and hence not comparable to others. But humanities, poetry to be precise, has found its defendants in all ages.

The present crisis of humanities emanates from the predominance of science and technology in particular because it contributes to human conditions and comfort in tangible terms and thereby changing the human condition with material inventions. The resultant utilitarian society likes to invest in science and technology because it takes care of provisions for life. Literature, on the other hand, takes care of vision. But its impact is intangible and immeasurable in terms of quantity. Humanities or literary discourse brings about qualitative changes that remain immeasurable, but for its manifestation in human conduct that may be observed and experienced, but not quantified. However, what gets obviated in the process is that both of them i.e., science and technology and humanities—are complementary, though those fascinated with tangible outcomes do tend to gloss over it. Fortunately, institutions of repute in management, also science and technology have started paying attention to humanities and social sciences, at least symbolically.

To speak of human values in an age in which humanities as a discipline itself is in a state of crisis may appear paradoxical.

The present century has increasingly realised the interconnectedness of all elements in the universe and interrelatedness of lives. Tim Cook speaks about maintaining balance between science and the humanities:

If science is a search in the darkness, then the humanities are a candle that shows where we have been and the danger that lies ahead. It is technology married with liberal arts, married with the humanities that makes our hearts sing.

The function of literature is to bring the questions of values—human and literary—in focus.

Literariness is the ability of literature to attract attention to itself that it achieves through deviant use of language. As a system of knowledge, it aims at providing pleasure first and knowledge thereafter. Therein lies its value in being pleasant. Thereafter, the important thing is to know what literature is valued for. Literature is known for what it stands or its commitment. Literature celebrates life in all forms and stands for and with values of life by representing the weak, the poor, the exploited, the vulnerable and the voiceless. In a way, literary values are values of life, particularly human life.

Accordingly, English literary curricula have evolved over a period of time in India. From its Anglo-centric core, it moved to new literatures—Third World Literature, Commonwealth Literature, American, Canadian, Australian, African Literature, and New Literatures in English, and later to Indian Literature in English and Indian Literature in translation in the light of various critical and theoretical discourses like Post-modernism, Post-colonialism, Feminism, and Black Aesthetics/Dalit Aesthetics among others.

The present phase demands its alignment to the obtaining situation and demands. Its acceptance lies in its ability to enrich engagement with local and global realties, experiences and their manifestations in literary terms without glossing over the core attributes i.e., human values. To achieve this, it is necessary for English studies to recognize and respect the differences and transcend binaries.

The question of relevance and acceptance of English literary studies follows. For local acceptance, it is necessary to have space for local literature and also contiguous literatures. For instance, for a Department of English located in Tamil Nadu may spare about 15 to 20 per cent space to literatures other than English like Tamil and Malayalam, Telugu or Kannada and to skill development.

The LOCF for English is prepared on the contours and curricular structure provided by the UGC, and may be modified without sacrificing the spirit of CBCS and LOCF.

## 1.2 Learning Outcomes-based Approach to Curricular Planning

The fundamental premise underlying the learning outcomes-based approach to curriculum planning and development is that higher education qualifications such as a Bachelor's Degree (Hons) programmes are earned and awarded on the basis of (a) demonstrated achievement of outcomes (expressed in terms of knowledge, understanding, skills, attitudes and values) and (b) academic standards expected of graduates of a programme of study.

The expected learning outcomes are used as reference points that would help formulate graduate attributes, qualification descriptors, programme learning outcomes and course learning outcomes which in turn will help in curriculum planning and development, and in the design, delivery and review of academic programmes.

Learning outcomes-based frameworks in any subject must specify what graduates completing a particular programme of study are (a) expected to know, (b) understand and (c) be able to do at the end of their programme of study. To this extent, LOCF in English is committed to allowing for flexibility and innovation in (i) programme design and syllabi development by higher education institutions (HEIs), (ii) teaching-learning process, (iii) assessment of student learning levels, and (iv) periodic programme review within institutional parameters as well as LOCF guidelines, (v) generating framework(s) of agreed expected graduate attributes, qualification descriptors, programme learning outcomes and course learning outcomes.

The key outcomes that underpin curriculum planning and development at the undergraduate level include Graduate Attributes, Qualification Descriptors, Programme Learning Outcomes, and Course Learning Outcomes.

The LOCF for undergraduate education is based on specific learning outcomes and academic standards expected to be attained by graduates of a programme of study. However, an outcome-based approach identifies moves way from the emphasis on what is to be taught to focus on what is actually learnt by way of demonstrable outcomes. This approach provides greater flexibility to the teachers to develop—and the students to accept and adopt—different learning and teaching pedagogy in an interactive and participatory ecosystem. The idea is to integrate social needs and teaching practices in a manner that is responsive to the need of the community. HEIs, on their turn, shall address to the situations of their students by identifying relevant and common outcomes and by developing such outcomes that not only match the specific needs of the students but also expands their outlook and values.

Moreover, it is borne in mind that outcome-based curriculum does not obviate fact that the focus is not just on domain knowledge or outcomes only but on processes and approaches to

be employed in pedagogical transactions. Processes are as important as the outcome. Else the outcomes would remain confined to the paper.

# 1.2.1 Nature and Extent of Bachelor's Degree Programme in English Literature (Honours)

Bachelor's Degree (Honours) is a well-recognized, structured, and specialized graduate level qualification in tertiary, collegiate education. The contents of this degree are determined in terms of knowledge, understanding, qualification, skills and values that a student intends to acquire in order to look for professional avenues or move to higher education at the postgraduate level.

Bachelor's Degree (Honours) programmes attract entrants from the secondary level or equivalent, often with subject knowledge that may or may not be directly relevant to the particular field of study/profession. Thus, BA (Honours) Course in English aims to equip students to qualify for joining a profession or to provide development opportunities in particular employment settings. Graduates are enabled to enter a variety of jobs or to continue academic study at a higher level.

Qualification descriptors at this level reflect in-depth and specialized knowledge and understanding of their subjects enriched by domain knowledge, student knowledge, critical thinking and effective communication skills. Knowledge at this level includes generic information about what all holders of the qualification are able to do, and the qualities and skills that they have. Courses, therefore, reflect different aspirations of types of students, and skills, learning needs and personal circumstances, needed thereof. Programmes assess not only academic skills but also other skills and attributes including what graduate level education requires, recognises and accredits in order for the Honours Degree to sync with national standards and be compatible with international practices.

The attributes and outcomes associated with specialised programmes of study such as BA Honours in English are predominantly comprised of structured learning opportunities. These programmes are devoted to classroom learning, group and individual learning and library and field research projects. The key component in the programme is developing the ability to communicate at different levels, ranging from basic to critical communication.

To complete the programme of study the student needs to demonstrate knowledge of the subject, understanding of one's location, ability to critically appreciate a text or tradition in itself or in relation to others, knowledge of the development of the discipline locally and globally through classroom study, self-study and research of existing literatures and current

practices. The critical perspective, thus acquired, helps the student to link the degree to life skills including professional skills and awareness with an understanding of human and literary value.

## 1.2.2 Aims of Bachelor's Degree Programme in English Literature (Honours)

The Honours programme in any subject is, in effect, a bridge between secondary and tertiary level education and postgraduate education. So it is important to make the courses in this programme as inclusive and broad as possible even as they also carry the imprints of specialized programmes of study. Honours courses are specialised and remain within the boundaries of accepted and current knowledge. The importance of student research is an integral part of any Honours Programme, particularly the English Honours programme.

The objectives of the LOCF in English, therefore, revisit traditional expectations of teaching and learning English by centre-staging outcomes that are demonstrable through five key attributes: understanding, use, communication, expansion, and application of subject knowledge with a clear awareness and understanding of one's location in the immediate and global environment.

In order to maximize the advantages of LOCF, the objectives are synced to outcomes. So the LOCF document highlights (i) the basic philosophy of teaching English as an Honours subject; (ii) the core objectives of English (Literary Studies and Language through Literature) by way of imparting subject knowledge, life skills, awareness of human values, respect for different locations and life forms, and professional skills; (iii) translation of each skill into demonstrable outcomes in terms of basic and critical communication, social engagement, personal growth and ability enhancement; (iv) application and use of domain knowledge as a bridge to society and the world at large; (v) demonstration of professional awareness and problem solving skills; (vi) demonstration of basic knowledge of digital knowledge platforms; (vi) ability to recognize the professional and social utility of the subject; and (vi) in the process understand, appreciate and imbibe values of life.

The broad objectives of the Learning Outcomes-based Curriculum Framework (LOCF) in English Literature (Honours) can therefore be outlined through the following points:

• **Prospects of the Curriculum:** Formulating graduate attributes, qualification descriptors, programme learning outcomes and course learning outcomes that are expected to be demonstrated by the holder of a degree student with Honours in English;

- Core Values: Enabling prospective students, parents, employers and others to understand the nature and level of learning outcomes (knowledge, skills, attitudes and human and literary values) or attributes for English Literature (Honours);
- Bridge to the World: Providing a framework to see the subject as a bridge to the world in such a way that while recognizing the different conditions in pluralistic society, the students also are aware of a core of shared values such as (i) a commitment to the knowledge to understand the world and how to make a contribution to it; (ii) development of each person's unique potential; (iii) respect for others and their rights; (iv) social and civic responsibility, participation in democratic processes; social justice and cultural diversity; and (v) concern for the natural and cultural environment;
- Assimilation of Ability, Balance, harmony and Inclusiveness: Identifying and
  defining such aspects or attributes of English Literature (Honours) that a graduate of
  the subject should be able to demonstrate on successful completion of the programme
  of study;
- Frame for National Standards: Providing a frame of reference for maintaining national standards with international compatibility of learning outcomes of English Literature (Honours) and academic standards to ensure global competitiveness, and to facilitate student/graduate mobility;
- Pliability: Formulating outcomes that are responsive to social and technological changes in order that the pedagogy will meet student's needs arising from the changes.
   LOCF encourages effective use of new technologies as tools for learning and provide a balance between what is common to the education of all students and the kind of flexibility and openness required for education;
- Pedagogy: Providing higher education institutions an important point of reference for designing teaching-learning strategies, assessing student learning levels, and periodic review of programmes and academic standards for English Literature (Honours) with shift from domain knowledge to processes of realising the outcomes;
- **Development**: Providing HEIs a developmental approach through LOCF that would accommodate social needs and provide students a clear direction of learning.

The specific objectives of the BA programme in English Literature (Honours) are to develop in the student the ability to demonstrable the following outcomes:

- 1. Disciplinary Knowledge of English Literature and Literary Studies
- 2. Communication Skills
- 3. Critical Thinking
- 4. Analytical Reasoning
- 5. Problem Solving
- 6. Research-Related Skills
- 7. Self-Directing Learning
- 8. Multicultural Competence
- 9. Values: Moral and Ethical, Literary and Human
- 10. Digital Literacy

The details are explained in the sections that follow.

## 1.3 Graduate Attributes

Disciplinary Knowledge:

- a) ability to identify, speak and write about different literary genres, forms, periods and movements
- b) ability to understand and engage with various literary and critical concepts and categories
- c) ability to read texts closely, paying attention to themes, generic conventions, historical contexts, and linguistic and stylistic variations and innovations
- d) ability to understand appreciate, analyze, and use different theoretical frameworks
- e) ability to locate in and engage with relevant scholarly works in order to develop one's own critical position and present one's views coherently and persuasively
- f) ability to situate one's own reading, to be aware of one's position in terms of society, religion, caste, region, gender, politics, and sexuality to be self-reflexive and selfquestioning
- g) ability to understand the world, to think critically and clearly about the local and the global through a reading of literatures in translation and in the original, to be a located Indian citizen of the world
- h) ability to see and respect difference and to transcend binaries

## Communication Skills:

- a) ability to speak and write clearly in standard, academic English
- b) ability to listen to and read carefully various viewpoints and engage with them.
- c) ability to use critical concepts and categories with clarity Critical Thinking:
- d) ability to read and analyze extant scholarship
- e) ability to substantiate critical readings of literary texts in order to persuade others
- f) ability to place texts in historical contexts and also read them in terms of generic conventions and literary history

## Problem Solving:

- a) ability to transfer literary critical skills to read other cultural texts
- b) ability to read any unfamiliar literary texts Analytical Reasoning:
- c) ability to evaluate the strengths and weaknesses in scholarly texts spotting flaws in their arguments
- d) ability to use critics and theorists to create a framework and to substantiate one's argument in one's reading of literary texts

## Research-Related Skills:

- a) ability to problematize; to formulate hypothesis and research questions, and to identify and consult relevant sources to find answers
- b) ability to plan and write a research paper Teamwork and Time Management:
- c) ability to participate constructively in class discussions
- d) ability to contribute to group work
- e) ability to meet a deadline Scientific Reasoning:
- f) ability to analyze texts, evaluating ideas and literary strategies
- g) ability to formulate logical and persuasive arguments

## Reflective Thinking:

ability to locate oneself and see the influence of location—regional, national, global—on critical thinking and reading

## Self-Directing Learning:

- a) ability to work independently in terms of reading literary and critical texts
- b) ability to carry out personal research, postulate questions and search for answers

## Digital Literacy:

- a) ability to use digital sources, and read them critically
- b) ability to use digital resources for presentations Multicultural Competence:
- c) ability to engage with and understand literature from various nations and reasons and languages
- d) ability to respect and transcend differences Moral and Ethical Values:
- e) ability to interrogate one's own ethical values, and to be aware of ethical issues
- f) ability to read values inherited in literary texts and criticism vis a vis, the environment, religion and spirituality, as also structures of power

## Leadership Readiness:

ability to lead group discussions, to formulate questions for the class in literary and social texts

## Life-long Learning:

- a) ability to retain and build on critical reading skills
- b) ability to transfer such skills to other domains of one's life and work

## 1.4 Qualification descriptors for a bachelor's degree with English Honours

The qualification descriptors for the BA (English Hons) programme in English shall be five learning attributes such as understanding, use, communication, expansion, and application of subject knowledge with a clear understanding of one's location. This also involves an awareness on the students' part of differences pertaining to class, caste, gender, community, region, etc. in order that they can transcend these differences with transparency of purpose and thought. The key qualification descriptor for English Honours shall be clarity of communication as well as critical thinking and ethical awareness. Each Honours Graduate in English should be able to

demonstrate a coherent and systematic knowledge and understanding of the field of
literary and theoretical developments in the field of English Studies and English
Studies in India. This would also include the student's ability to identify, speak and
write about genres, forms, periods, movements and conventions of writing as well as
the ability to understand and engage with literary-critical concepts, theories and
categories

- *demonstrate* the ability to understand the role of literature in a changing world from the disciplinary perspective as well as in relation to its professional and everyday use. While the aspect of disciplinary attribute is covered by the ability of the students to read texts with close attention to themes, conventions, contexts and value systems, a key aspect of this attribute is their ability to situate their reading, their position(s) in terms of community, class, caste, religion, language, region, gender, politics, and an understanding of the global and the local
- *demonstrate* the ability to think and write critically and clearly about one's role as a located Indian citizen of the world through a reading of English literatures and literatures in translation
- *Communicate* ideas, opinions and values—both literary values and values of life in all shades and shapes—in order to expand the knowledge of the subject as it moves from the classroom to life and life-worlds
- Demonstrate the ability to share the results of academic and disciplinary learning through different forms of communication such as essays, dissertations, reports, findings, notes, etc, on different platforms of communication such as the classroom, the media and the internet
- *Recognize* the scope of English studies in terms of career opportunities, employment and lifelong engagement in teaching, publishing, translation, communication, media, soft skills and other allied fields
- Apply subject-specific skills in language and literature to foster a larger sense of ethical and moral responsibility among fellow humans in order to see and respect differences in and among various species and life-forms and learn to transcend them

The programme will strengthen the student's ability to draw on narratives that alert us to layers and levels of meaning and differences in situations and complexities of relations. Linguistic and literary competence should help the students identify, analyze and evaluate keys issues in the text and around in the world—thematic, contextual, professional, processual—and think of ways to find acceptable and sustainable solutions. Students will have the ability to understand and articulate with clarity and critical thinking one's position in the world as an Indian and as an Indian citizen of the world.

## 1.5 Programme Learning Outcomes (BA Hons. English)

The programme learning outcomes relating to BA (Hons) degree programme in English:

- demonstrate a set of basic skills in literary communication and explication of literary practices and process with clarity
- demonstrate a coherent and systematic knowledge of the field of English literature and Bhasha literatures in English showing an understanding of current theoretical and literary developments in relation to the specific field of English studies.
- display an ability to read and understand various literary genres and stylistic variations and write critically
- cultivate ability to look at and evaluate literary texts as a field of study and as part of the wider network of local and global culture
- demonstrate a critical aptitude and reflexive thinking to systematically analyze the
  existing scholarship and expand critical questions and the knowledge base in the field
  of English studies using digital resources.
- display knowledge to cultivate a better understanding of values both literary values
  that aide us in literary judgment and also values of life at all stages; apply appropriate
  methodologies for the development of the creative and analytical faculties of students,
  their overall development of writing, including imaginative writing.
- recognize employability options in English studies programme as part of skill
  development and as career avenues open to graduates in today's global world such as
  professional writing, translation, teaching English at different levels, mass media,
  journalism, aviation communication and personality development
- channelize the interests of the students and analytical reasoning in a better way and make more meaningful choices regarding career after completion of graduate programme
- to enable students to develop an awareness of the linguistic-cultural richness of India as an important outcome of English literary studies in India

## **BA ENGLISH (HONOURS) COURSES**

## A. Core Courses

## PAPER 1: INDIAN CLASSICAL LITERATURE

## **Course Level Learning Outcomes:**

Some of the course learning outcomes that students of this course are required to demonstrate run thus:

- explain the eco-socio-political-cultural context of the age that produced Indian classical literature from its early beginning till 1100 AD
- appreciate the pluralistic and inclusive nature of Indian classical literature and its attributes
- historically situate the classical literature and diverse literary cultures from India, mainly from Sanskrit, but also Tamil, Prakrit and Pali by focusing on major texts in the principal genres
- trace the evolution of literary culture(s) in India in its/their contexts, issues of genres, themes and critical cultures
- understand, analyze and appreciate various texts with comparative perspectives

## **Course Content**

Stakeholders, as already suggested, may make amendments in the finalization of the corpus.

## SEMESTER 1: PAPER- EN 101C: INDIAN CLASSICAL LITERATURE

#### Unit-I

Origins of Kavya Literature:

Excerpts from The Ramayana: Ayodhya Kanda/ Yuddha Kanda

Excerpts from *The Mahabharta* from *The Book of Assembly Hall* (Sabha Parva): The Dicing and The Sequel of Dicing/ *Virata Parva* 

## **Unit-II**

Bharatamuni's The Natyashastra

Chapter 1: On the origin of drama: Chapters on Rasa and Bhava

## **Unit-III**

Sudraka: Mrichhkatika Or

Kalidasa: Abhijnansakuntalam

#### **Unit-IV**

Banabhatta: Excerpts from Kadambari: Chapter I & Chapter II

## **Suggested Readings:**

- *The Mahabharata*: The Dicing, The Sequel to Dicing and the Temptation of Karna, Worldview Critical Editions.
- Padmini Rajappa 's *Kadambari*, Penguin Classicsl
- Srimad Valmiki Ramayana (with Sanskrit Text and English Translation): Part I, Gita Press, Gorakhpur (2 vols Set).
- Bharata, *Natyashastra*, tr. Manmohan Ghosh, vol. I, 2nd edn. Calcutta: Granthalaya, 1967.
- Berriedale Keith 's A History of Sanskrit Literature, Motilal Banarasidas, 2019.
- J.A.B. Van Buitenen, \_Dharma and Moksa\_, in Roy W. Perrett, ed., Indian Philosophy, vol V
- Indian Theatre by Kapila Vatsyayan.

## E-Books

- The Ramayana Translated into English Prose From the OrigInal Sanskrit of Valmiki, Year 1977 Manmathanath Dutta
- The Ramayana of Valmiki, translated by Hari Prasad Shastri
- Valmiki Ramayan trans. Bibek Debroy
- Mahabharata Online.Trans. Kishori Mohan Ganguly (published between 1883 and 1896)

SEMESTER 1: PAPER EN 102C: EUROPEAN CLASSICAL LITERATURE

**Course Level Learning Outcomes** 

Some of the course learning outcomes that students of this course are required to demonstrate

run thus:

i. historically situate classical European, i.e., Greek and Latin literary cultures and their

socio- political-cultural contexts

ii. engage with classical literary traditions of Europe from the beginning till the 5th

century AD

iii. grasp the evolution of the concept of classic and classical in the European literary

thinking and its reception over a period of time

iv. appreciate classical literature of Europe and pursue their interests in it

examine different ways of reading and using literary texts across a wide range of V.

classical authors, genres and periods with comparative perspectives

vi. develop ability to pursue research in the field of classics

vii. develop academic and practical skills in terms of communication and presentation and

also learn about human and literary values of classical period

**Course Content** 

The texts suggested here are in addition to those in the CBCS syllabus. Some texts/portions

have been changed keeping in view the Course Level Learning Outcomes (CLLO) as well as

global guidelines in the LOCF documents. Stakeholders, as already suggested, may make

amendments in the finalization of the corpus as well as the points raised in the CLLO.

SEMESTER 1: PAPER EN 102C: EUROPEAN CLASSICAL LITERATURE

**UNIT I** 

Homer: Selections from The *Illiad* (Book 1) (Penguin)

**UNIT II** 

Sophocles: Oedipus Rex (Penguin)

**UNIT III** 

Plautus: *The Pot of Gold* (Penguin)

Horace: Selections from Satires Epistle 1, Book 1 (The Satires of Horace and Persius,

Translation. Niall Rudd, Penguin 2005)

## **UNIT IV**

Dante: Selections from *The Divine Comedy: Inferno, Canto 1 & 2* (Dante's The Divine Comedy: Inferno, Purgatario, Paradiso, Ed. Robin Kirkpatrick, Penguin Classics)

- Homer, *The Illiad*. Tr. E.V. Rieu. Harmondsworth: Penguin, 1985.
- Sophocles, *Oedipus the King*. Tr. Robert Fagles in Sophocles: The Three Theban Plays. Harmondsworth: Penguin, 1984.
- Richard Rutherford, *Classical Literature: A Concise History*. Oxford: Blackwell Publishing, 2005.

SEMESTER 2: PAPER- EN 201C: INDIAN WRITINGS IN ENGLISH AND IN

**TRANSLATION** 

**Course Level Learning Outcomes** 

Some of the course learning outcomes that students of this course are required to i.

demonstrate run thus:

ii. appreciate the historical trajectory of various genres of IWE from colonial times till

the present

iii. critically engage with Indian literary texts written **English** terms of

colonialism/postcolonialism, regionalism, and nationalism

iv. critically appreciate the creative use of the English language in IWE

v. approach IWE from multiple positions based on historical and social locations

**Course Content** 

Some texts suggested here are in addition to those in the CBCS syllabus. Some texts/portions

have been changed keeping in view the Course Level Learning Outcomes (CLLO) as well as

global guidelines in the LOCF documents. Stakeholders, as already suggested, may make

amendments in the finalization of the corpus as well as the points raised in the CLLO.

SEMESTER 2: PAPER-EN 201C: INDIAN WRITINGS IN ENGLISH AND IN

**TRANSLATION** 

**UNIT-I** 

**NOVELS** 

R.K. Narayan: Swami and Friends/ A Tiger in Malgudi

Amitav Ghosh: The Shadow Lines

OR

Tagore: *Home and the World* 

**UNIT-II** 

**SHORT FICTION** 

Mulk Raj Anand: Two Lady Rams

Rohinton Mistry: Swimming Lesson

Shashi Deshpande: The Intrusion

## **UNIT III**

#### **POETRY**

H.L.V. Derozio: Freedom to the Slave, The Orphan Girl, To India: My Native Land

Kamala Das: Introduction, My Grandmother's House

Nissim Ezekiel: Enterprise, Goodbye Party to Miss Pushpa TS, The Night of the Scorpion

Robin S. Ngangom: The Strange Affair of Robin S. Ngangom, A Poem for Mother

Eunice de Souza: De Souza Prabhu

#### **UNIT IV**

## **DRAMA**

Mahesh Dattani: Dance Like a Man/ Tara

OR

Girish Karnad: Naga Mandala/Hayavadana

## **Suggested Topics for Presentation**

i. Indian English

- ii. Indian English Literature and its Readership
- iii. Themes and Contexts of the Indian English Novel
- iv. The Aesthetics of Indian English Poetry
- v. Modernism in Indian English Literature
- vi. The Nation and Indian English Literature

## **Suggested Readings**

Raja Rao, Foreword to Kanthapura (New Delhi: OUP, 1989) pp. v-vi.

Salman Rushdie: *Commonwealth Literature does not exist, in Imaginary Homelands* (London:Granta Books, 1991) pp. 61-70.

Meenakshi Mukherjee, Divided by a Common Language, in The Perishable Empire (New

Delhi: OUP, 2000) pp.187–203.

Bruce King, *Introduction, in Modern Indian Poetry in English* (New Delhi: OUP, 2nd edn, 2005) pp. 1–10.

# SEMESTER 2: PAPER EN 202: BRITISH POETRY AND DRAMA: 14TH TO 17TH CENTURIES

## **Course Level Learning Outcomes**

Some of the course learning outcomes that students of this course are required to demonstrate run thus:

- understand the tradition of English literature from 14th to 17th centuries.
- develop a clear understanding of Renaissance Humanism that provides the basis for the texts suggested
- engage with the major genres and forms of English literature and develop fundamental skills required for close reading and critical thinking of the texts and concepts
- appreciate and analyze the poems and plays in the larger socio-political and religious contexts of the time.

## **Course Content**

The texts suggested here are in addition to those in the CBCS syllabus. Some texts/portions have been changed keeping in view the Course Level Learning Outcomes (CLLO) as well as global guidelines in the LOCF documents. Stakeholders, as already suggested, may make amendments in the finalization of the corpus as well as the points raised in the CLLO.

# SEMESTER 2: PAPER EN 202: BRITISH POETRY AND DRAMA: 14TH TO 17TH CENTURIES

#### **UNIT-I**

Geoffrey Chaucer: The Wife of Bath's Tale (Prologue and Tale)

UNIT-II

Edmund Spenser: Selections from Amoretti:

Sonnet LXVII: Like as a huntsman

Sonnet LVII: Sweet warrior

Sonnet LXXV: One day I wrote her name

John Donne: The Sunne Rising, Batter My Heart, Valediction: Forbidding Mourning

**UNIT-III** 

Christopher Marlowe: Doctor Faustus/ Webster: The Duchess of Malfi

**UNIT-IV** 

William Shakespeare: Macbeth/ The Tempest

## **Suggested Readings**

Pico Della Mirandola, excerpts from the Oration on the Dignity of Man, in The Portable Renaissance Reader, ed. James Bruce Ross and Mary Martin McLaughlin (New York: Penguin Books, 1953) pp. 476–9.

John Calvin, *Predestination and Free Will, in The Portable Renaissance Reader*,ed. James Bruce,

Ross and Mary Martin McLaughlin (New York: Penguin Books, 1953) pp. 704–11.

Baldassare Castiglione, *Longing for Beauty and Invocation of Love, in Book 4 of The Courtier*,

Love and Beauty, tr. George Bull (Harmondsworth: Penguin, rpt. 1983) pp. 324-8, 330-5.

Philip Sidney, An Apologyfor Poetry, ed. Forrest G. Robinson (Indianapolis: Bobbs-Merrill, 1970)

## **Course Level Learning Outcomes**

Some of the course learning outcomes that students of this course are required to demonstrate run thus:

- understand the depth and diversity of American literature, keeping in mind the history and culture of the United States of America from the colonial period to the present (17th century to 21st century)
- understand the historical, religious and philosophical contexts of the American spirit in literature; social-cultural-ecological-political contexts may, for example, include the idea of democracy, Millennial Narratives, the Myth of Success, the American Adam, the Myth of the Old South, the Wild West, Melting pot, Multiculturalism, etc.
- appreciate the complexity of the origin and reception of American literature, given its European and non-European historical trajectories, particularly in relation to writers of European (Anglo-Saxon, French, Dutch and Hispanic) descent, as well as writers from black and non-European (African, American Indian, Hispanic-American and Asian) writing traditions
- critically engage with the complex nature of American society, given its journey from specific religious obligations and their literary transformations (such as Puritanism, Unitarianism, Transcendentalism, etc.) to the growth of anti- or non-Christian sensibilities
- critically appreciate the diversity of American literature in the light of regional variations in climate, cultural traits, economic priorities
- explore and understand the nature of the relationships of human beings to other human beings and other life forms in relation to representative literary texts in various genres
- relate the African American experience in America (both ante-bellum and postbellum) to issues of exclusion in societies relevant to their learning experience
- analyze the American mind from global and Indian perspectives and situate the
   American in the contemporary world

# SEMESTER 3 PAPER EN 301C: AMERICAN LITERATURE

## **Course Content**

The texts suggested here are in addition to those in the CBCS syllabus. Some texts/portions have been changed keeping in view the Course Level Learning Outcomes (CLLO) as well as global guidelines in the LOCF documents. Stakeholders, as already suggested, may make amendments in the finalization of the corpus as well as the points raised in the CLLO.

#### UNIT-1

#### **NOVEL**

Hemingway: The Old Man and the Sea/

F Scott Fitzerald: The Great Gatsby

#### **UNIT-II**

### **DRAMA**

Arthur Miller: All My Sons / Tennessee Williams: The Glass Menagerie

#### **UNIT-III**

#### SHORT STORY/ NON-FICTIONAL PROSE

Edgar Allan Poe: The Purloined Letter

Emerson: Self Reliance

William Faulkner: Dry September

## **UNIT-IV**

## **POETRY**

Walt Whitman: A Passage to India; O Captain, My Captain

Emily Dickinson: Because I could not stop for Death, I heard a fly buzz

Robert Frost: Mending Wall, Birches

Langston Hughes: The Negro Speaks of Rivers / Maya Angelou: Still I Rise

## **Suggested Topics for Background Reading and Class Presentation**

- The American Myths of Genesis/ The American Dream/ The American Adam
- American Romance and the American Novel
- Is Huck Finn the Prototypical American Novel?
- Multicultural Literature of the United States; Folklore and the American Novel
- Race and Gender in American Literature
- War and American Fiction
- Two Traditions of American Poetry; Emerson and Poe/ Typological and Tropological Traditions
- Social Realism and the American Novel
- The Questions of Form in American Poetry

## **Suggested Readings**

Hector St John Crevecouer, 'What is an American', (Letter III) in Letters from an American Farmer (Harmondsworth: Penguin, 1982) pp. 66–105.

Frederick Douglass, *A Narrative of the life of Frederick Douglass* (Harmondsworth: Penguin, 1982) chaps. 1–7, pp. 47–87.

Henry David Thoreau, 'Battle of the Ants' excerpt from 'Brute Neighbours', in Walden (Oxford: OUP, 1997) chap. 12.

Ralph Waldo Emerson, 'Self Reliance', in The Selected Writings of Ralph Waldo Emerson, ed. with a biographical introduction by Brooks Atkinson (New York: The Modern Library, 1964).

Toni Morrison, 'Romancing the Shadow', in Playing in the Dark: Whiteness and Literary Imagination (London: Picador, 1993) pp. 29–39.

# SEMESTER 3: PAPER EN 302C: BRITISH LITERATURE: 17TH AND 18TH CENTURIES

## **Course Level Learning Outcomes**

Some of the course learning outcomes that students of this course are required to demonstrate run thus:

- identify the major characteristics of the Comedy of Manners and Mock-Heroic poetry
- demonstrate in-depth knowledge and understanding of the religious, sociointellectual and cultural thoughts of the 17th and 18th centuries
- examine critically keys themes in representative texts of the period, including Sin, Transgression, Love, Pride, revenge, sexuality, human follies, among others
- show their appreciation of texts in terms of plot-construction, socio-cultural contexts and genre of poetry and drama
- analyze literary devices forms and techniques in order to appreciate and interpret the texts

# SEMESTER 3: PAPER EN 302C: BRITISH LITERATURE: 17TH AND 18TH CENTURIES

#### **Course Content**

**UNIT-I** 

John Milton: Paradise Lost: Book 1

**UNIT-II** 

Alexander Pope: *The Rape of the Lock* (All 5 Cantos)

**UNIT-III** 

John Webster: The Way of the World

**UNIT-IV** 

Aphra Behn: Oroonoko

Bacon: Of Studies, Of Travel

Addison: Sir Roger at Church

## **Suggested Topics for Background Reading and Class Presentation**

- Religious and Secular Thought in the 17th Century
- Changing Images of the Human Being in the Literature of the Period
- The Stage, the State and the Market
- The Mock-epic and Satire
- Women in the 17th Century
- The Comedy of Manners

## **Suggested Readings**

The Holy Bible, Genesis, chaps. 1–4, The Gospel according to St. Luke, chaps. 1–7 and 22–4.

Niccolo Machiavelli, *The Prince*, ed. and tr. Robert M. Adams (New York: Norton, 1992) chaps. 15, 16, 18, and 25.

Thomas Hobbes, *selections from The Leviathan*, pt. I (New York: Norton, 2006) chaps. 8, 11, and 13.

John Dryden, 'A Discourse Concerning the Origin and Progress of Satire', in The Norton Anthology of English Literature, vol. 1, 9th edn, ed. Stephen Greenblatt (New York: Norton 2012) pp. 1767–8.

## SEMESTER 4: PAPER EN 401C: POPULAR LITERATURE

## **Course Level Learning Outcomes**

Some of the course learning outcomes that students of this course are required to demonstrate run thus:

- trace the early history of print culture in England and the emergence of genre fiction and best sellers
- engage with debates on high and low culture, canonical and non-canonical literature
- articulate the characteristics of various genres of non-literary fiction
- investigate the role of popular fiction in the literary polysystem of various linguistic cultures
- demonstrate how popular literature belongs to its time
- Use various methods of literary analysis to interpret popular literature

#### **SEMESTER 4: PAPER EN 401C: POPULAR LITERATURE**

#### **Course Content**

#### **UNIT-I**

#### CHILDREN'S LITERATURE

Lewis Carroll: Through the Looking Glass

Sukumar Ray: The Sons of Ramgaroor, and Khichudi

#### UNIT- II

## **DETECTIVE FICTION**

Arthur Conan Doyle: The Five Orange Pips/ The Adventures of the Speckled Band/

Satyajit Ray: The Golden Fortress

## **UNIT-III**

## ROMANCE/CHICK LIT

Daphne du Maurier: Rebecca/

Anuja Chauhan: The Zoya Factor

#### **UNIT-IV**

## **SCIENCE FICTION**

Isaac Asimov: Nightfall

Satyajit Ray: *The Diary of a Space Traveller and Other Stories* (First Story)

## Suggested Topics for Background Reading and Class Presentation

- Coming of Age
- The Canonical and the Popular
- Ethics and Education in Children's Literature
- Sense and Nonsense
- The Graphic Novel
- The Popular and the Market

## **Suggested Readings**

Leslie Fiedler, 'Towards a Definition of Popular Literature', in Super Culture: American Popular Culture and Europe, ed. C.W.E. Bigsby

Felicity Hughes, 'Children's Literature: Theory and Practice', English Literary History, vol. 45, 1978,

Christopher Pawling, 'Popular Fiction: Ideology or Utopia?' in Popular Fiction and Social Change, ed. Christopher Pawling

Tzevetan Todorov, 'The Typology of Detective Fiction', in The Poetics of Prose

Darco Suvin, 'On Teaching SF Critically', in Positions and Presuppositions in Science Fiction

Janice Radway. 'The Institutional Matrix, Publishing Romantic Fiction', in Reading the Romance: Women, Patriarchy, and Popular Literature

Edmund Wilson, 'Who Cares Who Killed Roger Ackroyd?', The New Yorker, 20 June 1945. Hilllary Chute, "Comics as Literature? Reading Graphic Narrative', PMLA 123(2)

## SEMESTER 4: PAPER 402C: BRITISH ROMANTIC LITERATURE

# **Course Level Learning Outcomes**

Some of the course learning outcomes that students of this course are required to demonstrate run thus:

- understand Romanticism as a concept in relation to ancillary concepts like Classicism
- understand the Romantic period in English literature in terms of its social, philosophical, intellectual, literary backgrounds including German and French influences
- analyze and understand the main characteristics of Romanticism
- appreciate the canonical and representative poems and prose of the writers of the Romantic period.
- develop skills of critical analysis and interpretation of selected poems in order to understand the theme, language, style, and elements of prosody.
- appreciate and analyze the sensibility of the British Romantic period: common man, equality, freedom, sense of community and fraternity
- relate Romantic literary texts to other forms of expression such as painting, for instance.

#### SEMESTER 4: PAPER 402C: BRITISH ROMANTIC LITERATURE

## **Course Content**

The texts suggested here are in addition to those in the CBCS syllabus. Some texts/portions have been changed keeping in view the Course Level Learning Outcomes (CLLO) as well as global guidelines in the LOCF documents. Stakeholders, as already suggested, may make amendments in the finalization of the corpus as well as the points raised in the CLLO.

#### UNIT-I

William Blake: 'The Lamb', 'The Chimney Sweeper' (from The Songs of Innocence and The Songs of Experience)

'The Tyger' (The Songs of Experience) Robert Burns 'A Bard's Epitaph'

## **UNIT-II**

William Wordsworth: Tintern Abbey

Samuel Taylor Coleridge: Kubla Khan

Percy Bysshe Shelley: Ode to the West Wind

John Keats: To Autumn

## **UNIT-III**

Mary Shelley: Frankenstein/

Walter Scott: Ivan Hoe/

Jane Austen: Emma

#### **UNIT-IV**

Charles Lamb: Dream Children: A Reverie, In Praise of Chimney Sweepers

William Hazlitt: On Poetry in General

## **Suggested Topics for Presentation**

- Reason and Imagination
- Conceptions of Nature
- Literature and Revolution
- The Gothic
- The Romantic Lyric

## **Suggested Readings**

William Wordsworth, '*Preface to Lyrical Ballads'*, in Romantic Prose and Poetry, ed. Harold Bloom and Lionel Trilling (New York: OUP, 1973) pp. 594–611.

John Keats, 'Letter to George and Thomas Keats, 21 December 1817', and 'Letter to Richard Woodhouse, 27 October, 1818', in Romantic Prose and Poetry, ed. Harold Bloom and Lionel Trilling (New York: OUP, 1973) pp. 766–68, 777–8.

Jean-Jacques Rousseau, 'Preface' to Emile or Education, tr. Allan Bloom (Harmondsworth: Penguin, 1991).

Samuel Taylor Coleridge, *Biographia Literaria*, ed. George Watson (London: Everyman, 1993) chap. XIII, pp. 161–66.

#### DETAILED COURSE CONTENT OF ENGLISH MINOR

101- Introducing Literature and Literary COurses

202- Creativity Through Language

301- British Literature

401- Modern Indian Literatures

#### **SEMESTER I- Minor 101**

#### INTRODUCING LITERATURE AND LITERARY GENRES

## **Course Level Learning Outcomes:**

- 1. Understanding of issues like literature, literariness, literary values and basic literary concepts
- 2. Have a basic understanding of development of English literature in terms of various movements
- 3. Engage with the genres and forms of English literature and develop fundamental skills required for close reading and critical thinking of the texts and concepts
- 4. Appreciate and analyse select literary poems and plays in the larger socio-cultural contexts of the time
- 5. Develop skills of critical analysis and interpretation of selected poems in order to understand the theme, language, tone and style, and elements of prosody

#### Course content

## Unit -I:

Basic notions on "why read literature", "The meaning of literature, literariness, literary values, function of literature, pleasure of reading, introduction to major literary concepts, genres

Unit -II: Epic

**Unit III**: Drama: Tragedy and Comedy

**Unit IV**: Novel and Short Story as modern genres

Suggested Readings W H Hudson, An Introduction to the Study of English Literature, Maple Press, 2003

Introduction to English Literature, ed. P. Varghese, Alfa Publications, 2011.

A Dictionary of Literary Terms, Martin Gray, Blackwell, 1998.

Terry Eagleton, How to Read a Poem, John Wiley & Sons, 2011

## **SEMESTER II- Minor 201**

## CREATIVITY THROUGH LANGUAGE

#### **Course Statement:**

The aim of this course is to help learners identify, appreciate as well as use language in multiple creative ways. Learners will be sensitized to the creative process and learn to craft language aesthetically. They will be exposed to the various areas where language can be used creatively be it the conventional literary modes such as poetry, short story and drama as well as advertisements, songs and newspaper reports. Learners will also develop an awareness of the process of translating a text and the cultural contexts of language. Finally, learners will develop a critical engagement with texts in the process of reviewing films and books.

## **Course Level Learning Outcomes:**

- 1. Demonstrate the ability for creative thinking and critical analysis of literature and media Show how figures of speech and idioms work in the understanding of texts
- 2. Demonstrate how a text interacts with the creative reader in the process of interpretation
- 3. Show their useful creative skill in writing, drafting and reading
- 4. Review literary and non-literary texts
- 5. Understand the importance of social media in the present context
- 6. Assess their own creative competence
- 7. Respond with sensitivity to the gender and cultural nuances in which a text is located (Value addition)

#### **Course Content Unit-I**:

Art and Craft of Language Figures of speech, idioms, phrases, proverbs Dialects, registers, codes

#### Unit-II:

Appreciating Creativity I: Poetry, Dramatic Dialogue, Short Story, Translated short stories, editorials, poems, songs, advertisements

#### **Unit-III**:

Appreciating Creativity II: Advertisement and its types, Newspaper reports Painting and Film reviews, Cyber media and social media

**Unit-IV**: Creative Writing practice based on Unit-II and Unit

## **Suggested Reading**

- 1. Baker, Mona (2011). In Other Words: A Coursebook on Translation. London, Routledge.
- 2. Bassnett, Susan. (2002). Translation Studies. London, Routledge
- 3. Dev, Anjana N et.al. (2008). Creative Writing: A Beginners Manual. Delhi, Pearson
- 4. Fiske, John (1982). Introduction to Communication Studies. London, Routledge

**MINOR PAPER III: Minor 301** 

## **BRITISH LITERATURE**

### **Course Level Learning Outcomes:**

- 1. Understand English literary cultures from the Renaissance to the present
- 2. Develop an understanding of different forms and types of British Literature through exposure to texts that highlight both compliance and contest to tradition
- 3. Appreciate and analyze the texts in the larger socio-political and religious contexts of the time demonstrate an awareness of nuances of the English language and its varieties
- 4. Extend the knowledge of life in literature (say of animals, environment, gender, politics, nationalities, personal and ideological differences) to life and living situations

  Suggested Course Content. Stakeholders may make amendments in the finalization of the corpus

## **Unit-I: Poetry**

- 1. William Shakespeare: Shall I Compare Thee, or John Donne —The Sun Rising or —A Valediction Forbidding Mourning or John Milton, —On His Blindness
- 2. William Wordsworth, —The Solitary Reaper or John Keats —La Belle Dame sans Merci
- 3. W B Yeats, —Sailing to Byzantium or T S Eliot, —To the Indians who Died in Africa

**Unit-II: Drama** G B Shaw: Arms and the Man

Unit III: Short Story: E.M. Forster: The Eternal Moment

Unit IV: Novel: George Orwell: Animal Farm

#### **Suggested Readings**

Peter Alexander, A History of English Literature, 3rd ed. Palgrave Macmillan, 2017.

M. H. Abrams, A Glossary of Literary Terms, 11th ed. Cengage, 2015. [Entries on drama, fiction, specific types of poetry]

Robert Scholes, et al, eds. Elements of Literature, rpt. OUP, New Delhi, 2010. [Sections on Poetry, Fiction, Essays and Drama].

#### **MINOR PAPER IV Minor 401**

## MODERN INDIAN LITERATURE

#### **Course Level Learning Outcomes**

- 1. Demonstrate the ability to read literary texts in terms of genre and contexts.
- 2. Engage with and write cogently on issues specific to modern India and to local realities
- 3. Critically appreciate the use of English in India

## **Suggested Course Content:**

## **Unit-I Poetry:**

- i. Kamala Das, —An Introduction
- ii. Nisssim Ezekiel, —Background, Casually
- iii Agha Shahid Ali, —The Dacca Gauzes
- iv. Arundhathi Subramaniam, Where I Live
- v. Anamika, —Women
- vi. Temsula Ao, —The Old Story Teller

Unit-II: Novel: Bama Karukku

Arup Kumar Datta: Kaziranga Trails

**Unit-III: Short Fiction** 

- 1. Shashi Deshpande, —The Inner Rooms
- 2. R.K. Narayan, —Engine Trouble
- 3. Ambai Squirrel

Unit-IV: Drama Girish Karnad: Hayavadana

# **Suggested Readings**

- 1. BR Ambedkar, Annihilation of Caste
- 2. Kamla Bhasin, *Understanding Gender*, Kali for Women, 2000
- 3. Amit Chaudhuri, "Introduction" to The Picador Book of Modern Indian Literature, 2001
- 4. Meenakshi Mukherjee, "Divided by a Common Language", in *The Perishable Empire*,

New Delhi: OUP, 2000. pp. 187—200

## Semester – I

Major Discipline Specific Courses (core) Major 101

Course – 1

## **Understanding Politics**

Total Credits: 04

Classes per week: 05 (@45 minutes per class)

Course Objective: This course is designed to develop a sound understanding of Political Science with the different meaning of politics and how is it interpreted differently by people holding different ideological positions. The critical engagements with ideologies will allow the students to develop their own understanding of politics. Since the state occupies a central position in the discourses on politics, the understanding of different theories on the state will allow the students to understand the role of the state in the society and how it governs and regulate the power structure. Media and civil society are the drivers of the politics as they perform a communication role, important for information and ideology transmission.

## **Learning Outcomes:**

- a. The students would be able to explain different approaches to politics and build their own understanding of politics.
- b. They will be able to answer why the state plays so much central place in the discourses on politics.
- c. They will be able to make a distinction between nation and state.
- d. They will come to know about different theories on nationalism.
- e. Students would be able to answer what are social movements and make a distinction between the old and new social movements.

## Unit-I

- a. What is Politics?
- b. Different Approaches to Understand Politics: Traditional (Historical, Philosophical, Legal)
   & Modern (Behavioral, Systems, Structural-Functional, Communication, Rational Choice, Post-modern)

#### Unit-II

- a. What is state? Significance of state in discussion of Politics.
- b. Theories of state (idealist, liberal, neo-liberal, Marxist, Gandhian).

c. Changing Role of State in the Era of Globalization?

#### Unit-III

- a. State and the nation
- b. Concept of nation, nationalism, internationalism.

#### Unit-IV

- a. Theories of Democracy: liberal, participatory, deliberative
- a. Political Communication
- b. Role of Mass media

## **Readings:**

- Heywood, A. (2004). *Political Theory An Introduction*, (3rd ed.). Basingstoke: Palgrave.
- Bhargava, R., & Acharya, A. (Eds.). (2008) *Political Theory: An Introduction*. New Delhi: Pearson Longman.
- Harding, A. (1994). The Origins of the Concept of the State, *History of Political Thought*, 15(1), pp. 57-72. •
- Held, D. (1989). Political Theory and the Modem State. Cambridge: Polity Press.
- Heywood, A. (2002). The State. In Politics. New York: Palgrave, pp. 85-102.
- Laski, H. J. (1935). The State in Theory and Practice. London: George Allen & Unwin
- Newton, K., & Deth, J. (2010). The Development of the Modern State. In *Foundations of Comparative Politics: Democracies of the Modern World*. Cambridge: Cambridge University Press, pp. 13-33.
- Dahl, R. A. (1991). *Democracy and its Critics*. New Delhi: Orient Longman.
- Macpherson, C. B. (1973). *Democratic Theory: Essays in Retrieval*. Oxford: Clarendon Press.
- Shah, G. (Ed.). (2002). Social Movements and the State. New Delhi: Sage Publication.

## Major Discipline Specific Courses (core)

#### Course - 2

# Western Political Thinkers Major 102

Total Credits: 04

Classes per week: 05 (@45 minutes per class)

Course Objective: The purpose of this module is to introduce to the students some classical political thinkers from the West who shaped the ideas and key concepts of political Science in the Anglo-American tradition. Developing a 'just society' and a 'just state' has been a perennial question for all civilizations. But the answers are not alike. They are different across civilizations and times. This course examines the ideas of some of the prominent classical political thinkers beginning from Plato and ending with Mao whose response to political questions vividly influenced political thinking. The seeds of the conceptual themes which seem to be so enriched today also found expressions in older times with different accentuation and nodes. The course seeks to the trace that ideas and tradition and examine them critically.

## **Learning Outcomes:**

- a. The students will know the key ideas of all the political philosophers given in the course.
- b. They will be able to explain what was the ideal state according to Plato and how was it linked to his scheme of education and theory of justice.
- c. They will be able to answer how Aristotle differed from his master Plato on the conception of justice.
- d. They will be able to make a distinction among Hobbes, Locke, and Rousseau on the state of nature, the law of nature, nature and form of contract and the emergence of state from the contract.
- e. They will be able to answer how and why Machiavelli gave an overriding priority to pragmatism above ethics and values in operation of statecraft.
- f. They will be able to discern the meaning of utilitarianism and how Bentham and Mill differed from each other.
- g. Students would learn the key ideas in Marxism and will be able to answer how Lenin and Marx interpreted some of the ideas of Marx while applying Marxism in their respective countries.

## Unit-I

- a. Plato: Ideal state, Theory of Justice, System of Education, Critique of Democracy
- b. Aristotle: Citizenship, Justice, Slavery
- c. Machiavelli: Religion and Politics, Republicanism

#### Unit-II

a. Social Contract Theorists (Hobbes, Locke, Rousseau): State of Nature, Natural Rights and Social Contract, State and Political Obligation

#### Unit-III

a. Utilitarian Thinkers (Betham & J. S. Mill): Utilitarianism, liberty, Representative Government

#### Unit -IV

- a. Marxist Thinkers (Karl Marx, Lenin and Mao): Class Struggle, Dialectic Materialism and Historical Materialism, State and Revolution
- b. Post-Marx Marxism Antonio Gramsci

# Readings:

- Annas, J. (1981). An Introduction to Plato's Republic. Clarendon Press, Oxford.
- Barker, E. (1959). *The Political Thought of Plato and Aristotle*. New York: Dover Publications.
- Nelson, B. (2006). Western Political Thought. New Delhi: Pearson.
- Mukherjee, S., & Ramaswami, S. (2004). *A History of Political Thought*. Delhi: Prentice Hall of India.
- Burns, T. (2009). Aristotle. In Boucher, D. & Kelly, P. (Eds.), *Political Thinkers: From Socrates to the Present*. Oxford: Oxford University Press.
- Machiavelli, N. (1961). *The Prince*. Harmondsworth: Penguin. (Translated by George Bull).
- Skinner, Q. (2000). The Adviser to Princes. In: *Machiavelli: A Very Short Introduction*. Oxford: Oxford University Press.
- Hobbes, T., & Macpherson, C. B. (1968). Leviathan. Baltimore: Penguin Books
- Macpherson, C. (1962). *The Political Theory of Possessive Individualism: Hobbes to Locke*. Oxford University Press, Ontario.
- Sabine, G. H. (1973). *A History of Political Theory*. New Delhi: Oxford and I.B.H. Publishing
- McClelland, J. S. (1996). A History of Western Political Thought. Routledge.

#### Minor/Elective

#### Course - 1

#### **Globalization and Politics**

Minor 101

Total Credits: 04

Classes per week: 05 (@45 minutes per class)

Course Objective: The purpose of this course is to enable students to understand and critically analyze the phenomenon of globalization which entails interconnectivity and transportation of local with the global and vice versa. Students will come to know about the factors and forces of globalization, and how this has impacted the nation-states wherein it has triggered debates on national sovereignty, culture, and market and given rise to social movements of different shades and themes in focus.

## Learning Outcomes: Students will be able to explain

- a. Meaning of globalization and how different schools have understood this.
- b. About the global institutional drivers of the globalization.
- c. How the globalization has impacted the traditional notion of sovereignty of the state?
- d. How globalization has impacted the domestic market and culture of societies.

## Unit I

- a. Meaning and nature of Globalization
- b. Liberalization, privatization and globalization

## Unit II

- a. Globalization and International Financial Institutions (GATT, World Bank, International Monetary Fund, World Trade Organization)
- b. Role of MNCs in the era of globalization

#### Unit-III

- a. Globalization and Peasant Movements in India
- b. Globalization and Environmental Movement in India
- c. Globalization and Human Displacement in India

#### Unit- IV:

- a. Globalization, Democracy and Citizenship
- b. Globalization and the Issue of National Sovereignty

c. Globalization and its Impact on Culture

### **Readings:**

- Held, D., & McGrew, A. (Eds.). *The Global Transformations Reader: An Introduction to the Globalization Debate.* (2nd edition), Cambridge: Polity Press.
- Ritzer, G. (Ed.), *The Blackwell Companion to Globalization*. Oxford: Blackwell.
- Williams, M. (1994). The IMF and the Third World. International Economic Organisations and the Third World. New York: Harvester Wheatsheaf.
- Rodrik, D. (2011). Bretton Woods, GATT, and the WTO: Trade in a Politicized World. The Globalization Paradox. New York: Norton
- Kofman, E., & Youngs, G. (Eds.), *Globalization: Theory and Practice*. (3rd edition), New York: Continuum International Publishing Group
- Dicken, P. (2015). *Global Shift: Mapping the Changing Contours of the World Economy*, (7th edition). London: The Guilford Press
- Moghadam, V. M. (2013). The Global Justice Movement. In *Globalization and Social Movements*. Lanham: Rowman and Littlefield
- Agnew, J. (2009). *Globalization and Sovereignty*. Maryland: Rowman & Littlefield Publishers, Inc.,
- O'Brien, R., & Williams, M. (2016), *Global Political Economy: Evolution and Dynamics*, (5th ed.). London and New York: Palgrave Macmillan.
- Ritzer, G. (Ed.), The Blackwell Companion to Globalization. Oxford: Blackwell

## **Interdisciplinary Courses**

Course - 1

ID 1st Sem

## **Managing Elections and Elections Campaign**

Total Credits: 03

Classes per week: 04 (@45 minutes per class)

Course Objective: This course exposes students to a wide range of conceptual and practical issues and elements pertaining to electoral democracy in India. Elections and their nature have changed significantly with the support of social media and new technologies. Parties are using these mediums and techniques and adjusting to the new nuances emerging from it. Election management has become a crucial element of electoral democracy wherein parties use all their human and material resources at their disposal. This module exposes the students to the techniques of man and material resources to manage the elections.

## **Learning Outcomes:**

- a. Students will learn about how to file election nominations and the technical issues involved in it.
- b. They will be able to explain the election code of conduct including the ethics to be maintained in expenditure and elections campaign.
- c. They will be made aware of the role of new media and technology involved in election campaign.
- d. They will get to know about the required skills for media management during the elections.
- e. They will be able to answer what are debates on state funding of political parties in elections.

#### Unit I

- a. Electoral Democracy: Methods of Representation
- b. Challenges of Electoral Politics
- c. Model Code of Conducts
- d. Election Nominations and Election Affidavits
- a. Knowing your Candidates

#### Unit II

- a. Traditional methods of Electoral Campaign; Poster, Pamphlets
- b. Use of New Techniques and Methods in Election Campaign

c. Ethics in Electoral Campaign, Studies in use and abuse of communication

#### Unit III

- a. Role of Print, Electronic and Social Media in Elections
- b. Electoral Campaign and the Issue of Fake News
- c. Fund Management in elections

#### Unit VI:

- a. Membership Drive
- b. Responsibility management
- c. Booth Management

## **Readings:**

- Krouse, R., & Marcus, G. (1984). Electoral Studies and Democratic Theory Reconsidered. *Political Behavior*, 6(1), pp. 23-39.
- Varshney, A. (2007). India's Democratic Challenge. Foreign Affairs, 86(2), pp. 93-106
- Hauser, W., & Singer, W. (1986). The Democratic Rite: Celebration and Participation in the Indian Elections. *Asian Survey*, 26(9), pp. 941-958.
- Yadav, Y. (1999). Electoral Politics in the Time of Change: India's Third Electoral System, 1989-99. *Economic and Political Weekly*, 34(34/35), pp. 2393-2399.
- Kumar, V. (2005). People's Right to Know Antecedents of Their Election Candidates: A
  Critique of Constitutional Strategies. *Journal of the Indian Law Institute*, 47(2), pp. 135157.
- Herrnson, P. (1988). The Importance of Party Campaigning. *Polity*, 20(4), pp. 714-719.
- West, D. (1994). Television Advertising in Election Campaigns. *Political Science Quarterly*, 109(5), pp. 789-809.
- Goldstein, K., & Freedman, P. (2002). Campaign Advertising and Voter Turnout: New Evidence for a Stimulation Effect. *The Journal of Politics*, 64(3), pp. 721-740.
- Shirky, C. (2011). The Political Power of Social Media: Technology, the Public Sphere, and Political Change. *Foreign Affairs*, 90(1), pp. 28-41.
- Newton, K. (1999). Mass Media Effects: Mobilization or Media Malaise? *British Journal of Political Science*, 29(4), pp. 577-599.
- Carlisle, J., & Patton, R. (2013). Is Social Media Changing How We Understand Political Engagement? An Analysis of Facebook and the 2008 Presidential Election. *Political Research Quarterly*, 66(4), pp. 883-895.
- George, H. (1883). Money in Elections. *The North American Review*, 136(316), pp. 201-211.

- Jain, S. (2001). State Funding of Elections and Political Parties in India. *Journal of the Indian Law Institute*, 43(4), pp. 500-511.
- Sridharan, E. (2007). Toward state funding of elections in India? A comparative perspective on possible options. *The Journal of Policy Reform*, 3:3, pp. 229-254.
- Rosenblum, N. (2000). Political Parties as Membership Groups. *Columbia Law Review*, 100(3), pp. 813-844.
- Part, I. The Need for Greater Party Responsibility. (1950). *The American Political Science Review*, 44(3), pp. 15-36.

## Semester – II

## **Major Discipline Specific Courses (core)**

Course - 3

Major 201

## **Ancient Indian Political Thought**

Total Credits: 04

Classes per week: 05 (@45 minutes per class)

Course Objectives: This course intends to acquaint students with the vast repository of ideas and literatures produced by ancient Indian philosophers on politics and management of statecraft which has remained so far ignored in Indian discourses within the discipline of Political Science. It is now a settled proposition that thinking on politics and statecraft has been in all the great civilizations including India which is one of the most ancient and rich civilizations of the world. In India, academic sages and philosophers produced huge treasures of wisdom on politics and functioning of government including bureaucracy, role and, nature of the monarchy and its relationship with the people. This course module will make them understand the ideas of some prominent ancient political thinkers of India in light of the key sources like Vedas, Mahabharat, Ramayan, Purans and some of the texts written by the philosophers themselves.

## **Learning Outcomes:**

- **a.** The students will come to know about the ideas of individual sages and philosophers on politics and functioning of government.
- b. They will be able to interlink the themes on the functioning of the Monarchy and its relationship with the people taking the cue from the ideas of individual thinkers.
- c. Students will be able to explain the trajectory of ideas on key political questions and institutions of ancient India.

#### Unit I:

- a. Salient features of Ancient Indian Political Thought
- b. Beyond Anglo-American Narrative
  - i. Need for Indian Vocabulary and Indian Framework
  - ii. Nation vs Rashtra
  - iii. India or Bharat
  - iv. Religion vs Dharma
  - v. Culture vs Sanskriti

#### Unit II:

- a. Geographical and Cultural Conception of Bharat
- b. Territorial Depiction in Bhisma Parva and Shanti Parva
- c. Depiction of Bharat in Puranas

#### Unit III:

- a. Shanti Parva in Mahabharata
- b. Saptanga Theory of Kautilya
- c. Diplomacy in Epics

#### Unit - IV

- a. Mandal Theory of Kautilya
- b. Conception of Justice and Jurisprudence: Manu and Kautilya

## **Readings:**

- Kosambi, D.D. (1980). *Culture and civilization in Ancient India*. Delhi: Vikas Publishing House.
- Mishra, K. K. (2004). The Study of Ancient Indian Political Traditions. *The Indian Journal of Political Science*, 65(1), pp.9-20.
- Rao, K. S. (2007). Vedic Ideals and Indian Political Thought. *Indian Journal of Political Science*, 68(1), pp. 5-14.
- Roy, H. & Singh, M. P. (2017). *Indian Political Thought*, Pearson, Delhi.
- Basham, A. L. (1981 Reprint). The Wonder That Was India, Delhi: Rupa Paperback.
- Feuerstein, G., Kak, S., & Frawley, D. (1999). *In search of the cradle of civilization*. Delhi: Motilal Banarsi Das.
- Verma, S. R. (2005). Vedas: The Source of Ultimate Science, Delhi: Nag Publishers.
- Mookerji, R. (2004). The Fundamental Unity of India, Orient Blackswan, Hyderabad.
- Modelski, G. (1964). Kautilya: Foreign Policy and International System in the Ancient Hindu World. *The American Political Science Review*, 58(3), pp. 549-560.
- Mukherjee, B. (1976). *Kautilya's Concept of Diplomacy*. Calcutta, India: Minerva Associates Publications.
- Rao, K. (2005). Manu's Ideas on Administration. *The Indian Journal of Political Science*, 66(3), pp. 489-502.
- Dutt, M. N. (1895). *Manusmrti*. (Reprint 2003).

## **Major Discipline Specific Courses (core)**

Course - 4

Political Theory

Total Credits: 04 Major 202

Classes per week: 05 (@45 minutes per class)

Course Objective: The course has been designed to introduce key concepts in politics to the students to sharpen their understanding of political discourses and the ability to make the scientific enquiry into the political phenomenon and political questions. Diverse traditions and approaches have been included in the scheme of teaching to make understanding comprehensive and insightful. Contemporary debates on key concepts like equality, freedom, democracy, citizenship, and justice allow the students to understand the expanding horizons of discourses in the discipline.

# **Learning Outcomes:**

- a. Students will be able to learn key concepts needed to understand the political phenomenon.
- b. They will come to know about the role and functions of Political theory.
- c. They will come to know how liberal and Marxist traditions look at and understand politics.
- d. They will learn what is power and how does it operate in society and politics.
- e. They will be able to explain the debates on the distributive theory of justice. f. They will come to understand and explain different theories and contemporary debates in democracy.

#### Unit I:

- a. Understanding political questions
- b. Nature of Political Theory: Explanatory, Normative and Empirical
- c. Decline and revival of Political Theory

## Unit II

- a. Theories of Politics: Liberal, Marxist, Feminist, Post-Modern
- b. Power, Authority and Influence (Max Weber, Robert Dahl, Michel Foucault)

## Unit III:

- a. Notion of Justice
- b. Distributive Justice: John Rawls and Robert Nozick

#### c. Communitarianism

#### Unit IV

- a. Theories of rights, liberty and equality
- a. Theories of Citizenship

## **Readings:**

- Acharya, A. & Bhargava, R. (Ed.). (2008). *Political Theory: An Introduction*. Pearson: New Delhi.
- Bhargava, R. (2010). What is Political Theory and Why Do We Need It? Oxford: Oxford University Press.
- Barry, N. (1981). An Introduction to Modern Political theory. London: Macmillan.
- Heywood, A. (2004). Political Ideologies: An Introduction (3rd ed.), London: Palgrave.
- Heywood, A. (2013). *Politics* (4th ed.), London: Palgrave Macmillan.
- Farrely, C. (2004). *An Introduction to Contemporary Political Theory: A Reader*. London: Sage.
- Gray, J. (1993). Post-liberalism: Studies in Political thought. London: Routledge.
- Kymlicka, W. (1995). *Multicultural Citizenship: A liberal Theory of Minority Rights*. Oxford: Clarendon Press.
- Mackinnon, C. (2008). Issues in Political Theory. New York: Oxford University Press.
- Dahl, R. A. (1957). The concept of power. New York: Bobbs-Merrill.
- Nozick, R. (1974). Anarchy, State and Utopia. New York: Basic Books.
- Rawls, J. (1971). A Theory of Justice. Cambridge: Harvard University Press.
- Young, I. M. (1990). *Justice and the Politics of Difference*. Princeton: Princeton University press.
- Bhargava, R & Acharya, A. (Eds.), *Political Theory: An Introduction*. New Delhi: Pearson Longman
- Held, D. (1991). *Models of Democracy*. Polity Press, Cambridge.

#### Minor/Elective

#### Course - 2

Feminism: Theory and Practice Minor 201

Total Credits: 04

Classes per week: 05 (@45 minutes per class)

**Course Objective**: This course seeks to understand the nature, phases and core issues of the feminist movement, both in Anglo-American and India. Besides, attempts have been made to understand how the social and cultural construction of role for the women has not only undermined her position as an equal member in the society but also does not take cognizance of her contribution to the family.

Learning Outcomes: After reading this course the students will be able to explain

- a. How different schools have understood patriarchy and feminist questions differently.
- b. The origin, evolution and key issues which are at the core of the feminist movement both in Anglo-American world and India.
- c. The representation of the women in the political space of India.
- d. How the immense contribution that women make to the family are neglected in computation?

#### Unit I:

- a. Meaning of Feminism
- b. Sex /Gender Distinction
- c. Liberal Feminism, Socialist Feminism and Radical Feminism

#### Unit II:

- a. Origin and Phases of Feminist Movement
- b. Characteristics and Issues in Feminist movement in the Euro-American World
- c. Feminist Movement in India

#### Unit III:

- a. Patrilineal and Matrilineal Practices in the Indian family
- b. Gender Relations in Family

#### Unit IV:

- a. Women and their Representation in Politics and Administration
- b. Women Representation at Grass-roots level in Politics
- c. Violence and Discrimination against Women (Domestic Violence, Sexual Harassment, Women Trafficking and Deserted Women)

## Readings

- Shinde, T. (1993). Stree Purusha Tulna. In Lalitha, K., & Tharu, S. (Eds.), *Women Writing in India*, New Delhi, Oxford University Press
- Mcdermott, R., & Hatemi, P. (2011). Distinguishing Sex and Gender. *Political Science and Politics*, 44(1), pp. 89-92.
- Matthews, J. (1986). Feminist History. Labour History, (50), pp. 147-153.
- Haug, F. (1989). Lessons from the Women's Movement in Europe. *Feminist Review*, (31), pp. 107-116.
- Agnihotri, I., & Mazumdar, V. (1997). Changing the Terms of Political Discourse: Women's Movement in India, 1970s-1990s. *Economic and Political Weekly*, 30(29), pp. 1869-1878.
- Kalpagam, U. (2000). The Women's Movement in India Today-New Agendas and Old Problems. *Feminist Studies*, 26(3), pp. 645-660.
- Mazumdar, V. (1994). Women's Studies and the Women's Movement in India: An Overview. *Women's Studies Quarterly*, 22(3/4), pp. 42-54.
- Devi, D., & Lakshmi, G. (2005). Political Empowerment of Women in Indian Legislature: A Study. *The Indian Journal of Political Science*, 66(1), pp. 75-92.
- Khanna, M. (2009). Political Participation of Women in India. *The Indian Journal of Political Science*, 70(1), pp. 55-64.
- Sharma, G., & Das, R. (2008). Women in Grassroots Democracy in India: Non-Governmental Organisations and Its Possibilities. *The Indian Journal of Political Science*, 69(4), pp. 815-823.
- Ahmad, S., Nilofer, & Parveen, G. (2008). Women's Political Participation and Changing Pattern of Leadership in Rural Areas of U.P. *The Indian Journal of Political Science*, 69(3), pp. 661-672.
- Kishwar, M. (1996). Women and Politics: Beyond Quotas. *Economic and Political Weekly*, 31(43), pp. 2867-2874.
- Karlekar, M. (1998). Domestic Violence. *Economic and Political Weekly*, 33(27), pp. 1741-1751.
- Chapman, J. (2014). Violence against Women in Democratic India: Let's Talk Misogyny. *Social Scientist*, 42(9/10), pp. 49-61.

- Subramaniam, M., Krishnan, P., & Bunka, C. (2014). Women's Movement Groups in State Policy Formulation: Addressing Violence against Women in India. *Indian Anthropologist*, 44(1), pp. 37-52.
- Sheba T. (2004). Sexual Harassment at the Workplace: Emerging Problems and Debates. *Economic and Political Weekly*, 39(41), pp. 4491-4494.

## Semester – III

Major Discipline Specific Courses (core)

Course - 5

## **Comparative Government and Politics**

Major 301

Total Credits: 04

Classes per week: 05 (@45 minutes per class)

Course Objective: This course will enable the students to understand the functioning of governments and political systems in comparative perspectives. The political system does not operate in a vacuum. It has its own legal, economic, socio-political and cultural ambience in which it works. This course exposes the students to concepts and approaches which can apply to understand different political regimes in terms of the origin of governmental structures and their functioning. We have different political regimes even within the broader category of democratic regimes. However, they differ from each other in many respects. This course will allow the students to understand their functioning in a comparative perspective.

## **Learning Outcomes**

- a. The students will be able to understand and apply different approaches to explain the functioning of different types of governing regimes.
- b. They will be able to compare democratic regimes and evaluate their functioning.
- c. They will be able to critically reflect on critical aspects of electoral democracy that includes functioning of parties and the relation between representation and democracy.
- d. They will be able to explain how media has changed the contours of elections and electoral democracy.

#### Unit I

- a. Meaning and Significance of Comparative Politics
- b. Approaches to the study of Comparative Politics: Political System, Institutionalism and New institutionalism, Political Economy, Political Culture, Political Development

#### Unit II

- a. Typologies of Regimes: Democracy and Autocracy
- b. Democratic waves after Second World War; Post-Soviet Union, Arab Springs

#### Unit III

- a. Theories of representation: Types and functions of electoral system.
- b. Debates on Political Participation, Comparing democratic systems such of India and the USA

#### Unit IV

- a. Meaning and Typologies of the Party System
- b. Comparing functioning of Party system in India, USA and Britain
- c. Political Communication and the Role of Media

## Readings

- Hague, R., & Harrop, M. (2004). *Comparative Government and Politics: An Introduction*, (6th ed.). New York: Palgrave Macmillan.
- Kopstein, J., & Lichbach, M. (Eds.). (2005). *Comparative Politics: Interests, Identities, and Institutions in a Changing Global Order*, second edition. Cambridge: Cambridge University Press.
- Landman, T. (2003). *Issues and Methods in Comparative Politics: An Introduction, second edition*. London and New York: Routledge.
- Lijphart, A. (1971). "Comparative Politics and the Comparative Method", *The American Political Science Review*, 65, No. 3, pp. 682-693.
- Macridis, R. C. (1969). A Survey of the Field of Comparative Government. In Blondel, J. (Ed.), *Comparative Government*. London: Palgrave.
- Newton, K., & Van, D., Jan, W. (2009). Foundations of Comparative Politics: Democracies of the Modern World, second edition. Cambridge: Cambridge University Press.
- Peters, B. G. (2017). Approaches in Comparative Politics. In Caramani, D. (Ed.), *Comparative Politics*, fourth edition. Oxford: Oxford University Press.
- Blondel, J. (1999). Then and Now: Comparative Politics. *Political Studies* XLVII, pp. 152-160.
- Chilcote, R. H. (2000). *Comparative Inquiry in Politics and Political Economy: Theories and Issues*. Oxford: Westview Press.
- Clark, B. (1998). Political Economy: A Comparative Approach, (2nd ed.). London: Praege.
- Esteva, G. (2010). Development. In Sachs, W. (Eds.), *The Development Dictionary: A Guide to Knowledge as Power*, (2nd ed.). London: Zed Books.
- Bobbio, N. (1989). *Democracy and Dictatorship: The Nature and Limits of State Power*. Translated by Kennealy, P., Minneapolis: University of Minnesota Press.

- Diamond, L. (2003). Can the Whole World Become Democratic? Democracy, Development, and International Policies. Paper 03-05, Center for the Study of Democracy. University of California, Irvin.
- Held, D. (2006). *Models of Democracy*. Cambridge: Polity Press.
- Huntington, S. P. (1991). *The Third Wave: Democratization in the Late 20th Century*. Norman: University of Oklahoma Press.
- Bowler, S. (2006). Electoral Systems. In Rhodes, R.A.W., Binder, S.A., & Rockman, B.A. (Eds.), *The Oxford Handbook of Political Institutions*. Oxford University Press, Oxford.
- Farrell, D. M. (2011). *Electoral Systems: A Comparative Introduction*. New York: Palgrave Macmillan.
- Newton, K., & Van, D. J. W. (2009) Foundations of Comparative Politics: Democracies of the Modern World, second edition. Cambridge: Cambridge University Press.
- Peffley, M., & Rohrschneider, R. (2014). The Multiple Bases of Democratic Support: Procedural Representation and Governmental Outputs. In Thomassen, J. (Eds.), *Elections and Democracy Representation and Accountability*. Oxford: Oxford University Press.
- Caramani, D. (2017). Party Systems. In Caramani, D. (Ed.), *Comparative Politics*, (4th ed.). Oxford: Oxford University Press.
- Chhibber, P. K., & Torcal, M. (1997). Elite Strategy, Social Cleavages, and Party Systems in a New Democracy. *Comparative Political Studies*, 30 (1): pp. 27–54.
- Chhibber, P. K., & Kollman, K. (2004). The Formation of National Party Systems: Federalism and Party Competition in Canada, Great Britain, India, and the United States. Princeton: Princeton University Press, pp. 9-21.

## Major Discipline Specific Courses (core)

#### Course - 6

## Modern Indian Political Thinkers Major 302

Total Credits: 04

Classes per week: 05 (@45 minutes per class)

**Course Objective:** This course has been designed to familiarize the students with key ideas of some of political thinkers of the modern India whose writings and ideas have impacted the society and polity significantly. Their writings and thoughts give insights into their ideas of India and the kind of society and polity that they had dreamed of. As all their thoughts are not possible to cover in a semester, some key thoughts have been underlines for focused study.

## **Learning Outcomes:**

- a. They will come to understand how Bankim Chandra Chattopadhyay conceptualizes the idea of 'we' and 'they' in his writings.
- b. How Swami Dayanand Sarswati criticized the superstitions in religious texts and practice of the same by the followers and in what ways an understanding of Vedanta brings one to the supreme and real truth and wisdom?
- c. Students will be able to explain Vivekanand's criticism of the West and taking pride in the Indian religion on the one hand and critiquing Christianity and Islam on the issue of religious conversion.
- d. They will be able to explain the key ideas of Gandhi.
- e. Students will be able to evaluate the ideas of Savarkar on Hindutva.
- f. They will be able to explain how Aurobindo understood and explain Indian Nationalism. They will also come to know why Aurobindo equated Indian Nationalism with Sanatan Dharma.
- g. They will come to know about the socialist ideas of Lohia and Jay Prakash Narayan and integral Humanism of Deendayal Upadhyay

#### Unit I

- a. Salient features of Modern Indian Political Thought
- b. Bankim Chandra Chattopadhyay: The Nation and the Community
- c. Swami Dayanand Saraswati: Critique of Religions and Call for turning to Vedanta

#### Unit II

- a. Vivekanand as a Nationalist Monk
- b. Aurobindo on Indian Nationalism
- c. Tilak: Nationalism and Swaraj

#### Unit III

a. Gandhi: Truth and Non-violence, Swadeshi

b. Savarkar: Hindutva and Social Reforms

c. Ambedkar: Social Democracy

#### Unit IV

a. Ram Manohar Lohia and Jai Prakash Narayan: Socialist Thoughts

b. Deen Dayal Upadhyaya: Integral Humanism

### Readings

- Bagchi, J. (1990). Representing Nationalism: Ideology of Motherhood in Colonial Bengal. *Economic and Political Weekly*, 25(42/43), pp. 65-71.
- Haldar, M. K. (1977). Renaissance and Reaction in Nineteenth Century Bengal: Bankim Chandra Chattopadhyay (Translation of Bengali Essay). Calcutta: Minerva Associates.
- Saraswati, D. (1882). *Satyarth Prakash: The Light of Truth*. New Delhi: Sarvadeshik Arya Pratinidhi Sabha.
- Sharma, R. (1958). Swami Dayanand's Contribution to Indian Nationalism and His Political Philosophy. *The Indian Journal of Political Science*, 19(1), pp. 25-34.
- Basu, S. (2002). *Religious Revivalism as Nationalist Discourse: Swami Vivekananda and New Hinduism in Nineteenth-Century Bengal*. London: Oxford University Press.
- Gokhale, B. (1964). Swami Vivekananda and Indian Nationalism. Journal of Bible and Religion, 32(1), pp. 35-42.
- Kumar, N. (1992). The Swami and the Mahatma: The Socio-Political Relevance. *The Indian Journal of Political Science*, 53(3), pp. 297-313.
- Ghosh, A. (1996). On Nationalism. Pondicherry: Sri Aurobindo Ashram.
- Singh, K. (1963). Prophet of Indian Nationalism: Study of the Political Thought of Sri Aurobindo Ghosh 1893-1910. London: Allen and Unwin.
- Rao, P. V. (2010). Foundations of Tilak's Nationalism. Orient Blackswan. New Delhi.

- Varma, V. (1958). *Political Philosophy of Lokamanya Tilak*. The Indian Journal of Political Science, 19(1), pp. 15-24.
- Gandhi, M.K. (1948). *Hinduism, Collected Works of Mahatma Gandhi*. Delhi: National Book Trust.
- Gandhi, M.K. (1948). An Autobiography or the Story of My Experiments with Truth. Ahmedabad: Navajivan.
- Gandhi, M.K. (1938). The Hind Swaraj or Indian Home Rule. Ahmedabad: Navajivan.
- Banerjee, N. N. (1989). *The Undaunted Patriot*. In Swatantryaveer Savarkar Rashtriya Smarak. Bombay, pp. 57-61.
- Godbole, V.S. (2004) Rationalism of Veer Savarkar. Thane: Itihas Patrika Prakashan.
- Keer, D. (1966). *Veer Savarkar*. Bombay: Popular Prakashan.
- Savarkar, V.D. (1969). *Hindutva*. Bombay: Veer Savarkar Prakashan
- Dwivedi, H., & Sinha, R. (2005). *Dr. Ambedkar: The Pioneer of Social Democracy*. The Indian Journal of Political Science, 66(3), pp. 661-666.
- Gore, M.S. (1993). The Social Context of an Ideology: Ambedkar's Political and Social Thought. Delhi: Sage Publication.
- Doctor, A. (1988). Lohia's Quest for an Autonomous Socialism. *The Indian Journal of Political Science*, 49(3), pp. 312-327.
- Lohia, R. M. (1952). Aspects of Socialist Policy. Bombay: Tulloch Road.
- Narayan, J. P. (1965). Socialism, Sarvodaya and Democracy. Asia Publishing House.
- Nene, V. V. (2014). *Pt. Deendayal Upadhyaya Ideology & Perception Part -2. Integral Humanism*. New Delhi: Suruchi Prakashan.
- Swaroop, D. (Ed.). (1992). Deen Dayal Upadhya's Integral Humanism. New Delhi: DRI.
- Upadhyay, D. D. (1968). *Political Diary*. New Delhi: Suruchi Prakashan.

### Minor/Elective

Course - 3

## **Human Rights**

Total Credits: 04 Minor 301

Classes per week: 05 (@45 minutes per class)

Course Objective The purpose of the course is to build conceptual understanding in students about human rights and enable them to critically examine key issues and areas often talked about in human rights discourses. Apart from state actors and institutions, agencies and law associated with them, which occupy the central place is discussion, the module also engages with social, religious, political and economic ideologies which unleash several critical issues pertaining to human rights. Thus, it is not the conflict zones but industrialization and pursuit of political and religious hegemony also throw serious human rights challenges.

## **Learning Outcomes**

- a. The student will be able to explain the meaning of human rights and examine human rights issues in different social, political and cultural contexts.
- b. The students will be able to relate human rights with other rights of individuals.
- c. They will come to know how ideologies which seek to create hegemony; religious or political, pose threats to the human rights of individuals.
- d. Students will be able to examine and explain issues of human rights when state and its agencies apply the methods and techniques of surveillance, interrogation and counterterrorism operations.
- e. They will come to know about the human rights of the armed forces.

## Unit I

- a. Meanings and scope of Human rights and its correlation with other rights
- b. Institutionalization of Human Rights: Universal Declaration of Human Rights

#### Unit II

- a. Political Ideologies and the Principles of Human Rights
- b. Refugee Rights: A case Study of Northeast India

#### Unit III

- a. Terrorism, Police Encounter and Human Rights
- b. Human Rights of the Armed Forces

### Unit IV

- a. Issues of Surveillance and Censorship
- b. Police Custody, Torture and Human Rights

## Readings:

- Aggarwal, G. P. et al. (2013). *Human Rights in Changing Times*. UK: Cambridge Scholars Publishing.
- Hoffman, J., & Graham, P. (2006). 'Human Rights', *Introduction to Political Theory*. Delhi: Pearson, pp. 436-458.
- SAHRDC (2006). Introduction to Human Rights, Classification of Human Rights: An Overview of the First, Second, and Third Generational Rights. In *Introducing Human Rights*. New Delhi: Oxford University Press.
- The Constitution of India, Chapter 3: Fundamental Rights
- Henkin, L. (1998). Religion, Religions, and Human Rights. *The Journal of Religious Ethics*, 26(2), pp. 229-239.
- Arat, Z. (2008). Human Rights Ideology and Dimensions of Power: A Radical Approach to the State, Property, and Discrimination. *Human Rights Quarterly*, 30(4), pp. 906-932.
- Mitchell, N., Howard, R., & Donnelly, J. (1987). Liberalism, Human Rights, and Human Dignity. *The American Political Science Review*, 81(3), pp. 921-927.
- Haragopal, G., & Jagannatham, B. (2009). Terrorism and Human Rights: Indian Experience with Repressive Laws. *Economic and Political Weekly*, 44(28), pp. 76-85.
- Bhandare, M. (2005). Terrorism and the Rule of Law: An Indian Perspective. *Peace Research*, 37(1), pp. 31-35.
- Marwah, V. (1998). Human Rights and the Role of Police. *Journal of the Indian Law Institute*, 40(1/4), pp. 138-142.
- Keshot, A. (2009). Fundamental Rights of Indian Military Personnel. *Journal of the Indian Law Institute*, 51(1), pp. 67-78.
- Sen, S. (2014). Right to Free Speech and Censorship: A jurisprudential Analysis. *Journal of the Indian Law Institute*, 56(2), pp. 175-201.
- D. O'Byrne. (2007). Torture. *In Human Rights: An Introduction*. Delhi: Pearson, pp. 164-197.

## **Interdisciplinary Courses**

Course - 2

## Research in Public Opinion and Voting Behavior IDC 3rd Sem

Total Credits: 03

Classes per week: 04 (@45 minutes per class)

Course Objective: The purpose of the course is to equip students with concepts, skills, and methods to understand public opinion and voting behavior in the political system. They will be trained in skills and methods of data collection, their processing with the application of new technology and precise statistical tools. The module is going to provide hands - on learning to the students to interpret election data and predicting of electoral fortunes of the parties based on inputs from the field.

## **Learning Outcomes:**

- a. Students would learn the methods and techniques of data collection from the field.
- b. They would know where and how to apply the statistical tools like mean, median, mode, standard deviation, and correlational research.
- c. They will be able to predict the results of the election based on data applying the techniques of election data.

#### Unit I

- a. Conceptual Understanding of Public Opinion
- b. Role of Public Opinion in Democratic Politics

## Unit II

- a. Survey
- b. Sampling
- c. Interview
- d. Ouestionnaire and Schedule
- e. Observation

## Unit III

- a. Mean, Median, Mode and Standard Deviation, Correlational Research
- b. Pie diagram, Bar Charts
- c. Statistical Software: SPSS

### Unit IV

- a. Techniques of Interpreting Election Data
- b. Prediction in Polling Research
- c. Politics of Interpreting Data

## Readings

- Gunnell, J. G. (2011). Democracy and the Concept of Public Opinion. In George, C. E. III., George, C. J., Lawrence, R., & Shapiro, R. Y. (Eds.), *The Oxford Handbook of American Public Opinion and the Media*.
- Lau, R. R., Klenberg M. S., & Ditonto, T. M. (2018). Measuring Voter Decision Strategies in Political Behaviour and Public Opinion Research. *Public Opinion Quarterly*, 82(1), pp. 911–936.
- Bruyn, S. (1963). The Methodology of Participant Observation. Human Organization, 22(3), pp. 224-235. Cannell, C., Miller, P., & Oksenberg, L. (1981). Research on Interviewing Techniques. Sociological Methodology, 12, pp. 389-437.
- Geer, J. (1988). What Do Open-Ended Questions Measure? *The Public Opinion Quarterly*, 52(3), pp. 365-371.
- Gideon, L. (Ed.). (2012). Handbook of Survey Methodology for the Social Sciences. Springer.
- Hubbard, F. (1942). Questionnaires, Interviews, Personality Schedules. *Review of Educational Research*, 12(5), pp. 534-541.
- Ellwood, C. (1933). The Uses and Limitations of the Statistical Method in the Social Sciences. *The Scientific Monthly*, 37(4), PP. 353-357.
- Babbie, E. et al. (2012). Adventures in Social Research: Data Analysis Using SPSS 14.0 and 15.0 for Windows. (8th edition), Thousand Oaks, CA: Pine Forge Press.
- Bryman, A. (2012). Social Research Methods. 4th Edition. Oxford: Oxford University Press
- Eldersveld, S. J. (1951). Theory and Method in Voting Behavior Research. *The Journal of Politics*, 13(1), pp. 70-87.
- Gosnell, H. F., & Pearson, N. (1939). The Study of Voting Behaviour by Correlational Techniques. *American Sociological Review*, 4(6), pp.809-815.
- Eldersveld, S. J. (1956). Experimental Propaganda Techniques and Voting Behaviour. *The American Political Science Review*, 50(1), pp. 154-165.

## Semester – IV

Major Discipline Specific Courses (core)

Course - 7

Major 401

# **Theories of International Relations**

Total Credits: 04

Classes per week: 05 (@45 minutes per class)

Course Objective: The field of international relations is made up of diverse actors, processes, and outcomes. The key objective of this course is to introduce the students to both the mainstream International Relations (IR)approaches such as realism (and its nexus with Classical Geopolitics), liberalism and constructivism and to critical approaches such as post colonialism and feminism. The term 'Geopolitics' was coined at the very end of the 19th century at the service of new forms of nationalism, colonial projects and inter- imperialist rivalry in Europe and beyond. With the complex interplay between space and power at its conceptual core, geopolitics has most often been associated with a 'realist' and state-centric approach to international relations. This course is also expected to act as a catalyst for students to think creatively and critically in search of 'global' or more 'international' international relations that is inclusive of non-Western experiences, traditions and interactions and critical of the western domination and eurocentric bias of mainstream IR and its neglect of the history, politics and contributions made by non-Western traditions of thought and theorizing.

## **Learning Outcomes**

- a. Familiarization with the key concepts of the discipline of IR.
- b. Understanding of linkages between Classical Realism and Classical Geopolitics.
- c. Comprehensive understanding of the key assumptions and arguments of the mainstream IR.
- d. Appreciation of what is Global IR and why non-western perspectives are needed.
- e. Greater appreciation of the important role played by non-Western countries in building post-War norms and institutions in key areas such as universal sovereignty,
- f. human rights, development, and regionalism.
- g. Understanding the agency of the Global South in these areas is key to countering IR's ethnocentrism and developing new concepts, theories, and methods.

#### Unit I:

- a. Evolution of the Discipline
- b. Power, Sovereignty, Security
- c. Space, Power & Territory

- d. States and non-state actors
- e. Sustainable development

### Unit II

- a. Realism (national interest, national power, national security, security dilemma, balance of power, structural realism, defensive/offensive realism)
- b. Liberalism (interdependence, neoliberal institutionalism, commercial liberalism, democratic peace theory, international law, regimes, world public opinion)
- c. Constructivism (identity, impact of ideas, social construction of knowledge, emerging new forms of political associations)

### Unit III

- a. Marxism
- b. Postmodernism
- c. Post colonialism
- d. Feminism

### Unit IV

- a. Role and relevance of non-western perspectives in IR
- b. Indian and Chinese perspectives in IR

## **Readings:**

- Agnew, J. (1998). Geopolitics: *Revisioning World Politics*. London and New York: Routledge.
- Dunn, T., Kurki, M., & Smith, S. (2010). *International Relations Theories: Discipline and Diversity*, (2nd ed.). Oxford: Oxford University Press.
- Jackson, R. and Sørensen, G. (2007). *Introduction to International Relations: Theories and Approaches*. Oxford: Oxford University Press.
- Dunne, T. and Schmidt, B. (2008). Realism. In Baylis, John et al. (Eds.), *The Globalization of World Politics*, (3rd ed.), Oxford: Oxford University Press.
- Dunne, T. (2008). Liberalism. In Baylis, John et al. (Eds.), *The Globalisation of World Politics: An Introduction to IR*. Oxford: Oxford University Press.
- Burke, A. (2008). Postmodernism. In Reus-Smit, C., & Snidal, D. (Eds.), *The Oxford Handbook of IR*. Oxford: Oxford University Press.
- Devetak, R. (1996). Critical Theory. In Burchill, S. et al., *Theories of International Relations*. New York: St. Martinis.
- Linklater, A. (1996). Marxism. In Burchill, S., & Linklater, A. (Eds.), *Theories of International Relations*. New York: St. Martinis.

- Smith, S., & Owens, P. (2008). Alternative Approaches to International Theory: Feminism. In Baylis, J. et al. (Eds.), *The Globalisation of World Politics: An Introduction to IR*. Oxford: Oxford University Press.
- Acharya, A. (2014). Global International Relations (IR) and Regional Worlds: A New Agenda for International Studies. *International Studies Quarterly*, 58(4), pp. 1-13.
- Bajpai, K., & Mallavarapu, S. (2005). *International Relations in India: Bringing Theory Back Home*. New Delhi: Orient Blackswan
- Acharya, A., & Buzan, B. (2009). *Non-Western International Relations Theory: Perspectives on and Beyond Asia.* London: Routledge.

## Major Discipline Specific Courses (core)

Course - 8

Major 402

### **Indian Constitution**

Total Credits: 04

Classes per week: 05 (@45 minutes per class)

Course Objective: The purpose of the course is to familiarize the students with the key elements of Indian constitution and enable them to critically assess the working of government institutions in the broader framework of constitutionality and factors and forces which attempts to influence them. The course has been designed to cover the journey of the map of India that emerged from partition to subsequent integration of Princely states and how the decision on key significant symbols such as national flag, national song, national anthem, etc. of the constitution was arrived at through comprehensive debates in the Constituent Assembly.

# **Learning Outcomes**

- Students will be able to understand the terms of partition and how princely states were integrated. They will be able to answer how princely states of Junagarh, Hyderabad, Goa, and Kashmir were integrated into India
- They will come to know the importance of the Preamble in the constitutional design of India
- They will be able to answer how constituent assembly decided about our National flag, National song, and Anthem and how debates unfolded on National language and Minority rights in the Constitution
- They will be able to answer questions pertaining to the function and role of the President, Prime Minister, Governor, Chief Minister, Parliament and State legislature, and the courts in the Constitutional design of India

### Unit I

- a. Independence and integration of Indian States: Case Study of Junagarh, Goa, Kashmir and Northeast India
- b. Philosophy of Indian Constitution, Preamble
- c. Debates on National Language, National Flag, National Anthem, National Song, Minority rights

### Unit II

- a. Fundamental Rights and Duties, Directive Principles of State Policy
- b. Procedure in the Constitutional Amendment

### Unit III

- a. Union and State Executive
- b. Union and State Legislature

#### Unit IV

- a. Supreme Court and High Courts: Structure and Functions
- b. Judicial Accountability, Judicial Activism and Judicial Overreach
- c. Centre-State Relations: Legislative, Executive and Financial
- d. Contemporary Debates in Indian Federalism

## **Readings:**

- Austin, G. (1999). The Indian Constitution: Cornerstone of a Nation. Oxford University Press
- Shankar, B. L., & Rodrigues, V. (2014). *The Indian Parliament: A democracy at work*. Oxford University Press.
- Singh, M. P., & Saxena, R. (2013). Federalizing India in the Age of Globalization, New Delhi, India: Primus Books.
- Basu, D.D. (2022). Introduction to the Constitution of India. 26th Edition. Lexis Nexis.
- Singh, M. (2008). Reorganisation of States in India. *Economic and Political Weekly*, 43(11), pp. 70-75.
- Noorani, A. (1973). Vande Mataram: A Historical Lesson. *Economic and Political Weekly*, 8(23), pp. 1039-1043.
- Rochana, B. (2000). Constituent Assembly Debates and Minority Rights. *Economic and Political Weekly*, 35(21/22), pp. 1837-1845.
- Baxi, U. (1967). The Little Done, the Vast Undone—Some Reflections on Reading Granville Austin's 'The Indian Constitution'. *Journal of the Indian Law Institute*, 9(3), pp. 323-430.
- Manor, J. (2005). The Presidency. In Kapur, D., & Mehta, P. B. (Eds.), *Public Institutions in India: Performance and Design*. New Delhi: Oxford University Press
- Manor, J. (Ed.). (1994). *Nehru to the Nineties: The Changing Office of Prime Minister in India*. New Delhi: Viking.
- Dhavan, R. (2006). Governance by Judiciary: Into the Next Millennium. In Dua, B.D., Singh, M.P., & Saxena, R. (Eds.), *Indian Judiciary and Politics: The Changing Landscape*. Delhi: Manohar Publication.
- Godbole, M. (2008). *The Judiciary and Governance in India*. Delhi: Rupa Publication.
- Bagchi, A. (2000). 'Rethinking Federalism': Overview of Current Debates with Some Reflections in Indian Context. *Economic and Political Weekly*, 35(34), pp. 3025-3036.
- Hicks, U. (1976). Fiscal Federalism in India. FinanzArchiv/Public Finance Analysis, 34(2), pp. 358-362.

#### Minor/Elective

Course - 4

Minor 401

## The Constituent Assembly Debates and the Idea of India

Total Credits: 04

Classes per week: 05 (@45 minutes per class)

## **Course Objective:**

The making of Indian constitution was indeed a gigantic task. It was really challenging to leave behind the wounds and scars of partition and design a new script and trajectory for the modern India assuring unity of the country without diluting or disturbing its diversity. It was again a difficult task of mediating between the elements of modernity and civilizational ethos and identity which make India a unique nation in the world. It was a result of marathon meetings and crossfertilization of ideas for over two years which went through examining and discussing the minute details. Reading into the debates of Constituent Assembly reflects the depth and richness of thoughts that went into shaping and producing a sacred document for the modern India. This course entails some of the key issues which continue to engage our national discourses in post-colonial India. The debates in the constituent assembly on the underlying issues shall be the primary and essential readings for the students.

## **Learning Outcomes:**

The students will be able to know and answer

- a. What were debates on nomenclature of the country? How the term 'India i.e. Bharat' as 'Union of States' came to stay in the constitution?
- b. What went into discussions on deciding national symbols like National Flag and National Anthem of the country?
- c. What were the views of the majority of the members in the Constituent Assembly on minority rights?
- d. What were the discussions on religious freedom and religious conversion in the Constituent Assembly?
- e. What were the positions of the members of the constituent assembly on the issue of cow protection?

## Unit I

- a. Unity in Diversity and Diversity in Unity
- b. Basic Philosophy and 'the Preamble' of Indian Constitution

## **Unit II**

- a. National Flag, National Anthem and National Song
- b. National Languages, Rajbhasha and Rastrabhasha

#### Unit III

- a. Minority Rights
- b. Debates on Religious Conversion
- c. Religion Based Reservations in Public Institutions.

## **Unit IV**

- a. Ban on Cow Slaughter
- b. Uniform Civil Code
- c. Article 370

## Readings

- Lahoti, R. C. (2004). *Preamble: The Spirit and Backbone of the Constitution of India*. Eastern book Company, Delhi.
- Gottlob, M. (2007). India's Unity in Diversity as a Question of Historical Perspective. *Economic and Political Weekly*, 42(9), pp. 779-789.
- Wallace, D. (1951). The Indian Constitution of 1949. The Journal of Politics, 13(2), pp. 269-275.
- Mookerji, R. (2004). The Fundamental Unity of India, Orient Blackswan, Hyderabad.
- Roy, S. (2006). A Symbol of Freedom: The Indian Flag and the Transformations of Nationalism, 1906-2002. *The Journal of Asian Studies*, 65(3), PP. 495-527.
- Lipner, J. (2003). *Re-translating Bankim Chatterji's Ananda Math*. India International Centre Quarterly, 30(1), 59-71.
- Agnihotri, R. K. (2015). Constituent Assembly Debates on Language. Economic and Political Weekly, 50(8), pp. 47-56.
- Gusain, L. (2012). The Effectiveness of Establishing Hindi as a National Language. *Georgetown Journal of International Affairs*, 13(1), pp. 43-50.
- Sinha, M. (2005). Minority Rights: A Case Study of India. *International Journal on Minority and Group Rights*, 12(4), pp. 355-374.
- Bajpai, R. (2000). Constituent Assembly Debates and Minority Rights. *Economic and Political Weekly*, 35(21/22), pp. 1837-1845.
- Basavaraju, C. (2009). Reservation under the Constitution of India: Issues and Perspectives. *Journal of the Indian Law Institute*, 51(2), pp. 267-274.
- Shah, G. (1985). Caste, Class and Reservation. *Economic and Political Weekly*, 20(3), pp. 132-136.
- Claerhout, S., & Roover, J. D. (2005). The Question of Conversion in India. *Economic and Political Weekly*, 40(28), pp. 3048-3055.
- Goyal, S. R. (2000). *India's Secularism*. New Delhi: Voice of India.
- Shourie, A. (2001). *Harvesting Our Souls: Missionaries, their Designs, their claims, Voice of India*. New Delhi: Asa publications.
- Manooja, D. (2000). Uniform Civil Code: A Suggestion. *Journal of the Indian Law Institute*, 42(2/4), pp. 448-457.
- Rattan, J. (2004). Uniform Civil Code in India: A Binding Obligation under International and Domestic Law. *Journal of the Indian Law Institute*, 46(4), pp. 577-587.
- Seth, L. (2005). A Uniform Civil Code: towards gender justice. *India International Centre Quarterly*. India International Centre, 31 (4), pp. 40-54.

## **Interdisciplinary Courses**

Course - 3

## Party Politics in India

**IDC 4th Sem** 

Total Credits: 03

Classes per week: 04 (@45 minutes per class)

Course Objective: This Course focuses on the study of political parties in India both at centre and state levels. The study comprises of their organization, ideology and political support base. The in-depth understanding of parties would enable the students also to examine the questions of inner party democracy and transfer of power within the party. Further, it engages the students on the questions of government funding of elections and elections campaign in the country. With the application of new technologies and new mass media, it is important to understand how the nature and magnitude of elections campaigns have changed in India. The course allows the students to make a comparative study of elections manifestos of major political parties which will give them insight into their commitments to the issues and how and in what ways they converge as well as differ from each other.

## **Learning outcomes:**

- a) The students will be able to explain the origin and ideologies of main national parties of India especially the BJP, The CPM, and the Indian National Congress.
- b) The students will come to know how the regional parties emerged and how their emergence challenged the hegemony of the national party like Indian the National Congress.
- c) The students will be able to explain the transformation in the nature of the regional parties in India.
- d) They will be able to decode the election manifestoes of political parties and explain in what ways they converge and diverge on policy issues and programs.
- e) They will be able to explain how politics and issues can be studied through slogans.

## Unit - I

- a. Nature of National Parties, their Organization, Ideology and Support Base
- b. Debates on Democracy within Party
- c. Dynasty politics and Family Succession in Parties

#### Unit – II

- a. Rise of Regional Parties
- b. Nature of Regional Parties: Dynasty and Family Proprietorship and Control

### Unit – III

- a. Comparing Manifestos of the Political Parties
- b. Studies in Slogans.
- c. Understanding Voting Behaviour

### Unit - IV

- a. Expenditure in Elections
- b. Impact of High Election Expenditure
- c. Debate on Public Funding of Elections

## Readings

- Jaffrelot, C. (1996). The Hindu Nationalist Movement and Indian Politics, 1925 to the 1990s. New Delhi: Penguin.
- Bhattacharyya, H. (2015). Political Parties and Democracy in South Asia: The CPI-M in India's Liberal Democracy, In Wolf S. et al. (Eds.), *Politics in South Asia*. Cham: Springer.
- Khare, H. (2004). The Indian National Congress: Problems of Survival and Reinvention. In Mitra, S. K. et al. (Eds.), *Political Parties in South Asia*, New York: Praeger, pp. 31-54.
- Zavos, J. et al. (Eds.). (2004). *Hindu Nationalism and Indian Politics: An Omnibus, New Delhi*: Oxford University Press.
- Heath, O. (1999). Anatomy of BJP's Rise to Power: Social, Regional and Political Expansion in 1990s. *Economic and Political Weekly*, 34(34/35), 2511-2517.
- Jaffrelot, C., & Verniers, G. (2011). Re-nationalization of India's Political Party System or Continued Prevalence of Regionalism and Ethnicity? *Asian Survey*, 51(6), pp. 1090-1112
- Pai, S. (1990). Regional Parties and The Emerging Pattern of Politics in India. The *Indian Journal of Political Science*, 51(3), pp. 393-415.
- Vaishnav, M. (2013). *The Complicated rise of Regional Parties*. Carnegie endowment for international peace.
- Roy, D. (2004). From Promises to Performance: Political Manifestos and Budget 2004-05. *Economic and Political Weekly*, 39(32), pp. 3583-3585.
- Singh, S. (2012). Where Do Parties Live? Electoral Institutions, Party Incentives, and the Dimensionality of Politics. *Social Science Quarterly*, 93(4), pp. 950-967.
- Katju, M. (2001). Changing Times: Visual Media and Indian Politics. *Economic and Political Weekly*, 36(39), pp. 3759-3761.
- Kumar, R. (2017). Padayatras and the Changing Nature of Political Communication in India. *Studies in Indian Politics*, 5(1), pp. 32–41.
- Zhirnov, A. (2016). Electoral coordination in India: The role of costly campaign communication, *India Review*, 15:4, pp. 359-378.

- Bharucha, A. (2003). Impact of Identity Politics on Differential Voter Outcomes: What Determines India's Voting Behaviour? *Economic and Political Weekly*, 38(6), pp. 550-560.
- Vaishnav, M. (2015). *Understanding the Indian Voter*. Carnegie endowment for international peace.
- Chhibber, P. (1995). Political Parties, Electoral Competition, Government Expenditures and Economic Reform in India, *The Journal of Development Studies*, 32(1), pp. 74-96.
- Thachil, T., & Teitelbaum, E. (2015). Ethnic Parties and Public Spending: New Theory and Evidence from the Indian States. *Comparative Political Studies*, 48(11), pp. 1389–1420.
- Sahoo, N. (2017). Towards public financing of elections and political parties in India: Lessons from global experiences. ORF Occasional Paper No. 127.

### Semester-I

Major

Paper Code: BNGDSC 1 Credit Point: 4

Name of the Paper: বাংলা ভাষা, সাহিত্য ও ইতিহাস পরিচয় (An Introduction to Bengali Language & Literature)

**Course Objective:** The main objective of the course is to provide the basic introductory historical knowledge of Bengali Language & Literature. As we Know Bengali Language & Literature has a literary history of more than thousand years. The aim of the course is to make the students aware of the rich heritage of the language & literature.

**Course learning outcome:** After completing the course the students will have the basic knowledge about the Bengali language & literature and also history of ancient and medieval Bengal. The students will be able to make a clear understanding on the history, heritage and evolution of Bengali language & literature.

UNIT 1 : ক) প্রাচীন বঙ্গভূমির জনপদ ও ভৌগোলিক পরিচয়

খ) বাংলা ভাষা ও বাংলা লিপির উদ্ভব ও ক্রমবিকাশ

UNIT 2: ক) বাঙালি জাতিসত্তার ইতিহাস: শশাঙ্ক, পাল ও সেন যগ

খ) তুর্কি আক্রমণ ও বঙ্গীয় সমাজ সংস্কৃতিতে তার অভিঘাত

UNIT 3 : প্রাচীন ও মধ্যযুগের বাংলা সাহিত্যের ইতিহাস (চৈতন্য পূর্ববর্তী)

চর্যাপদ, বড় চণ্ডীদাস, শাহ মহম্মদ সগীর, মালাধর বসু, কৃত্তিবাস, কবীন্দ্র পরমেশ্বর, শ্রীকর নন্দী

UNIT 4: বৈষ্ণব পদাবলী ও মঙ্গলকাব্য (চৈতন্য পূৰ্ববৰ্তী)

- ক) বৈষ্ণব পদাবলীর উদ্ভব ও ক্রমবিকাশ চণ্ডীদাস, বিদ্যাপতি
- খ) মঙ্গলকাব্যের উদ্ভব ও ক্রমবিকাশ কানাহরি দত্ত, বিজয় গুপ্ত, নারায়ণ দেব

## প্রাথমিক পাঠ

অসিত কুমার বন্দ্যোপাধ্যায়, ২০০৬-২০০৭, বাংলা সাহিত্যের সম্পূর্ণ ইতিবৃত্ত, মডার্ণ বুক এজেন্সী প্রাইভেট লিমিটেড, কলকাতা ক্ষেত্র গুপু, ২০০২, বাংলা সাহিত্যের সমগ্র ইতিহাস, গ্রন্থনিলয়, কলকাতা

গোপাল হালদার, ১৪০৪ব, বাঙলা সাহিত্যের রূপ-রেখা, ১ম-খণ্ড, অরুণা প্রকাশনী, কলকাতা

নীহার রঞ্জন রায়, ৪র্থ সংস্করণ ১৪১০ব, বাঙ্গালীর ইতিহাস (আদি পর্ব), দে'জ পাবলিশিং, কলকাতা

রামেশ্বর শ', ১৮১৯ব, সাধারণ ভাষাবিজ্ঞান ও বাংলা ভাষা, পুস্তক বিপণি, কলকাতা

সুকুমার সেন, ২০০৭, বাংলার সাহিত্য-ইতিহাস, সাহিত্য অকাদেমি, নতুন দিল্লি

সহায়ক পাঠ

আশুতোষ ভট্টাচার্য, ১৩৪৬ব, বাংলা মঙ্গলকাব্যের ইতিহাস, কলিকাতা বুক হাউস, কলকাতা

আহমদ শরীফ, ২০১১, বাঙালী ও বাঙলা সাহিত্য, ২য় খণ্ড, নয়া উদ্যোগ, কলকাতা

আহমদ শরীফ, ২০১৪, বাঙালী ও বাঙলা সাহিত্য, ১ম খণ্ড, নয়া উদ্যোগ, কলকাতা

সুকুমার সেন, ২০০৯, বাঙ্গালা সাহিত্যের ইতিহাস, ১ম খণ্ড, আনন্দ পাবলিশার্স, কলকাতা

সুখময় মুখোপাধ্যায়, ১৯৭৪, মধ্যযুগের বাংলা সাহিত্যের তথ্য ও কালক্রম, জি. ভরদ্বাজ এণ্ড কোং, কলকাতা

Major

Paper Code: BNGDSC 2

(History of Medieval Bengali Literature (Post-Chaitanya Period)

Name of the Paper মধ্যযুগের বাংলা সাহিত্যের ইতিহাস (চৈতনোত্তর কাল)

Course Objective: The main objective of the course is to provide the throw knowledge about the development of

Bengali Literature. The Bengali Literature developed through various literary and social movements through times.

Such as Vaishnav movements Shakto movements Romantic movements etc. The literary creation of different periods

**Credit Point: 4** 

has a documentation of those movements. The course aims to teach the literary history of social movements.

Course learning outcome: The course will enable students to understands to various social and literary movement

and literature of medieval Bengal.

UNIT 1: চৈতন্যদেব ও বাংলা সাহিত্য

চৈতন্যজীবন, চৈতন্য চরিতকাব্য -- বৃন্দাবন দাস, কৃষ্ণদাস কবিরাজ , লোচনদাস, জয়ানন্দ,

# UNIT 2 : বৈষ্ণব পদাবলী, অনুবাদ ও অনুসারী সাহিত্য –

বলরাম দাস, জ্ঞানদাস, গোবিন্দদাস, অদ্ভুত আচার্য, কাশীরাম দাস, চন্দ্রাবতী, ভবানীনাথ, দৌলত কাজি, সৈয়দ আলাওল

### UNIT 3: মঙ্গলকাব্য

মনসামঙ্গল--- বিপ্রদাস পিপলাই, দ্বিজ বংশীদাস, কেতকাদাস, তন্ত্রবিভূতি, জগজ্জীবন ঘোষাল, জানকীনাথ

চণ্ডীমঙ্গল---- দ্বিজমাধব, মুকুন্দরাম চক্রবর্তী

ধর্মসঙ্গল --- রূপরাম, ঘনরাম

অন্নদামঙ্গল --- রায়গুণাকর ভারতচন্দ্র

অন্যান্য অপ্রধান মঙ্গলকাব্য --- শীতলামঙ্গল, রায়মঙ্গল, ষষ্ঠীমঙ্গল, কালিকামঙ্গল

## UNIT 4 : উল্লেখযোগ্য সাহিত্যধারা

নাথ সাহিত্য, শিবায়ন, শাক্ত পদাবলী, পীর সাহিত্য, গীতিকা সাহিত্য, বাউল গান, কবিগান, আখড়াই হাফ আখড়াই, টপ্পা, কীর্তন গান

## প্রাথমিক পাঠ

অসিত কুমার বন্দ্যোপাধ্যায়, ২০০৬-২০০৭, বাংলা সাহিত্যের সম্পূর্ণ ইতিবৃত্ত, মডার্ণ বুক এজেন্সী প্রাইভেট লিমিটেড, কলকাতা আশুতোষ ভট্টাচার্য, ১৩৪৬ব, বাংলা মঙ্গলকাব্যের ইতিহাস, কলিকাতা বুক হাউস, কলকাতা ক্ষেত্র গুপ্ত, ২০০২, বাংলা সাহিত্যের সমগ্র ইতিহাস, গ্রন্থনিলয়, কলকাতা গোপাল হালদার, ১৪০৪ব, বাঙ্লা সাহিত্যের রূপ-রেখা, ১ম-খণ্ড, অরুণা প্রকাশনী, কলকাতা গোপাল হালদার, ১৪১২ব, বাঙ্লা সাহিত্যের রূপ-রেখা, ২য়- খণ্ড, অরুণা প্রকাশনী, কলকাতা সুকুমার সেন, ২০০৭, বাংলার সাহিত্য-ইতিহাস, সাহিত্য অকাদেমি, নতুন দিল্লি

## সহায়ক পাঠ

আহমদ শরীফ, ২০১১, বাঙালী ও বাঙ্লা সাহিত্য, ২য় খণ্ড, নয়া উদ্যোগ, কলকাতা আহমদ শরীফ, ২০১৪, বাঙালী ও বাঙ্লা সাহিত্য, ১ম খণ্ড, নয়া উদ্যোগ, কলকাতা জহর সেনমজুমদার, ২০০৯, মধ্যযুগের কাব্য : স্বর ও সংকট, বঙ্গীয় সাহিত্য সংসদ, কলকাতা সুকুমার সেন, ২০০৯, বাঙ্গালা সাহিত্যের ইতিহাস, ১ম খণ্ড, আনন্দ পাবলিশার্স, কলকাতা সুখময় মুখোপাধ্যায়, ১৯৭৪, মধ্যযুগের বাংলা সাহিত্যের তথ্য ও কালক্রম, জি. ভরদ্বাজ এণ্ড কোং, কলকাতা

### Semester-II

Major

Name of the Paper উনিশ শতকের সমাজ-সংস্কৃতি ও বাঙলা সাহিত্য (Bengali Literature and Culture of the 19<sup>th</sup> Century)

Paper Code: BNGDSC 3 Credit Point: 4

**Course Objective:** The 19<sup>th</sup> century is very important from various aspects – Socio-cultural inspired literary creativity lots of socio political movements and changes happened in these periods. A remarkable freshness may be found in the Bengali literature of the time. In this course the students will gather the knowledge about the social-cultural developments of the 19<sup>th</sup> Century.

**Course learning outcome:** The course will enable students to understands to various social and literary movement and literature of the 19<sup>th</sup> Century Bengali Literature. This will help students to be familiar with rich heritage of Bengali Literature.

UNIT 1: উনিশ শতকের সামাজিক আন্দোলন (ফোর্ট উইলিয়াম কলেজ, রাজা রামমোহন রায়, বিদ্যাসাগর, ডিরোজিও, অক্ষয় কুমার দত্ত, দেবেন্দ্র নাথ ঠাকুর, ও কেশব চন্দ্র সেন) ও জাতীয়তাবাদী চেতনার উন্মেষ

## UNIT 2: আধুনিক বাংলা কাব্য

ঈশ্বর গুপ্ত, রঙ্গলাল বন্দ্যোপাধ্যায়, হেমচন্দ্র বন্দ্যোপাধ্যায়, মধুসূদন দত্ত, নবীন চন্দ্র সেন, বিহারীলাল চক্রবর্তী, রবীন্দ্রনাথ ঠাকুর, গিরীন্দ্রমোহিনী দাসী, মানকুমারী বসু, কামিনী রায়, অনঙ্গ মোহিনী দেবী

## UNIT 3: আধুনিক বাংলা নাটক, প্রহসন, ও নাট্যমঞ্চ

রামনারায়ণ তর্করত্ন, মধুসূদন দত্ত, দীনবন্ধু মিত্র, গিরিশ চন্দ্র ঘোষ, দ্বিজেন্দ্রলাল রায়, ক্ষীরোদ প্রসাদ বিদ্যাবিনোদ, লেবেডফ ও বেঙ্গলি থিয়েটার, বেলগাছিয়া নাট্যশালা, ন্যাশনাল থিয়েটার (প্রথম ও দ্বিতীয় পর্ব), ও অভিনেতা ও অভিনেত্রীরা (গিরিশচন্দ্র ঘোষ, অর্ধেন্দু শেখর মুস্তাফী, বিনোদিনী দাসী, তিনকড়ি দাসী)

## UNIT 4 : কথাসাহিত্য ও সাময়িকপত্র

নক্সা- প্যারীচাঁদ মিত্র, কালীপ্রসন্ন সিংহ

বাংলা উপন্যাসের উন্মেষ ও বিকাশ- বঙ্কিমচন্দ্র চট্টোপাধ্যায়, রমেশচন্দ্র দত্ত, ত্রৈলোক্যনাথ মুখোপাধ্যায়, স্বর্ণকুমারী দেবী বাংলা ছোটগল্পের উন্মেষের প্রেক্ষাপট ও রবীন্দ্রনাথ

বাংলা সাময়িকপত্রের উদ্ভব ও বিকাশ

দিগ্দর্শন, সম্বাদ প্রভাকর, জ্ঞানাম্বেষণ, তত্ত্বোধিনী, সোমপ্রকাশ, বঙ্গদর্শন, বামাবোধিনী, ভারতী

প্রাথমিক পাঠ

অসিত কুমার বন্দ্যোপাধ্যায়, ২০০৬-২০০৭, বাংলা সাহিত্যের সম্পূর্ণ ইতিবৃত্ত, মডার্ণ বুক এজেন্সী প্রাইভেট লিমিটেড, কলকাতা

গোপাল হালদার, ১৪১২ব, বাঙ্লা সাহিত্যের রূপ-রেখা, ২-খণ্ড, অরুণা প্রকাশনী, কলকাতা

ব্রজেন্দ্রনাথ বন্দ্যোপাধ্যায়, ২০১৩, বঙ্গীয় নাট্যশালার ইতিহাস : ১৭৯৫-১৮৭৬, করুণা প্রকাশনী, কলকাতা

সুকুমার সেন, ২০০৭, বাংলার সাহিত্য-ইতিহাস, সাহিত্য অকাদেমি, নতুন দিল্লি

সুকুমার সেন, ২০০৯, বাঙ্গালা সাহিত্যের ইতিহাস, ১-৩য় খণ্ড, আনন্দ পাবলিশার্স, কলকাতা

সহায়ক পাঠ

অসিত কুমার বন্দ্যোপাধ্যায়, ১৩৭৪, উনিশ-বিশ, মণ্ডল বৃক হাউস, কলকাতা

অজিত কুমার ঘোষ,২০১০, বাংলা নাটকের ইতিহাস, দে'জ পাবলিশিং, কলকাতা

অলোক রায়,২০১২, উনিশ শতক, প্রমা, কলকাতা

দর্শন চৌধুরী, ২০০৩, বাংলা থিয়েটারের ইতিহাস, পুস্তক বিপণি, কলকাতা

Major

Paper Code: BNGDSC 4

**Credit Point: 4** 

Name of the Paper বাংলা ভাষাবিজ্ঞান সাধারণ পরিচয়

A General Introduction to Bengali Grammar

Course objective: To make the students aware about basic grammar of Bengali Language. To make students familiar

with various forms of Bengali modern Grammar.

Course learning outcome: The course would enlighten the students on the topic such as dhawani, Barna,

Bananbidhi etc. The students could be able to understand and analyze basic knowledge of Bengali Language.

UNIT 1 : ভাষা—সংজ্ঞা, বৈশিষ্ট্য, উপভাষা, উপভাষার শ্রেণিবিভাগ ও ভাষাতাত্ত্বিক বৈশিষ্ট্য

UNIT 2: ধ্বনি ও বর্ণ, স্বর্ধ্বনি ও ব্যঞ্জনধ্বনি – বৈশিষ্ট্য ও শ্রেণিবিভাগ, উচ্চারণ বৈচিত্র্য ও স্বনিম

ধ্বনি পরিবর্তনের কারণ ও সূত্র, ধ্বনির আগম, স্বরাগম, অপিনিহিতি, স্বরভক্তি, ব্যাঞ্জনাগম, প্রতিধ্বনি, ধ্বনির নির্গমন- স্বরলোপ, সমাক্ষর লোপ, ব্যাঞ্জন লোপ, ধ্বনির রূপান্তর, অভিশ্রুতি, নাসিক্যভবন, সমীভবন, স্বরসংহতি, ধ্বনির স্থানান্তর, ধ্বনির বিপর্যাস

UNIT 3: সাধু ও চলিত ভাষা, শব্দার্থ পরিবর্তনের ধারা, শব্দ ভাণ্ডার

UNIT 4 : বাংলা বানানবিধি

## প্রাথমিক পাঠ

আবুল কালাম মনজুর মোরশেদ, ২০১৩, আধুনিক ভাষাতত্ত্ব, মাওলা ব্রাদার্স, ঢাকা রামেশ্বর শ', ১৮১৯ব, সাধারণ ভাষাবিজ্ঞান ও বাংলা ভাষা, পুস্তক বিপণি, কলকাতা সুনীতি কুমার চট্টোপাধ্যায়, ২০১১, সরল ভাষাপ্রকাশ বাঙলা ব্যাকরণ, প্রকাশ ভবন, কলকাতা

### সহায়ক পাঠ

পরেশচন্দ্র মজুমদার, ২০০৮, বাঙলা ভাষা পরিক্রমা, ২-খণ্ড, দে'জ, কলকাতা সুকুমার সেন, ২০০১, ভাষার ইতিবৃত্ত, আনন্দ পাবলিশার্স, কলকাতা

Semester-III

Major

Paper Code: BNGDSC 5

Name of the Paper : প্রাগাধুনিক বাংলা সাহিত্যের আধুনিক পাঠ

(Contemporary reading of Pre-Modern Bengali Literature)

Course Objective: The main objective of the course is to provide the ideas of Pre-Modern Bengali Literature and also

how the modern writers of various field has reconstruct the Pre-Modern texts in the modern aspect.

Course learning outcome: After completing the course, the students will have the knowledge about the Pre-Modern

Bengali Literature. The students will be able to understand the Pre-Modern period and its literary resource in context

of contemporary society. They will also learn how to read the Pre-Modern Bengali Literature in present time.

Unit I: কবিতা

রবীন্দ্রনাথ ঠাকুর- বৈষ্ণব কবিতা

জীবনানন্দ দাশ – বাংলার মুখ আমি দেখিয়াছি

বিষ্ণু দে – এবং লখিন্দর

জগদীশ ভট্টাচার্য- খেয়াঘাটে

সঞ্জয় ভট্টাচার্য – ফুল্লরা

অরুণ মিত্র – ও বেহুলা

পরমানন্দ সরস্বতী- প্রচণ্ড ভৈরবী

শক্তিপদ ব্রহ্মচারী – মনসামঙ্গল

কবিতা সিংহ – হরিণা বৈরী

কৃষ্ণা বসু – রাধিকা সংবাদ

মল্লিকা সেনগুপ্ত- আম্রপালি

Unit II : নাটক

শাঁওলী মিত্র – নাথবতী অনাথবৎ

শেখর দেবরায় – মনসাকথা

Unit III : উপন্যাস

রামকুমার মুখোপাধ্যায় – ধনপতির সিংহলযাত্রা

Unit IV : প্রবন্ধ

প্রতিভা বসু – মহাভারতের মহারণ্যে

প্রাথমিক পাঠ

অরুণ মিত্র, ২০১৬, অরুণ মিত্রের শ্রেষ্ঠ কবিতা, দে'জ পাবলিশিং, কলকাতা কবিতা সিংহ, ১৯৮৭, কবিতা সিংহের শ্রেষ্ঠ কবিতা, দে'জ পাবলিশিং, কলকাতা কৃষ্ণা বসু, ২০০৩, কৃষ্ণা বসুর শ্রেষ্ঠ কবিতা, দে'জ পাবলিশিং, কলকাতা জগদীশ ভট্টাচার্য, ১৯৯২, জগদীশ ভট্টাচার্যের শ্রেষ্ঠ কবিতা, ভারবি, কলকাতা

জীবনানন্দ দাশ, ১৩৯৩, জীবনানন্দ দাশের কাব্যগ্রন্থ (প্রথম খণ্ড), বেঙ্গল পাবলিশার্স প্রাইভেট লিমিটেড, কলকাতা

পরমানন্দ সরস্বতী, ১৯৮৯, পরমানন্দ সরস্বতী কাব্যসঞ্চয়ন, জগদীশ ভট্টাচার্য ও অন্যান্য(সম্পা.), শ্রীশ্রী বিজয়কৃষ্ণ সাধন আশ্রম, নরেন্দ্রপুর

প্রতিভা বসু, ২০১২, মহাভারতের মহারণ্যে, বিকল্প, কলকাতা

বিষ্ণু দে,২০২০, বিষ্ণু দে'র শ্রেষ্ঠ কবিতা, দে'জ পাবলিশিং, কলকাতা

মল্লিকা সেনগুপ্ত, ২০১৬, মল্লিকা সেনগুপ্ত শ্রেষ্ঠ কবিতা, দে'জ পাবলিশিং, কলকাতা

রবীন্দ্রনাথ ঠাকুর, সোনারতরী, রবীন্দ্র-রচনাবলী দ্বিতীয় খণ্ড, বিশ্বভারতী প্রকাশন বিভাগ, কলিকাতা

রামকুমার মুখোপাধ্যায়, ১৪২১, ধনপতির সিংহলযাত্রা, মিত্র ও ঘোষ, কলকাতা

শক্তিপদ ব্রহ্মচারী, ২০১৯, কবিতা সমগ্র, অক্ষর প্রকাশনী, আগরতলা

শাঁওলী মিত্র, ১৯৮৩, নাথবতী অনাথবৎ, মিত্র ও ঘোষ, কলকাতা

শেখর দেবরায়,২০২২, মনসাকথা, মলয় দেব (সম্পা.) শেখর দেবরায়ের লোকঐতিহ্যাশ্রিত দৃটি নাটক মনসাকথা ও রইদ রাজার কিচ্ছা,

গুটেনবার্গ, কলকাতা

সঞ্জয় ভট্টাচার্য,২০২১, সঞ্জয় ভট্টাচার্যের কবিতা,গৌতম বসু, ভূমেন্দ্র গুহ(সম্পা.), গাঙচিল, কলকাতা

সহায়ক পাঠ

অজিত কুমার ঘোষ,২০১০, বাংলা নাটকের ইতিহাস, দে'জ পাবলিশিং, কলকাতা

অম্বজ বস. ১৩৬২ব. একটি নক্ষত্র আসে. দে'জ পাবলিশিং. কলকাতা

অশ্রুকুমার সিকদার, ১৪১১ব, আধুনিক কবিতার দিগ্বলয়, অরুণা প্রকাশনী, কলকাতা

অশোককুমার মিশ্র, ২০১৭, আধুনিক বাংলা কবিতার রূপরেখা ১৯০১-২০০৮, দে'জ পাবলিশিং, কলকাতা

দর্শন চৌধুরী, ২০০৩, বাংলা থিয়েটারের ইতিহাস, পুস্তক বিপণি, কলকাতা

দীপ্তি ত্রিপাঠী, ২০০৩, আধনিক বাংলা কাব্যপরিচয়, দে'জ পাবলিশিং, কলকাতা

বাসন্তীকুমার মুখোপাধ্যায়, ২০১২, আধুনিক বাংলা কবিতার রূপরেখা, প্রকাশভবন, কলকাতা

সরোজ বন্দ্যোপাধ্যায়, ২০০৮, কবিতার কালান্তর, দে'জ পাবলিশিং, কলকাতা

সরোজ বন্দ্যোপাধ্যায়, ২০১২, বাংলা উপন্যাসের কালান্তর, দে'জ পাবলিশিং, কলকাতা

Major

Paper Code: BNGDSC 6

Name of the Paper: ছন্দ অলঙ্কার ও সাহিত্যের রূপরীতি

(Bengali Metre, Rhetoric and Literary Terms)

Course Objective: The main objective of the course is to provide the introductory knowledge of Metre and Rhetoric

of Bengali Language. The course also provides the theoretical knowledge of Literature.

Course learning outcome: Course will enable the students to analyse the metre and rhetoric's of Bengali Language. The students will gather the technical knowledge about the Bengali language & literature. The students also will have the knowledge about different literary terms and theories.

Unit I : বাংলা ছন্দ

ক) সংজ্ঞা বিচার : দল/অক্ষর, কলা/মাত্রা, যতি, যতিলোপ, পর্ব, পঙ্ক্তি/চরণ, পদ, লয়, স্তবক, পয়ার, মহাপয়ার

খ) বাংলা ছন্দের জাতি বিচার : মিশ্রবৃত্ত/অক্ষরবৃত্ত,কলাবৃত্ত/মাত্রাবৃত্ত, দলবৃত্ত/স্বরবৃত্ত ছন্দের উদাহরণসহ বৈশিষ্ট্য

গ) ছন্দোলিপি প্রণয়ন

Unit II: বাংলা অলঙ্কার

ক) শব্দালঙ্কার: অনুপ্রাস, যমক, শ্লেষ, বক্রোক্তি

খ) অর্থালঙ্কার: উপমা, রূপক, সমাসোক্তি, উৎপ্রেক্ষা, অপকৃতি, ব্যতিরেক, বিরোধ, ব্যাজস্তুতি, সন্দেহ, অতিশয়োক্তি

গ) অলঙ্কার নির্ণয়

Unit III : সাহিত্যের রূপ ও রীতি (কাব্য ও নাটক)

ক) কবিতার সংজ্ঞা, স্বরূপ ও বৈশিষ্ট্য, কাব্যের শ্রেণিবিভাগ – গীতিকাব্য, সনেট, আখ্যান কাব্য, মহাকাব্য, পত্রকাব্য, গদ্যকবিতা

খ) নাটকের সংজ্ঞা, স্বরূপ ও বৈশিষ্ট্য, নাটকের শ্রেণিবিভাগ - ট্র্যাজেডি, কমেডি, ঐতিহাসিক নাটক, পৌরাণিক নাটক, সামাজিক নাটক, প্রহসন, রূপক ও সাংকেতিক নাটক, কাব্যনাট্য, গীতিনাট্য, অ্যাবসার্ড নাটক, পথনাটক

Unit IV: সাহিত্যের রূপ ও রীতি (কথাসাহিত্য ও প্রবন্ধ )

ক) উপন্যাসের সংজ্ঞা স্বরূপ ও বৈশিষ্ট্য, উপন্যাসের শ্রেণিবিভাগ - নভেল ও রোমান্স, ঐতিহাসিক উপন্যাস, সামাজিক উপন্যাস, মনস্তাত্ত্বিক উপন্যাস, রাজনৈতিক উপন্যাস, আঞ্চলিক উপন্যাস, আত্মজীবনীমূলক উপন্যাস, চেতনাপ্রবাহমূলক উপন্যাস, গ্রাফিক নভেল

খ) ছোটগল্পের সংজ্ঞা, স্বরূপ, বৈশিষ্ট্য ও প্রকারভেদ, ছোটগল্প ও অণুগল্প

প্রাথমিক পাঠ

কুন্তল চট্টোপাধ্যায়, ২০১২, সাহিত্যের রূপরীতি ও অন্যান্য প্রসঙ্গ, রত্নাবলী, কলকাতা তারাপদ ভট্টাচার্য, ১৩৬৬, ছন্দ-তত্ত্ব ও ছন্দোবিবর্তন, কলিকাতা বিশ্ববিদ্যালয়, কলকাতা প্রবোধচন্দ্র সেন, ২০০২, নৃতন ছন্দ-পরিক্রমা, আনন্দ পাবলিশার্স, কলকাতা প্রবোধচন্দ্র সেন, ১৯৮০, আধুনিক বাংলা ছন্দ-সাহিত্য, অণিমা প্রকাশনী, কলকাতা

শ্রীশ্যামাপদ চক্রবর্ত্তী, ২০২১, অলঙ্কার-চন্দ্রিকা, প্রজ্ঞা বিকাশ, কলকাতা

সহায়ক পাঠ

উজ্জ্বল কুমার মজুমদার,২০১৪, সাহিত্য ও সমালোচনার রূপরীতি, দে'জ পাবলিশিং, কলকাতা জীবেন্দ্র সিংহ রায়, ১৯৬৪, বাঙলা অলঙ্কার, মর্ডাণ বুক এজেন্সি, কলকাতা পবিত্র সরকার,২০১৯, ছন্দতত্ত্ব ছন্দরূপ, চিরায়ত প্রকাশনী, কলকাতা

Semester-IV

Major

Paper Code: BNGDSC 7

Name of the Paper: বিশ শতকের বাংলা সাহিত্য (কবিতা ও নাটক) {Bengali Literature of the 20th Century(Poetry &Drama)}

Course Objective: As we know Bengali literature has a history of more than thousand years. Every century has its different aspects. In this course we will focus on the 20th century Bengali literature especially poetry and drama. Our objective is to provide the knowledge about different characteristics of the literature of that time.

Course learning outcome: The 20<sup>th</sup> century is a significant time of our history. Many remarkable incidents have occurred in those days. The 1<sup>st</sup> and 2<sup>nd</sup> World War, Indian Independence, Partition and different movements was among those. The students will have through knowledge on Bengali Literature especially poetry and drama of 20th century and its socio-political reality.

Unit I : স্বাধীনতা পূৰ্ববৰ্তী বাংলা কবিতা

সত্যেন্দ্রনাথ দত্ত- যক্ষের নিবেদন

কাজী নজরুল ইসলাম- আমার কৈফিয়ৎ

জীবনানন্দ দাশ- ১৯৪৬-৪৭

সুধীন্দ্ৰনাথ দত্ত-উটপাখী

বিষ্ণু দে- ক্রেসিডা

সমর সেন- মেঘদূত

সঞ্জয় ভট্টাচার্য- উর্বশী

সুভাষ মুখোপাধ্যায়-মে দিনের কবিতা

Unit II : স্বাধীনতা পরবর্তী বাংলা কবিতা

শক্তি চট্টোপাধ্যায়- জরাসন্ধ

সুনীল গঙ্গোপাধ্যায়- আমি কী রকম ভাবে বেঁচে আছি

শঙ্খ ঘোষ- যমুনাবতী

নবনীতা দেবসেন- আরোগ্য

বীরেন্দ্র চট্টোপাধ্যায় -জন্মভূমি আজ

মল্লিকা সেনগুপ্ত- ছেলেকে হিস্ট্রি পড়াতে গিয়ে

জয় গোস্বামী- মালতীবালা বালিকা বিদ্যালয়

কৃষ্ণা বসু- জাহাজ

Unit III : স্বাধীনতা পূর্ববর্তী বাংলা নাটক

বিজন ভট্টাচার্য – নবান্ন

Unit IV : স্বাধীনতা পরবর্তী বাংলা নাটক

বাদল সরকার- এবং ইন্দ্রজিৎ

প্রাথমিক পাঠ

বুদ্ধদেব বসু(সম্পা), আধুনিক বাংলা কবিতা, ১৩৬০ ব, এম.সি. সরকার অ্যাণ্ড সন্স প্রাইভেট লিমিটেড, কলকাতা জীবনানন্দ দার্শের শ্রেষ্ঠ কবিতা, ১৩৬১ব, নাভানা প্রকাশনী, কলকাতা কাজী নজরুল ইসলাম, সঞ্চিতা, ১৩৭৯ব, ডি.এম. লাইব্রেরী, কলকাতা সুভাষ মুখোপাধ্যায়, পদাতিক, ১৩৪৬ব, বিশ্ববাণী প্রকাশনী, কলকাতা নবনীতা দেবসেন, ১৩৬৬ব, শ্রেষ্ঠ কবিতা, দে'জ পাবলিশিং, কলকাতা বীরেন্দ্র চট্টোপাধ্যায়ের শ্রেষ্ঠ কবিতা, ১৩৬৭ব,ভারবি, কলকাতা শ্রু ঘোষের শ্রেষ্ঠ কবিতা, ১৩৮৫ব, দে'জ পাবলিশিং, কলকাতা সুনীল গঙ্গোপাধ্যায়ের শ্রেষ্ঠ কবিতা, ১৯৯৩, আফসার ব্রাদার্স, বাংলাবাজার, ঢাকা শক্তি চট্টোপাধ্যায়ের শ্রেষ্ঠ কবিতা, ১৩৪৯ব, দে'জ পাবলিশিং, কলকাতা মন্থিকা সেনগুপ্তের শ্রেষ্ঠ কবিতা, পুনর্মুদ্রণ জুন ২০১৬, দে'জ পাবলিশিং, কলকাতা জয় গোস্বামী, প্রেমের কবিতা, ২০১৩, আনন্দ পাবলিশার্স, কলকাতা কৃষ্ণা বসু, শ্রেষ্ঠ কবিতা, দ্বিতীয় সংস্করণ, ২০১৯, দে'জ পাবলিশিং, কলকাতা বিজন ভট্টাচার্য, নবার, ১৯৪৪, জাতীয় সাহিত্য পরিষদ, কলকাতা

সহায়ক পাঠ

অজিত কুমার ঘোষ,২০১০, বাংলা নাটকের ইতিহাস, দে'জ পাবলিশিং, কলকাতা

অলোক রায় ২০১০, বিশ শতক, প্রমা প্রকাশনী, কলকাতা

অশ্রুকুমার সিকদার, ১৪১১ব, আধুনিক কবিতার দিগ্বলয়, অরুণা প্রকাশনী, কলকাতা

অশোককুমার মিশ্র, ২০১৭, আধুনিক বাংলা কবিতার রূপরেখা ১৯০১-২০০৮, দে'জ পাবলিশিং, কলকাতা

অসিত কুমার বন্দ্যোপাধ্যায়, ১৩৭৪, উনিশ-বিশ, মণ্ডল বক হাউস, কলকাতা

দর্শন চৌধুরী, ২০০৩, বাংলা থিয়েটারের ইতিহাস, পুস্তক বিপণি, কলকাতা

দীপ্তি ত্রিপাঠী, ২০০৩, আধুনিক বাংলা কাব্যপরিচয়, দে'জ পাবলিশিং, কলকাতা

বাসন্তীকুমার মখোপাধ্যায়, ২০১২, আধনিক বাংলা কবিতার রূপরেখা, প্রকাশভবন, কলকাতা

সরোজ বন্দ্যোপাধ্যায়, ২০০৮, কবিতার কালান্তর, দে'জ পাবলিশিং, কলকাতা

Major

Paper Code: BNGDSC 8

Name of the Paper: বিশ শতকের বাংলা কথাসাহিত্য (Bengali Fiction of the 20th Century)

Course Objective: As we know Bengali literature has a history of more than thousand years. Every century has its different aspects. In this course we will focus on the 20th century Bengali literature especially fictional writings. Our objective is to provide the knowledge about different characteristics of the literature of that time.

Course learning outcome: The 20th century is a significant time of our history. Many remarkable incidents have occurred in those days. The 1st and 2nd World War, Indian Independence, Partition and different movements was

among those. The students will have through knowledge on Bengali Literature especially fictional writings of 20th

century and its socio-political reality.
Unit I : স্বাধীনতা পূৰ্ববৰ্তী বাংলা উপন্যাস
হাঁসুলিবাঁকের উপকথা-তারাশঙ্কর বন্দ্যোপাধ্যায়
Unit II : স্বাধীনতা পরবর্তী বাংলা উপন্যাস
হাজার চুরাশির মা-মহাশ্বেতা দেবী
Unit III : স্বাধীনতা পূৰ্ববৰ্তী বাংলা ছোটগল্প
দিবসের শেষে-জগদীশ গুপ্ত
পুঁইমাচা-বিভূতিভূষণ বন্দ্যোপাধ্যায়
গামানুষ জাতির কথা-পরগুরাম
হারানের নাতজামাই-মানিক বন্দ্যোপাধ্যায়
ফসিল-সুবোধ ঘোষ
মহানগর-প্রেমেন্দ্র মিত্র

তিমিরসম্ভবা-জ্যোতিময়ী দেবী	BENGALI
নিমগাছ-বনফুল	
ঘেনা-সুলেখা সান্যাল	
Unit IV : স্বাধীনতা পরবর্তী বাংলা ছোটগল্প	
অশ্বমেধের ঘোড়া-দীপেন্দ্রনাথ বন্দ্যোপাধ্যায়	
অবতরণিকা-নরেন্দ্রনাথ মিত্র	
জননী-বিমল কর	
আদাব-সমরেশ বসু	
ভারতবর্ষ-রমাপদ চৌধুরী	
ইন্দর যাগ-ভগীরথ মিশ্র	
স্টিলের চঞ্চু-সাধন চট্টোপাধ্যায়	

দোজখের ওম-আখতারুজ্জামান ইলিয়াস
মধ্যবিত্ত-সুচিত্রা ভট্টাচার্য
প্রাথমিক পাঠ
তারাশঙ্কর বন্দ্যোপাধ্যায়, হাঁসুলিবাঁকের উপকথা, ১৩৫৪ব, বেঙ্গল পাবলিশার্স প্রাইভেট লিমিটেড, কলকাতা
মহাশ্বেতা দেবী, হাজার চুরাশির মা, ১৯৭৪, করুণা প্রকাশনী, কলকাতা
বিভূতিভূষণ বন্দ্যোপাধ্যায়ের শ্রেষ্ঠ গল্প, ১৩৭১ব, মিত্র ও ঘোষ পাবলিশার্স প্রাইভেট লিমিটেড, কলকাতা
দীপংকর বসু (সম্পা.) পরশুরাম গল্পসমগ্র, ১৩৭৬ব, এম.সি.সরকার অ্যাণ্ড সন্স প্রাইভেট লিমিটেড, কলকাতা
যুগান্তর চক্রবর্তী (সম্পা.), মানিক বন্দ্যোপাধ্যায়ের শ্রেষ্ঠ গল্প, ১৩৫৭ব, বেঙ্গল পাবলিশার্স প্রাইভেট লিমিটেড, কলকাতা
সুবোধ ঘোষের শ্রেষ্ঠ গল্প, ১৩৫৬ব, প্রকাশভবন, কলিকাতা
প্রেমেন্দ্র মিত্রের শ্রেষ্ঠ গল্প, ১৩৫৯ব, নাভানা, কলিকাতা
সুবীর রায়চৌধুরী (সম্পা.), জগদীশ গুপ্তর গল্প, ১৩৫০ ব, ইস্টার্ন পাবলিশার্স, কলিকাতা

জগদীশ ভট্টাচার্য (সম্পা.), বনফুলের শ্রেষ্ঠ গল্প, ১৩৫৬ব, বেঙ্গল পাবলিশার্স প্রাইভেট লিমিটেড, কলকাতা

গৌতম অধিকারী (সম্পা.), সুলেখা সান্যাল রচনাসমগ্র, ২০০৮, কথারূপ, কলকাতা

সুবীর রায়টোধুরী (সম্পা.), জ্যোতির্ময়ী দেবীর রচনা-সংকলন ১, ১৩৯৮ব, দেজ পাবলিশিং, কলকাতা

অসিতকুমার বন্দ্যোপাধ্যায় (সম্পা.), শ্রেষ্ঠ গল্প: শ্রেষ্ঠ লেখক, জয়দীপ পাবলিকেশনস, কলকাতা

গল্প সমগ্র, নরেন্দ্রনাথ মিত্র, ১৯৬২, মিত্র ও ঘোষ পাবলিশার্স প্রাইভেট লিমিটেড, কলকাতা

বিমল করের বাছাই গল্প, ১৩৭১ব, মণ্ডল বুক হাউস, কলকাতা

গল্প সমগ্র, রমাপদ চৌধুরী, ২০১৩, আনন্দ পাবলিশার্স প্রাইভেট লিমিটেড, কলকাতা

শ্রেষ্ঠ গল্প, ভগীরথ মিশ্র, ১৯৬৫, মৌসুমী সাহিত্য মন্দির, কলকাতা

আখতারুজ্জামান ইলিয়াস, রচনাসমগ্র ১, অষ্টম সংস্করণ, ২০১৬, মাওলা ব্রাদার্স, বাংলাবাজার, ঢাকা

শ্রেষ্ঠ গল্প, সুচিত্রা ভট্টাচার্য, প্রথম পর্ব, ২০১৫, পুষ্প, কলকাতা

একালের ছোটগল্প সঞ্চয়ন, প্রথম খণ্ড, ২০০৯, কলকাতা বিশ্ববিদ্যালয়

একালের ছোটগল্প সঞ্চয়ন, দ্বিতীয় খণ্ড, ২০০৯, কলকাতা বিশ্ববিদ্যালয়

সহায়ক '	পাঠ
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অরুণকুমার মুখোপাধ্যায়, ১৩৭৮, বাংলা গদ্যরীতির ইতিহাস , ক্লাসিক প্রেস, কলকাতা

অসিত কুমার বন্দ্যোপাধ্যায়, ১৩৭৪, উনিশ-বিশ, মণ্ডল বুক হাউস, কলকাতা

অজিত কুমার ঘোষ, ২০১০, বাংলা নাটকের ইতিহাস, দে'জ পাবলিশিং, কলকাতা

অলোক রায়, পবিত্র সরকার এবং অভ্র ঘোষ (সম্পা), ২০০৭, দুশ বছরের বাংলা প্রবন্ধ সাহিত্য, খণ্ড ২, সাহিত্য অকাদেমি, নিউ দিল্লি

অলোক রায়, ২০১০, বিশ শতক, পরমা প্রকাশনী, কলকাতা

সরোজ বন্দোপাধ্যায়, ২০১২, বাংলা উপন্যাসের কালান্তর, দে'জ পাবলিশিং, কলকাতা

#### Bengali Minor

#### Semester I

Minor/Elective

Paper Code: BNGM/E 1 Credit Point: 4

Name of the Paper বাংলা ভাষা ও সাহিত্যের সংক্ষিপ্ত ইতিহাস (প্রাচীন ও মধ্যযুগ)

A Short History of Bengali Literature (Ancient & Medieval Era)

Course Objective: The main objective of the course is to provide the throw knowledge about the development of Bengali Literature. The Bengali Literature developed through various literary and social movements through times. Such as Buddhist movements, Vaishnav movements, Shakto movements, Romantic movements etc. The literary creation of different periods has a documentation of those movements. The course aims to teach the literary history of social movements.

**Course learning outcome:** The course will enable students to understand to various social and literary movement and literature of medieval Bengal.

UNIT 1 : চর্যাপদ, বড়ু চণ্ডীদাস, শাহ মহম্মদ সগীর, মালাধর বসু, কৃত্তিবাস , কবীন্দ্র পরমেশ্বর , শ্রীকর নন্দী, , বৈষ্ণব পদাবলী (চণ্ডীদাস, বিদ্যাপতি), বিজয় গুপ্ত, নারায়ণ দেব

UNIT 2: ক) চৈতন্য চরিতকাব্য -- বৃন্দাবন দাস, কৃষ্ণদাস কবিরাজ

খ) বৈষ্ণব পদাবলী, অনুবাদ ও অনুসারী সাহিত্য –

জ্ঞানদাস, গোবিন্দদাস; অদ্ভূত আচার্য, কাশীরাম দাস, চন্দ্রাবতী, দৌলত কাজী, আলাওল

UNIT 3: মনসামঙ্গল--- বিপ্রদাস পিপিলাই, দ্বিজ বংশীদাস, কেতকাদাস; চণ্ডীমঙ্গল---- দ্বিজমাধব, মুকুন্দরাম চক্রবর্তী; ধর্মমঙ্গল --- রূপরাম, ঘনরাম; অন্নদামঙ্গল --- রায়গুণাকর ভারতচন্দ্র

UNIT 4: নাথ সাহিত্য, শিবায়ন, শাক্ত পদাবলী, পীর সাহিত্য, গীতিকা সাহিত্য, বাউল গান, কীর্তন গান

## প্রাথমিক পাঠ

অসিত কুমার বন্দ্যোপাধ্যায়, ২০০৬-২০০৭, বাংলা সাহিত্যের সম্পূর্ণ ইতিবৃত্ত, মডার্ণ বুক এজেন্সী প্রাইভেট লিমিটেড, কলকাতা আশুতোষ ভট্টাচার্য, ১৩৪৬ব, বাংলা মঙ্গলকাব্যের ইতিহাস, কলিকাতা বুক হাউস, কলকাতা ক্ষেত্র গুপু, ২০০২, বাংলা সাহিত্যের সমগ্র ইতিহাস, গ্রন্থনিলয়, কলকাতা

Bengali Minor

গোপাল হালদার, ১৪০৪ব, বাঙ্লা সাহিত্যের রূপ-রেখা, ১ম-খণ্ড, অরুণা প্রকাশনী, কলকাতা

গোপাল হালদার, ১৪১২ব, বাঙ্লা সাহিত্যের রূপ-রেখা, ২য়-খণ্ড, অরুণা প্রকাশনী, কলকাতা

সুকুমার সেন, ২০০৭, বাংলার সাহিত্য-ইতিহাস, সাহিত্য অকাদেমি, নতুন দিল্লি

সহায়ক পাঠ

আহমদ শরীফ, ২০১১, বাঙালী ও বাঙ্লা সাহিত্য, ২য় খণ্ড, নয়া উদ্যোগ, কলকাতা

আহমদ শরীফ, ২০১৪, বাঙালী ও বাঙ্লা সাহিত্য, ১ম খণ্ড, নয়া উদ্যোগ, কলকাতা

জহর সেনমজুমদার, ২০০৯, মধ্যযুগের কাব্য: স্বর ও সংকট, বঙ্গীয় সাহিত্য সংসদ, কলকাতা

সুকুমার সেন, ২০০৯, বাঙ্গালা সাহিত্যের ইতিহাস, ১ম খণ্ড, আনন্দ পাবলিশার্স, কলকাতা

সুখময় মুখোপাধ্যায়, ১৯৭৪, মধ্যযুগের বাংলা সাহিত্যের তথ্য ও কালক্রম, জি. ভরদ্বাজ এণ্ড কোং, কলকাতা

Semester II

Minor

Paper Code: BNGMC 2

Credit Point: 4

A Short history of Bengali Literature (The 19th & 20th Century)

Name of the Paper বাংলা সাহিত্যের সংক্ষিপ্ত পরিচয় ( উনিশ ও বিশ শতক)

 $Course\ Objective:\ The\ 19^{th}\ \&\ 20^{th}\ century\ is\ very\ important\ from\ various\ aspects-Socio-cultural\ inspired\ literary$ 

creativity lots of socio political movements and changes happened in these periods. A remarkable freshness may be

found in the Bengali literature of the time. In this course the students will gather the knowledge about the social-

cultural developments of the 19th & 20th Century.

Course learning outcome: The course will enable students to understand to various social and literary movement and literature of the 19<sup>th</sup> & 20<sup>th</sup> Century Bengali Literature. This will help students to be familiar with rich heritage of Bengali Literature.

UNIT 1: উনিশ শতকের সামাজিক আন্দোলন ও জাতীয়তাবাদী চেতনার উন্মেষ (ফোর্ট উইলিয়াম কলেজ, রাজা রামমোহন রায়, বিদ্যাসাগর, ডিরোজিও, অক্ষয় কুমার দত্ত, দেবেন্দ্র নাথ ঠাকুর, ও কেশব চন্দ্র সেন )

UNIT 2 : আধুনিক বাংলা কাব্য

ঈশ্বর গুপ্ত, মধুসূদন দত্ত, কামিনী রায়, অনঙ্গ মোহিনী দেবী, রবীন্দ্রনাথ ঠাকুর, সত্যেন্দ্রনাথ দত্ত, কাজী নজরুল ইসলাম, জীবনান্দ দাশ, অমিয় চক্রবর্তী, সুধীন্দ্রনাথ দত্ত, বুদ্ধদেব বসু, বিষ্ণু দে, রাধারানী দেবী

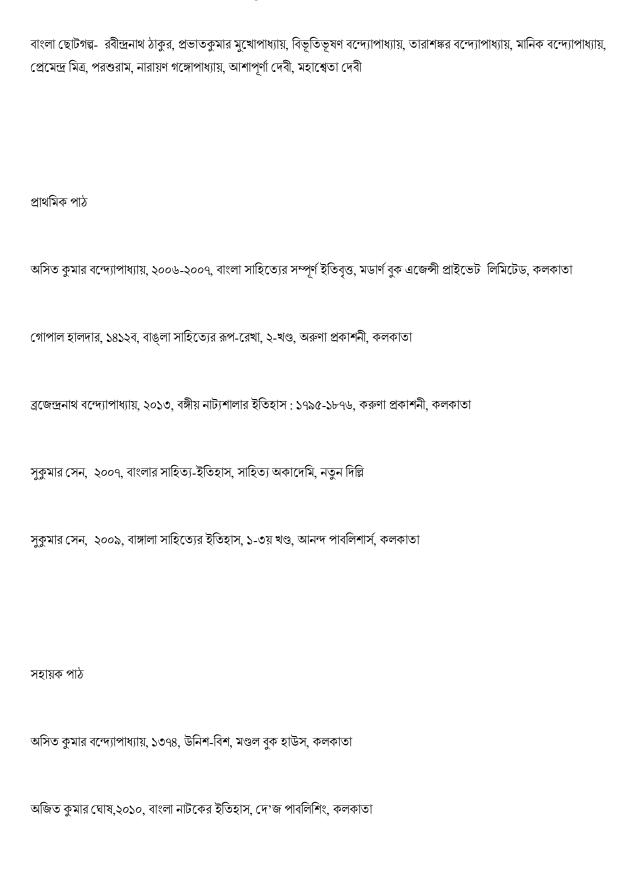
UNIT 3 : আধুনিক বাংলা নাটক, প্রহসন, ও নাট্যমঞ্চ

রামনারায়ণ তর্করত্ন, মধুসূদন দত্ত, দীনবন্ধু মিত্র, গিরিশ চন্দ্র ঘোষ, দ্বিজেন্দ্রলাল রায়, রবীন্দ্রনাথ ঠাকুর, মন্মথ রায়, বিজন ভট্টাচার্য, তুলসী লাহিড়ী, উৎপল দত্ত

লেবেডফ ও বেঙ্গলি থিয়েটার, বেলগাছিয়া নাট্যশালা, জোড়াসাঁকো নাট্যশালা, ন্যাশনাল থিয়েটার (প্রথম ও দ্বিতীয় পর্ব), ও স্টার থিয়েটার

UNIT 4 : বাংলা কথাসাহিত্য

বাংলা উপন্যাস – বঙ্কিমচন্দ্র চট্টোপাধ্যায়, স্বর্ণকুমারী দেবী, রবীন্দ্রনাথ ঠাকুর, শরৎচন্দ্র চট্টোপাধ্যায়, বিভূতিভূষণ বন্দ্যোপাধ্যায়, তারাশঙ্কর বন্দ্যোপাধ্যায়, মানিক বন্দ্যোপাধ্যায়, আশাপূর্ণা দেবী, মহাশ্বেতা দেবী



অলোক রায়,২০১২, উনিশ শতক, প্রমা, কলকাতা

অলোক রায় ২০১০, বিশ শতক, পরমা প্রকাশনী, কলকাতা

দর্শন চৌধুরী, ২০০৩, বাংলা থিয়েটারের ইতিহাস, পুস্তক বিপণি, কলকাতা

Semester III

Minor/Elective

Paper Code: BNGM/E 3

Name of the Paper : উনিশ শতকের বাংলা সাহিত্য (Bengali Literature of the 19th Century)

Course Objective: As we know Bengali literature has a history of more than thousand years. Where every century has its different aspects. In this course we will focus on the 19th century Bengali literature. Our objective is to provide the knowledge about different features of the literature of that period.

Course learning outcome: The 19th century is a valuable period of our history. Many remarkable social reforms were done in those days. Foundation of Bengali Press, the establishment of Fort William College, Hindu Collage, Calcutta University and many more educational organizations, introduction of women education, Hindu revivalist Movements and commencement of Bengali Nationalist Movements are the remarkable incidents of that time. The students will acquire through the knowledge on Bengali Literature of 19th century and its socio-political aspects.



বঙ্কিমচন্দ্র চট্টোপাধ্যায়, ১৩৩১ব, দুর্গেশনন্দিনী, গুরুদাস চট্টোপাধ্যায় এণ্ড সন্স, কলিকাতা

মাইকেল মধুসূধন দত্ত, ১৩৪৭ব, বীরাঙ্গনা কাব্য, শ্রীব্রজেন্দ্রনাথ বন্দ্যোপাধ্যায় ও শ্রীসজনীকান্ত দাস (সম্পা.) বঙ্গীয় সাহিত্য পরিষদ, কলিকাতা

সহায়ক পাঠ

অজিত কুমার ঘোষ,২০১০, বাংলা নাটকের ইতিহাস, দে'জ পাবলিশিং, কলকাতা

অরুণকুমার মুখোপাধ্যায়, ১৩৭৮, বাংলা গদ্যরীতির ইতিহাস , ক্লাসিক প্রেস, কলকাতা

অলোক রায়,২০১২, উনিশ শতক, প্রমা, কলকাতা

অধ্যাপক শশাঙ্কশেখর বাগচি (সম্পা.) কমলাকান্তের দপ্তর,১৯৬২, মডার্ণ বুক এজেন্সী প্রাইভেট লিমিটেড, কলিকাতা

অমরেন্দ্র গণাই (সম্পা.), বীরাঙ্গনা কাব্য, ১৩৭০ব, বিউটি বুক হাউস, ঢাকা

অসিত কুমার বন্দ্যোপাধ্যায়, ২০০৬-২০০৭, বাংলা সাহিত্যের সম্পূর্ণ ইতিবৃত্ত, মডার্ণ বুক এজেন্সী প্রাইভেট লিমিটেড, কলকাতা

অসিত কুমার বন্দ্যোপাধ্যায়, ১৩৭৪, উনিশ-বিশ, মণ্ডল বুক হাউস, কলকাতা

গোপাল হালদার, ১৪১২ব, বাঙ্লা সাহিত্যের রূপ-রেখা, ২-খণ্ড, অরুণা প্রকাশনী, কলকাতা

সুকুমার সেন, ২০০৭, বাংলার সাহিত্য-ইতিহাস, সাহিত্য অকাদেমি, নতুন দিল্লি

সুকুমার সেন, ২০০৯, বাঙ্গালা সাহিত্যের ইতিহাস, ৩-৫ম খণ্ড, আনন্দ পাবলিশার্স, কলকাতা

সুকুমার সেন, ১৯৯৮, বাঙ্গালা সাহিত্যে গদ্য, আনন্দ পাবলিশার্স, কলকাতা

দর্শন চৌধুরী, ২০০৩, বাংলা থিয়েটারের ইতিহাস, পুস্তক বিপণি, কলকাতা

Semester IV

Minor/Elective

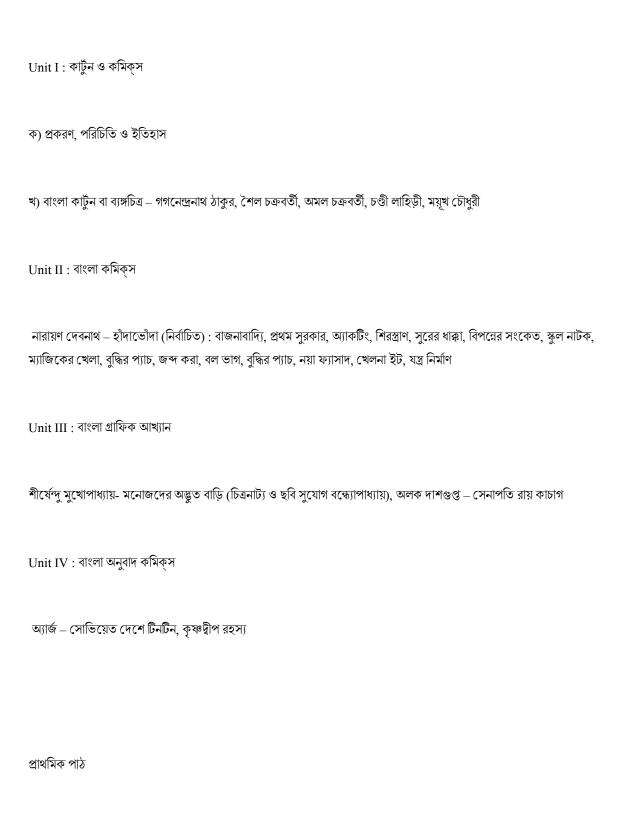
Paper Code: BNGM/E 4

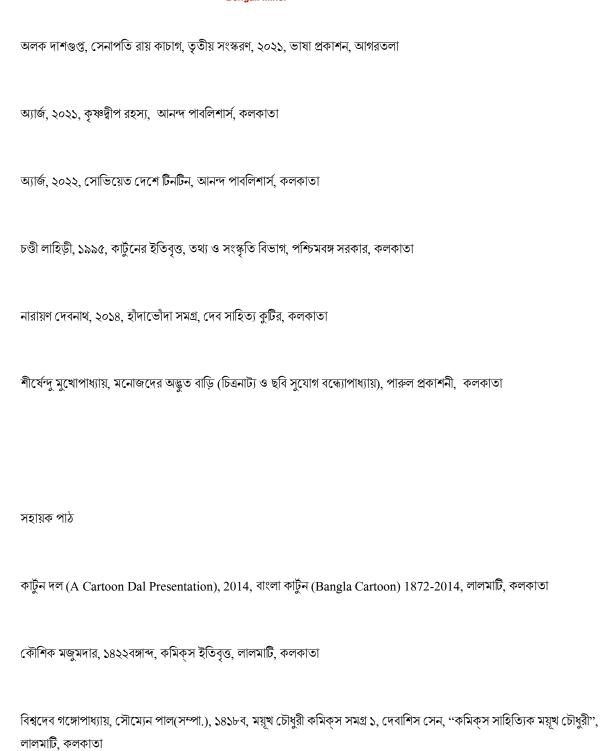
Name of the Paper: বাংলা কার্টুন ও কমিক্স

(Bengali Cartoon and Comics)

Course Objective: Cartoon and Comics are the indispensable part of Literature. The aim of the course is to provide the knowledge of cartoon and comics in Bengali Literature. Another objective of the course is to make student attracted about the cartoon and comics.

Course learning outcome: After completing the course the students will have through knowledge about the Bengali cartoon and comics. From the 19th century, some powerful cartoonist and comics writers have proudest a hues Bengali cartoon and comics. The students will know there works and also there is a scope to established themselves in this field.





তুষার মাজি, শান্তনু ঘোষ (সম্পা.), ১৪১৯ব, ময়ূখ চৌধুরী কমিক্স সমগ্র ২, ময়ূখ চৌধুরী "কমিক্স যখন গল্প বলে", লালমাটি, কলকাতা

সুমিত ঘোষ, ভারতের রাজনৈতিক কার্টুন চর্চা, আনন্দ পাবলিশার্স, কলকাতা

#### Semester I

#### **Interdisciplinary Course (MCQ)**

Paper Code: BNGIC 1 Credit Point: 3

Name of the Paper : বাংলা ভাষায় বিজ্ঞান চৰ্চা (উনিশ ও বিশ শতক) (The Study of Science in the Bengali Language)

#### UNIT 1:

ক. বাংলা বিজ্ঞান সাহিত্যের সূচনা পর্ব— বাংলা বিজ্ঞান সাহিত্যের সূচনা, কলিকাতা স্কুল বুক সোসাইটি, সাময়িক পত্র — দিগ্দর্শন থেকে বিদ্যাদর্শন

খ. বাংলা ভাষায় বিজ্ঞান চর্চায় গুরুত্বপূর্ণ ব্যক্তি – অক্ষয়কুমার দত্ত, জগদীশচন্দ্র বসু, আচার্য প্রফুল্লচন্দ্র রায়, সত্যেন্দ্রনাথ বসু,

#### UNIT 2 : বাংলা ভাষায় বিজ্ঞান সাহিত্য (বিশ শতকের প্রথমার্ধ)

- ক. রবীন্দ্রনাথ ঠাকুর-বিশ্বপরিচয় (সৌরজগত, নক্ষত্রলোক)
- খ. জগদীশচন্দ্র বসু-অব্যক্ত (ভাগীরথীর উৎস সন্ধানে, গাছের কথা)

#### UNIT 3: বাংলা কল্পবিজ্ঞান

সত্যজিৎ রায়-প্রোফেসর শঙ্কু (ব্যোমযাত্রীর ডায়েরি, প্রোফেসর শঙ্কু ও আশ্চর্য পুতুল, কর্ভাস, স্বপ্নদ্বীপ)

#### UNIT 4 : বাংলা ভাষায় বিজ্ঞান সাহিত্য (বিশ শতকের দ্বিতীয়ার্ধ)

শ্যামল চক্রবর্তী – বিজ্ঞানী অসীমা চট্টোপাধ্যায়

#### প্রাথমিক পাঠ

বুদ্ধদেব ভট্টাচার্য, ১৯৬০, বঙ্গসাহিত্যে বিজ্ঞান (বাংলা ভাষা ও সাহিত্যে বিজ্ঞানচর্চার ইতিহাস), বঙ্গীয় বিজ্ঞান পরিষদ, কলিকাতা

রবীন্দ্রনাথ ঠাকুর, বিশ্বপরিচয়, ১৩৪৪ব, বিশ্বভারতী, কলিকাতা

জগদীশচন্দ্র বস্, অব্যক্ত, ১৩২৮, বঙ্গীয় বিজ্ঞান পরিষদ, কলিকাতা

সত্যজিৎ রায়, শঙ্কুসমগ্র, ২০০২, আনন্দ পাবলিশার্স প্রাইভেট লিমিটেড, কলকাতা

শ্যামল চক্রবর্তী, ২০১৮, বিজ্ঞানী অসীমা চট্টোপাধ্যায়, দে'জ পাবলিশিং, কলিকাতা

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ধনঞ্জয় ঘোষাল (সম্পা), ২০১০, বাঙালির বিজ্ঞানচর্চা (প্রাক্ স্বাধীনতা পর্ব), সহযাত্রী, কলকাতা

#### Semester-III

#### **Interdisciplinary Paper**

Paper Code: BNGID/2

Paper Credit: 3

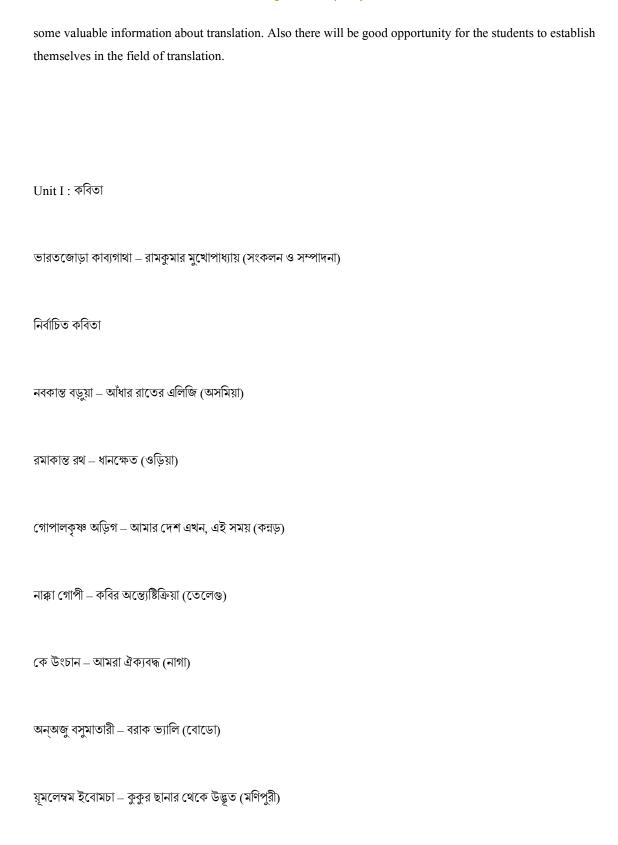
Full Marks: 100

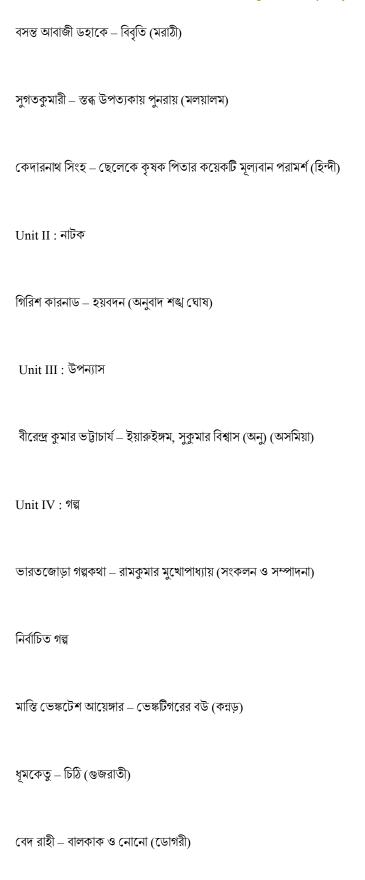
Question Pattern: MCQ

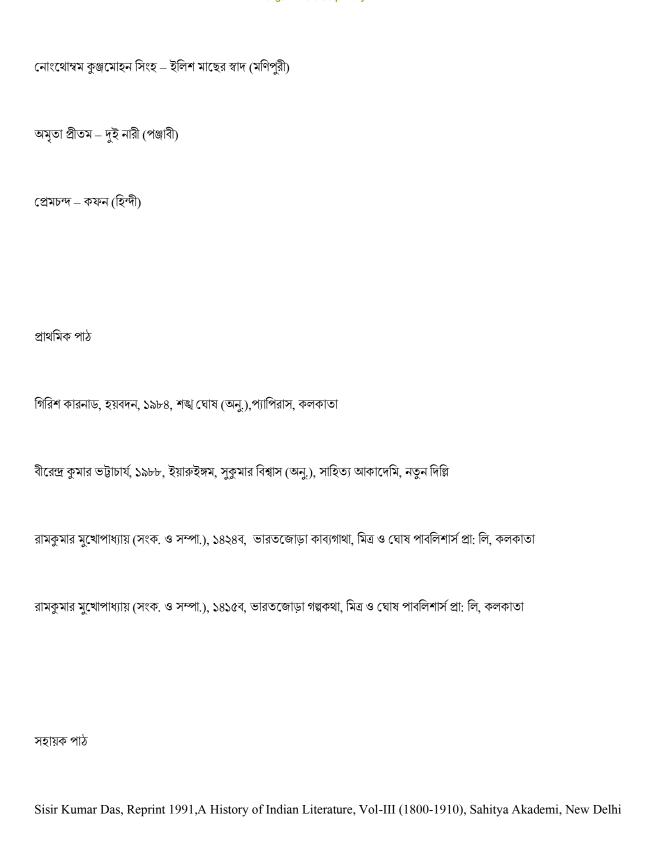
Name of the Paper: অনুবাদে ভারতীয় সাহিত্য (Indian Literatures in Translation)

Course Objective: The aim of the course is to provide an overview of Indian literatures, as we know there are so many Indian languages and every language has its own literature. In this course students will get the essence of different Indian Languages through the translation of some remarkable texts in Bengali.

Course learning outcome: After completing the course, the students will have through knowledge about different Indian Languages and its literatures. The students will know about the Indian literary Heritage. They will gather







Semester	III
Semester	1 V

Interdisciplinary Paper

Paper Code: BNGID/3

Paper Credit: 3

Full Marks: 100

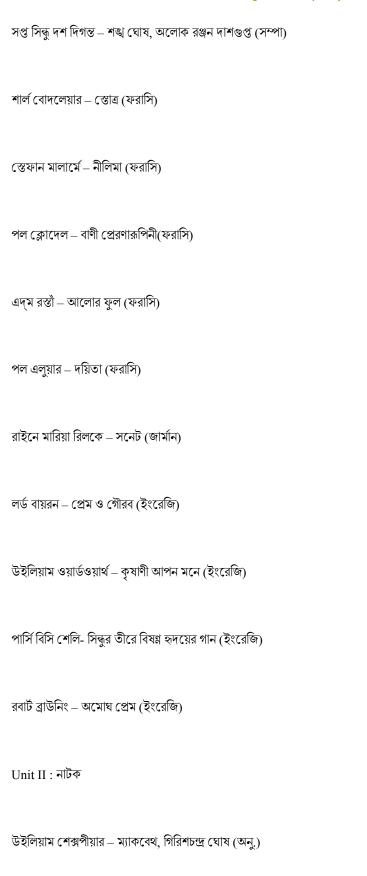
Question Pattern: MCQ

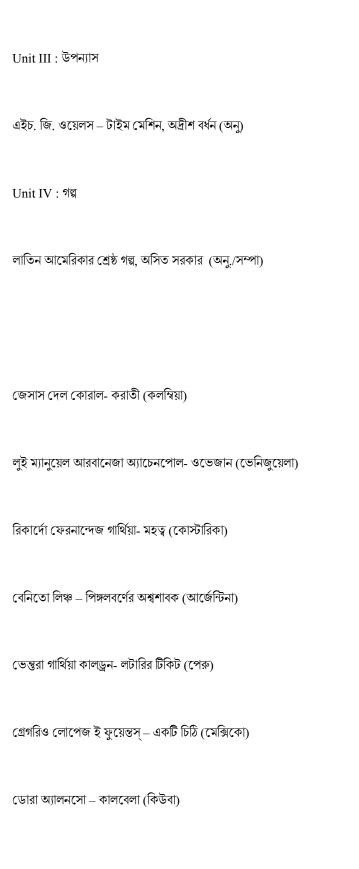
Name of the Paper: অনুবাদে বিদেশি সাহিত্য (Foreign Literatures in Translation)

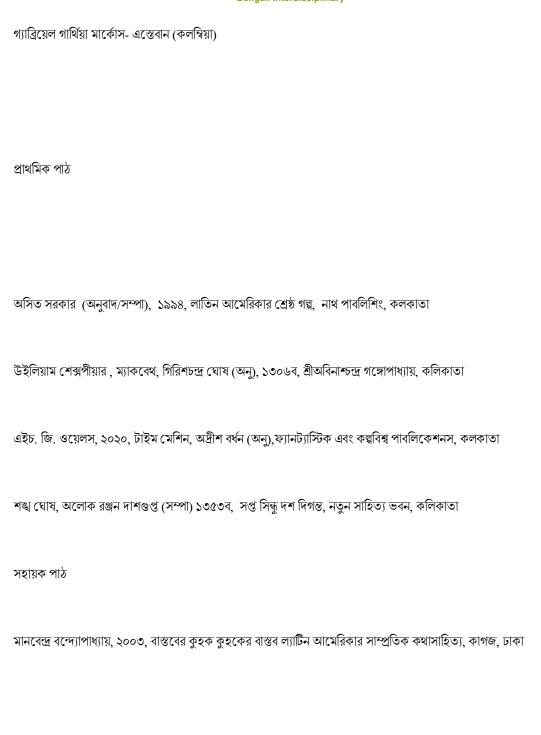
Course Objective: The aim of the course is to provide an overview of foreign literatures, as we know there are so many foreign languages and every language has its own literature. In this course students will get the essence of different foreign Languages through the translation of some remarkable texts in Bengali.

Course learning outcome: After completing the course, the students will have through knowledge about different foreign Languages and its literatures. The students will know about the literary heritage of world. They will gather some valuable information about translation. Also there will be good opportunity for the students to establish themselves in the field of translation.

Unit I : কবিতা







# TRIPURA UNIVERSITY

**SURYAMANINAGAR-799022** 



# **DEPARTMENT OF HUMAN PHYSIOLOGY**

Under Graduate
COURSE AND CURRICULUM

**Under NEP 2020** 

# MAJOR DISCIPLINE SPECIFIC COURSE

#### **Basic Structural Framework of the Syllabus**

**CORE COURSES : {MAJOR]** 

Course Code	Subject Name of the Course
	YEAR 1 1ST SEMESTER
Course I (4 Th)	History of Physiology & Medicine; Contribution of Indian scientists in the field of Physiology and allied health sciences; Structural and functional basis of Human Body.
Course 2 (2 Th)	Biophysics and Physicochemical Principles; Chemistry of Bio molecules, structure and classification of macromolecules, protein separation
Course 2 (2P)	Lab work I
	2 <sup>ND</sup> SEMESTER
Course 3 (4 Th)	Cardiovascular System; Respiratory System.
Course 4 (2 Th)	Physiology of Blood and body fluids
Course 4 (2 P)	Lab work II
	YEAR 2 3 <sup>RD</sup> SEMESTER
Course 5 (4 Th)	Enzyme classification and kinetics, Digestion & absorption
Course 6 (2 Th)	Excretory physiology; Skin and body temperature regulation.
Course 6 (2 P)	Lab work III
	4 <sup>th</sup> SEMESTER
Course 7 (4 Th)	Endocrinology; Reproductive Physiology
Course 8 (2 Th)	Nerve muscle physiology.
Course 8 (2 P)	Lab work IV
	Y LAR 3 5 <sup>th</sup> SEMESTER
Course 9 (4 Th)	Molecular Biology and Human Genetics
Course 10 (2Th)	Cell Signaling, cell cycle and apoptosis
Course 10 (2 P)	Lab work V
Course 11 ( 4 Th)	Immunology
Course 12 (2 Th)	Molecular physiological basis of Cancer
Course 12 (2 P)	Lab work VI

	6 <sup>th</sup> SEMESTER		
Course 13 (4 Th)	Nervous System		
Course 14 (2 Th)	Special senses		
Course 14 (2P)	Lab work VII		
Course 15 (4 Th)	Exercise & Sports Physiology and Yoga,		
Course 16 (2 TH)	Work Physiology, Ergonomics and Occupational Health.		
Course 16 (2P)	Lab work VIII		
	YEAR 4 7 <sup>th</sup> SEMESTER		
Course 17 (4 Th)	Metabolic pathways and integration, oxidative phosphorylation		
Course 18 (2 Th)	Nutrition and Dietetics		
Course 18 (2P)	Lab work IX		
Course 19 (4Th)	Embryology & Developmental Biology, Stress Physiology.		
Course 20 (2Th)	Neurochemistry, Behavioral physiology & Higher brain functions, chronobiology		
Course 20 (2P)	Lab work X		
	8 <sup>th</sup> Semester		
Course 21 (4 Th)	Medical Microbiology		
Course 22 (2 Th)	Environmental Physiology and Public Health issues		
Course 22 (2P)	Lab work XI		
Course 23 (4 Th)	Molecular Biological, Cell Biological and Immunological Techniques		
Course 24 (2Th)	Biostatistics, Research Methodology & Ethical issues in Biomedical Research		
Course 24 (2P)	Lab work XII		

# DETAIL COURSE CONTENTS: (CORE COURSES):

## YEAR - 1

#### **Semester-I:**

Course I (4 Th)	History of Physiology & Medicine; Contribution of Indian scientists in the field of Physiology and allied health sciences; Structural and functional basis of Human Body.

History of Physiology & Medicine; Contribution of Indian scientists in the field of Physiology and allied health sciences; Structural and functional basis of Human Body.

**Courseobjective:**Objectiveofthecourseistogivelearnersfundamentalknowledgeofhumanbodyanddifferent principle governing its function.

**Learningoutcome:** Attheendofthecourse, learners willbeable to:

Describe the structural framework of human body and organ systems.

Analyzetheimportanceofdifferentbiophysicalandphysiochemicalprinciples.

Summarize the chemistry of different biomolecules.

Demonstratetheskilltoexplainthebasisofnormalfunctionofhumanbody Interpret

theimportance of Human physiology as a basic science subject.

## History of Physiology and medicine and contribution of Indian Scientists in the field of Physiology and allied health sciences:

Charaka

Sushruta

Patanjal

U.NBrahmachari

S.CMahalanobis

J.B.S. Haldane

A.SPaintal

#### StructuralandFunctionalbasisofHumanBody:

Cell theory- General concept of structure and function of cell organelles of Eukaryotic cell:

Endoplasmic reticulum, Golgi body, Mitochondria, Nucleus, Lysosomes, Peroxisomes,

Ribosomes.

Cytoskeletalsystem, Celljunction, Cellinclusions.

Structural and functional basis of different human body or gan and or gan systems.

Musculoskeletalsystem.

Homeostasisanditscontrolsystems

Anthropometriclandmarks.

Course 2 (2 Th)	Biophysics and Physicochemical Principles; Chemistry of Bio molecules, structure and classification of macromolecules, protein separation methods

#### Biophysics and Physicochemical Principles:

Diffusion, osmosis, surfacetension & viscosity-definition and physiological applications.

Properties of water, pH and Buffer-definition, weakchemical bonds, biologica lsignificance;

Henderson-Hasselbalchequation, mathematical problems on pH and buffer.

Gibbs-Donnanmembraneequilibrium-itsbiological application and relation without of pressure and pH.

Colloids-Classification, properties-optical and electrical, Physiological importance of Colloids.

#### **Chemistry of Biomolecules:**

Carbohydrates-Definitionand, Classification.

Monosaccharides-classification, structure, stereoisomerism, optical isomerism, optical activity, epimerism.

Cyclicstructure-pyranoseandfuranoseforms, anomerism, mutarotation and its mechanism. Chemical reactions of monosaccharides (Glucose and Fructose).

Reactionswithacidandalkaliandtheirbiochemicalimportance. Polysaccharides-Starch, glycogen, dextrin.

Lipids-DefinitionandClassification.Fattyacids-Classification, and structure. Phospholipids and glycolipids-classification and physiological significance.

Monoandpolyunsaturatedfattyacidsandtheirphysiological significance.

Sterols-Chemicalnature, structure, classification and physiological importance.

Aminoacids-Classifications.Peptide and Protein:Zwitterion,isoelectricpH,isoionicform

Primary, secondary (alphahelix, betasheet and globular structure), tertiary, quaternary structure of proteins.

Protein purification and separation methods.

Course 2 (2P)	Lab work I
(21)	

 $\textbf{Course objective:} Objective of the course is totrain learners on skills for performing different anthropometric and biochemical measurements \ .$ 

Learningoutcome: Attheendofthecourse, learners willbeable to:

Demonstratetheskilltomeasuredifferentanthropometricparameters. Become

equipped to do different biochemical analysis.

Describe themodelsand chartsonhuman bodyand organ systems.

Analyzetheimportanceofdifferentanthropometricandbiochemicalparameters.

Interpret the results in light of knowledge on normal values in human systems.

StudyofModels/Chartsofdifferentbodyorgansystems&organs – Anatomicalposition,Structure&Functions.

StudyofBodyAnthropometry-Stature,weight,sittingheight,shoulderheight(standing),Elbowheight (standing), Hip height (standing), hand length, shoulder elbow length, leg length, shoulderbreadth (biacromial), Arm reach from wall (Arm span) Knee to Knee Breadth, Elbow to elbow breadth, Head circumference, Shoulder circumference, Chest circumference, waist circumference, hip circumference. Calculation of BMI, BSA, WHR, Head and Chest circumference ratio.

Qualitative identification of physiologically important substances – HCL, Lacticacid, Uricacid, Albumin, Peptone, Starch, Dextrin, Glucose, Fructose, Lactose, Maltose, Sucrose, Bilesalt, Acetone, Glycerol, urea.

Preparation of buffers olution and determination of pH.

#### **Semester –II:**

Course 3	Cardiovascular System; Respiratory System.
(4 Th)	

#### CardiovascularSystem; RespiratorySystem.

**Courseobjective:**Objectiveofthecourseistoprovideknowledgeonfunctions ofblood,bodyfluid,respiratory and cardiovascular system, their regulation and application of the knowledge.

Learningoutcome: Attheendofthecourse, learners will beable to:

Describe different formed elements of blood, their formation and function.

Explain the structural framework of human cardiovas cular and respiratory system.

Summarize the mechanism of cardiovascular and respiratory homeostasis.

Demonstratetheskilltoexplainthecausesofhematological,cardiovascularand respiratoryabnormalities. Express opinion on correction of different diseases associated with these systems .

#### CardiovascularSystem:

Anatomy of the heart.Properties of cardiac muscle.Origin and propagation of cardiac impulse.Heart Block. Cardiac cycle -Pressure and volume changes. Heart sounds. Murmurs.

Cardiacoutput-MeasurementbyapplicationofFick'sprinciple&factorsaffecting.Starling'slawofheart.

Electrocardiography- Principles of Electrocardiography, Normal electrocardiogram, different waves, intervalsandsegments; different electrocardiographicleadsystems. Cardiac Arrhythmias. The pulse-

Arterial and venous. Hemodynamics of blood flow.

Innervationofthe heartandbloodvessels, cardiac andvasomotorreflexes.

Coronary Circulation. Coronary arterydisease- Atherosclerosis.

Blood vessels-types, structure. Hemodynamics: velocity of blood flow, nature of blood flow, Flow-Pressure-Resistance relationship.

Bloodpressure-regulationwithspecialreferencetosino-aorticmechanism. Its controlling factors.

Immediateand delayedeffectsofhemorrhage.

#### RespiratorySystem:

Anatomyandhistologyofthe lung andairways.

Mechanics of breathing: Roleof respiratory muscles, Compliance of lungsand chest wall, pressure-volume relationships, alveolarsurfacetensionand surfactant. Spirometry: Lungvolumes and capacities. Dead space.

PulmonaryCirculation.

Ventilation- perfusion ratio, Transport of gases (O<sub>2</sub> and CO<sub>2</sub>) in body :Partial pressure and composition of normal atmospheric gases in inspired, expired, alveolar airs and blood.

Oxygen dissociation curve of hemoglobin – factors affecting. Carbon dioxide dissociation curve.

Regulation of respiration -- neural and chemical, respiratory centers, chemoreceptors, baroreceptors, pulmonary receptors.

Disorders of Breathing: Hypoxia: Types & effects. Asphyxia, Cyanosis, Periodic breathing, Apnoea, , Asthma, Emphysema.

High altitude pulmonary edema (HAPO). Oxygen therapy. Decompression sickness, caisson's disease

I	Course 4	Physiology of Blood and body fluids
	(2 Th)	

#### Physiology of Bloodandbody fluids.

Bonemarrow:Formedelementsofblood-origin,formation,functionsandfate.

PlasmaproteinsOriginandfunctions.

Erythropoiesis-factorseffectingandleucopoiesis.

Haemoglobin-Structure, types. Anemia.

Bloodvolume-factorseffecting.

Hemostasis-Factors, mechanism, anticoagulants, procoagulants. Disorders of hemostasis-Hemophilia.

Bloodgroup-ABO,Rhsystemandotherminorbloodgroupsystems.Bloodtransfusionandits hazards.

Lymphandtissuefluids-Formation, circulation, functions and fate.

Lymphaticorgans-Histological structures and functions of lymph gland and spleen. Splenomegaly causes and effects.

Course 4	Lab work II
(2 P)	

**Courseobjective:**Objectiveofthecourseistotrainthestudentsthetechniquesformeasurmentdifferent hematological, cardiovascular and respiratory parameters.

**Learningoutcome:** Attheendofthecourse, learners will be able to:

Analysisofdifferenthematological parameters.

Record the blood pressure and associated cardiovascular parameters.

Performlungfunctiontestsusingspirometerandotherrelated equipments.

Demonstrate ability to do such techniques individually.

Developskillstoexplainthecausesofhematological, cardiovascular and respiratory abnormalities

Haematological experiments: Preparation and staining of blood film with Leishman's stain. Identification of blood cells. Total count of W.B. Cand R.B. C. Differential count of W.B. C. Haemoglobine stimation by hemoglobinometer. Preparation of haemin crystals.

Cardio vascular Physiology Experiments: Determination of Blood pressure in different body posture.

Determination of pulse rate.

InterpretationofKymographicrecordingofthemovementsofperfusedheartoftoadandtheeffectsof Excess Calcium, acetylcholine and adrenaline on the contraction of heart.

Respiratory Human Experiments: Pneumographic recording / demonstration of effects of hyperventilation, breath-holding and talking. Interpretation of lung function tests using Spirometry (Digital) and analysis of the results.

Determination of Peak Expiratory Flow Rate

## YEAR -2

Course 5	Enzyme classification and kinetics, Digestion & absorption
(4 Th)	
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**Courseobjective:**Objectiveofthecourseistoexplaintheprocessofdigestion, absorption, metabolism, excretion and body temperature regulation.

**Learningoutcome:** At the end of the course, learners will be able to:

Explain the mechanism of digestion, absorption and metabolism in the body.

Describe the structural and functional significance of human excretory system.

Summarize the mechanism of body temperature regulation.

Demonstratetheskilltoexplainthecausesofdigestive, metabolicand excretory abnormalities.

Express opinion on correction of different diseases associated with these systems.

#### **Enzyme classification and Kinetics:**

Classification of enzymes

Co enzymes and co factors

Models of enzyme action, Multi-enzyme system-example

Enzyme kinetics: Factors affecting enzyme activity. Michaeles-Menten constant (Km); Lineweaver-Burk plot

Enzyme Inhibition: Types, Feedback and allosteric regulation of enzymes.

#### Digestion&Absorption:

Anatomyandhistologyofalimentarytract&digestive glands.

Mastication, Deglutition and movements of a limentary canal.

Composition, function and regulation of secretion of salivary, gastric, pancreatic and intestinal juice and bile.

Formation, secretion and regulation of HCL, concept of hyperacidity, achlorhydria

Gastro-intestinal hormones.

Entero-hepatic circulation of bilesalt-role of bileindigestion.

Digestion and absorption of carbohydrates, proteins and fats.

Defecation-mechanism, constipation

Basic conceptofpeptic ulcer, gallstone,

Vomiting center and mechanism

Course 6	Excretory physiology; Skin and body temperature regulation.
(2 Th)	

#### **Excretorysystem:**

Histology, Structural and Anatomy of kidney and nephron. Renal circulation—peculiarities and auto regulation.

Glomerular filtration, GFR, measurements, regulation. Juxta-glumerular apparatus.

Tubularreabsorption and secretion, diuretics

Formation of hypotonic and hypertonic urine-countercurrent mechanism.

Renalregulation of osmolarity and blood volume.

Renalregulationofacid-base balance, acidification of urine.

Physiologyofurinarybladderandmicturition. Abnormalities of micturition.

Normalandabnormalconstituentsofurine, and pathophysiological significance.

Renalfunctiontests. Disorders of renalfunctions.

#### **Skinand Body TemperatureRegulation:**

Histology and functions of skin.

Skinwounds, classification and phases and mechanisms of woundhealing.

Sweatglands-structure and composition of sweat.

Mechanism of sweatformation, secretion and its regulation. Insensible perspiration.

Regulation of bodytemperature inhomeotherms – its physical and physiological processes, roles of neural and hormonal processes.

Heat Stress, Pyrexia, hyperthermia and hypothermia

Course 6	Lab work III
(2 P)	

Courseobjective: Objective of the course is totrain the students the histological and urine analysis techniques.

Learningoutcome: Attheendofthecoursethelearners will be able to; Identify of

different histological slides of the systems in study.

Performbiochemicalanalysisofurinesamples.

Study different physiological models.

Demonstrateabilitytoperformsuchtechniquesindividually.

Developskillstoexplainthecauses of abnormalities involving these systems of the body.

Studyandidentificationofhistologicalslides of digestive system and excretory system.

StudyofModelsforanatomicalpositionandfunctionsoforgansofdigestivesystemandexcretorysystem and skin.

Urineanalysis:Identificationofabnormalconstituents of urine (albumin, ketone, glucose, bilesalt).

Assessment of nutritional status by recall method and Diet survey.

#### **Semester –IV:**

Course 7	Endocrinology; Reproductive Physiology
(4 Th)	

#### Endocrinology; Reproductive Physiology

**Courseobjective:** The course aim stoim part the learner's knowledge on nervea and muscle function, endocrine system and reproduction in human

Learning out come: After completion of the course, learners will be able to:

Knowhownerveandmusclecoordinatetoworkinhuman.

Comprehend a variety of functions of endocrine glands.

Describetheeffectsofhypoandhypersecretionofdifferenthormonesinhumansystem. Explain the

basic structural frame work of human reproductive system.

Usetheknowledgetounderstandthedifficulties associatedwithachievinghumanreproductivegoal.

#### **Endocrinology:**

Concept of autocrine, paracrine and endocrine system. Anatomical organization of endocrine glands. Mode of action of hormones, signal transduction and concept of second messenger system. Feedback regulation of hormone action.

Hypothalamus and Pituitary-Hypothalamus as a neuroendocrine organ. Hypothalamic releasing factors. Hypothalamo-hypophyseal portal system, Anterior and posterior pituitary --histological structure of the gland. Pituitary hormones, functions and regulation of secretion of hormones.

ThyroidandParathyroid--Histologicalstructureoftheglands. Thyroidandparathyroidhormones, chemical nature, mechanism of action, functions and regulation of secretion of the hormones. Calcium-phosphate homeostasis.

Adrenalgland--Histological structure of the gland. Adrenal cortical and medullary hormones, mechanism of action, functions and regulation of secretion of these hormones.

Endocrine Pancreas -- Histological structure. Hormones of Islet of Langerhans, Insulin, glucagon and other hormones,mechanismofaction,functionsandregulationofsecretionofthehormones. Hormonal control of blood sugar. Diabetes mellitus-types.

Gastro-intestinal hormones-Gastrin, Secretin, CCK, somatostatin, ghrelin and GRP-- functions of these hormones.

Effectofhypoand hypersecretionofhormonesofdifferentendocrine glands.

#### Reproductive Physiology:

Anatomical organization of male and female reproductive organs. Primary and accessory sex organs and secondary sex characters.

Histologyoftestis.Bloodtestisbarrier,Endocrinefunctionsoftestis.Spermatogenesis.Hypothalamic control of testicular functions. Cryptorchidism.

Histology of ovary. Ovarian hormones and their functions. Oo genesis and ovulation. For mation and functions of corpus luteum.

Physiology of puberty. Menstrual cycle- ovarian and uterine changes and its hormonal regulation. Onset of menopause and postmenopausal changes. Abnormalities in menstrual cycle.

Course 8	Nerve muscle physiology.
(2 Th)	

#### Nerve-MusclePhysiology:

Structure, properties and classification of Neurons and Neuroglia.

Nervefibersstructureandtypes.Propertiesofnervefibers,modernconceptofgenerationofresting membrane potential, graded potential.

Actionpotential,ionicbasis,characteristicsofAP,propagationindifferenttypesofnervefibers.Rheobase and chronaxae.

Nerveinjury-Degenerationandregenerationofnervefibers, Factors affectNerve growth

Synapse, structure, classification, properties, Transmission of nerve impulse through synapse, EPSP, IPSP. Neuromuscular Junction, structure, motor unit, motor point, propagation of nerve impulse through the neuro-muscular junction, MEPP, EPP.

Receptors, classification, types, properties, mechanism of transduction of stimuli from sensor yre ceptors.

Reflex, arc, classification, properties.

Muscle: Structural properties of skeletal and smooth muscles,

 $S ar co-tubular system, Mechanism of skeletal and smooth muscle contraction, EC \ coupling, Rigormort is.$ 

Propertiesofskeletalmuscle.

Course 8	Lab work IV
(2 P)	

Courseobjective: Objective of the course is totrain the students the histological and urine analysis techniques.

Learningoutcome: Attheendofthecoursethelearners will be able to; Identify of

different histological slides of the systems in study.

 $Perform staining procedure for staining the skeletal and cardiac muscle. \ Study$ 

different physiological models.

Demonstrateabilitytoperformsuchtechniquesindividually.

Developskillstoexplainthecauses of abnormalities involving these systems of the body.

 $Study and identification of his to logical slides of endocrine glands\ and reproductive system.$ 

 $Study of Models for an atomical position and functions of organs of endocrine glands and reproductive\ system$ 

Stainingofskeletalandcardiacmusclebymethylene blue.

Demonstrationonthenerve-musclepreparationand interpretationofkymographic recording of isotonic muscle twitch, effects of temperature, load and two successive stimuli on muscle twitch.

StudyofCharts on—Spermatogenesisandoogenesis.

StudyofChartsforidentificationof—Primary, secondary and maturegraffian follicles.

Determination of onset of puber ty from the velocity growth curve of stature of school children.

## YEAR 3

### 5<sup>th</sup> semester

Course 9	Molecular Biology and Human Genetics
Course	Willednar Diology and Human Genetics
(4 Th)	
(4 111)	

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#### ular Biology:

Nucleic acid: Chemical composition of DNA, RNA and DNA structure, detailed account of double stranded DNA, B-DNA, Z-DNA.

DNA the genetic material (Experimental proof-Griffith and Harshey and Chase Experiments).

Replication: Semi-conservative model of DNA replication.

Prokaryotic DNA replication, replication origin, DNA polymerases, composition and features, replication factors and the mechanism of replication, leading strand and lagging strand synthesis. DNA polymerases-I, II and III their composition,

Telomere, teleomerase and mode of action.

Trinscription: Coding region and noncoding region of genes, RNA polymerase structure, subunits and their function: mechanism of transcription, initiation, elongation and termination (rho dependent and rho independent mechanism).

Post-transcriptional processing of mRNA.

Translation: Genetic code, Genetic codons, initiating codon, termination codons, degeneracy of genetic code, Wobble hypothesis.

Mechanism of translation.

Translocation of proteins and protein modifications

Epigenetic modifications – DNA and chromosomal proteins.

Regulation genes expression and operon concept, regulation of Lac operon and Tryptophan operon.

#### **Human Genetics**

Chromosomal organization

Concept of gene and genome sizes. Gene structure: structural organization of prokaryotic and eukaryotic genes,

Regulatory elements of genes, (proximal or internal including promoter, operator, activator and enhancers).

DNA binding proteins, concise account of helix turn helix proteins, helix loop helix proteins, helix turn beta, zinc finger proteins, and mode of action in regulation of gene expression.

Mendelian genetics- Mendel's experiments, monohybrid crosses, principles of dominance, dihybrid crosses, incomplete dominance, co-dominance. Gene polymorphism, SNPs, Multiple alleles,

Linkage and Genetic Mapping.

Pedigree analysis,

Karyotyping. Human Genetical Disorders – gene incompatibility (ABO blood group), autosomal (Phenylketonuria, albinism), sex-linked (haemophilia, red green colour blindness), diseases with abnormal chromosome number examples.

Hardy Wein-berg principle and population genetics.

Course 10	Cell Signaling, cell cycle and apoptosis
(2Th)	

Biomembrane, organization and composition of bio membrane, fluidity & asymmetry of lipid bilayer.

Transport across the membrane pump, channels, ion channels, voltage and transmitter gated ion channels, protein sorting within the cells, Transport vesicle and Intra cellular Membrane Traffic, Role of Clathrin Signaling and receptors

Properties of cell signaling.

Signalling through G-Protein Coupled Receptors, cAMP & phospholipid, Calcium Ion Signals, electrical signaling. Different signal pathways viz. tyrosine kinase, Pi3K AKT, Hagde Hog, Wnt, Notch, TGF beta, Jak stat etc.

Nuclear receptors & steroid Hormones.

Mammalian cell cycle, phases, regulation

Apoptosis, autophagy and necrosis

Course 10	Lab work V		
Course 10	Lao work v		
(2 D)			
(21)			

- ➤ Analysis of pedigree chart
- > Gram staining of bacteria
- > Different sterilization methods
- > Single colony isolation
- > Cell singnaling chart study

Course 11	Immunology
(4 Th)	

Immune system, Innate and acquired immunity - their components

Primary and secondary lymphoid organs, T cell, B cell, Macrophage, neutrophil, dendritic cells their functions.

Antigen, Immunogen, Epitope, Hapten, Paratope, Class I & II MHC molecules, CD - 4 and CD - 8 markers - general idea.

Humoral immunity –Structure, Classification of antibodies. General structure of IgG antibody, monoclonal and polyclonal antibody, Primary and secondary immune responses, Clonal selection theory of antibody production, generation of effector and memory T cell, T and B cell cooperation in antibody production.

Cell mediated immunity - role of CTL and T<sub>H</sub> in Cell mediated immunity.

Complement components of classical and alternative pathways, their activation, and physiological function of complement system, complement deficiencies.

Antigen antibody interaction.

Types of HLA, polymorphism of HLA

T cell, B cell ontogeny and activation

Inflammation, mediators and signaling

Hypersensitivity Type-I and Type-II.

Antigen presentation, Clonal selection theory of antibody production.

Role of T-helper cell in activation of T-cytotoxic cell, Role of cytotoxic T cell in cell mediated immunity. Complement components of classical and alternative pathways, their activation, and physiological function of complement system, complement deficiencies.

Vaccination :Passive and active immunization, types and uses of vaccine.

# Course 12 Molecular physiological basis of cancer (2 Th)

Properties of cancer cells, concept of oncogenes and proto-oncogenes, suppressor gene.

Genetic and epigenetic causes of cancer

Classification of cancer on the basis of origin

Altered metabolic and physiological changes in cancer cells.

Molecular and chromosomal changes in cancer: Mutation: Spontaneous and induced mutation, mechanism of transition and transversion, chemical and physical agents inducing mutation, Ame's test, Types- DNA: Structural - Point mutation-deletion, insertion, Frame shift; Functional - Non-sense, mis-sense, silent, null mutation; Chromosomal: i)Structural-Inversion, translocation, deletion, duplication. ii)Number - Euploidy, anauploidy, Polyploidy.

Repair mechanism of Mutation: direct repair, excision repair, transcriptional excision repair, mismatch repair, UVr A, B and C mechanism, and SOS repair system.

Factors inducing cancer,

Concept of cancer metastasis.

Abnormal cell proliferation and cancer specific abnormalities in different cell signaling pathways.

Modern approach of cancer treatment, Nano drugs and immunotherapy

Course 12	Lab Work VI
(2 P)	

Measurement of height Measurement of weight Detaremination of BMI Study of different classifications of BMI (chart based) Anthropometric Nutritional assessment Ouchterlony double diffusion assay

#### 6<sup>th</sup> semester

Course 13	Nervous System
(4 Th)	

#### **Nervous system:**

Structural organization of different parts of brain and spinal cord. Nerve roots.

Brain Ventricle concept, CSF composition, formation, circulation and functions. Blood Brain Barrier, Lumber puncture, Cerebral circulation-course, factors affecting.. cranial nerves-functions

Somato-sensory system: Ascending (sensory) tracts-carrying touch, pain, temperature sensation. Referred pain. Pain inhibiting system, opioids.

Motor system: Descending tracts (pyramidal and extra pyramidal systems), Upper motor and lower motor neurons and their lesions, Babinski sign.

Functions of spinal cord with special reference to functional changes following hemi section and complete section at different levels of spinal cord. Brown sequard syndrome. Tabes Dorsalis.

Cerebellum: Histology, nuclei, connections and functions. Cerebellar diseases.

Basal ganglia: structure connections and functions, Parkinson's Disease.

Components and functions of Pons Medulla Reticular formation.

Stretch reflex: muscle spindle-structure, connections, and function- special reference to muscle tone. Role of different parts of brain in muscle tone maintenance. Spasticity, Rigidity.

Maintenance of posture & equilibrium: vestibular apparatus, different postural reflexes-righting reflex. Romberg's sign.

Cerebral cortex: Histology, different lobes, areas and their functions Method of Localization of the functions of cerebral cortex.

Thalamus: Nuclei, functions. Thalamic animal. Thalamic syndrome.

Hypothalamus: Nuclei, functions: Feeding & satiety, Thermoregulation etc.

Autonomic Nervous system (ANS): Classification, structural and functional organizations. Neurotransmitter in ANS.

Course 14	Spacial sansas
Course 14	Special senses
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(2 111)	

Vision: anatomy and structure of eye ball, Histology of retina, photochemical changes of retina on exposure to light, light and dark adaptation, visual pathway, reflexes of eyes, accommodation, Argyll Robertson pupil, refractive errors and their corrections, visual field-scotopic and photopic vision, visual acuity, perception and depth, positive and negative after image, theories of color vision, color blindness, cataract, glaucoma and retinal detachment.

Audition: Structure and function of auditory apparatus, organ of corti. Auditory pathways & centers. Mechanism of hearing. Perception of sound frequency and loudness. Deafness, audiometry, hearing tests. Olfaction and gustation: Structure and functions of receptor organs, nerve pathways, centers. Taste and smell adaptation, abnormalities of olfactory and taste sensation.

Course 14	Lab work VII
(2P)	

Determination of heart rate and blood pressure at rest and after exercise.

Determination of PFI and graphical representation of recovery heart rate.

Determinations of VO<sub>2</sub> max indirectly by Queens's college step test.

ECG demonstration

Course 15	Exercise & Sports Physiology and Yoga,
(4 Th)	

#### Exercise & Sports Physiology and Yoga:

Introduction to exercise & sports physiology- scope, Importance. Skeletal muscle types and their response to exercise. Types of exercise: isotonic, isometric etc.

Energy for exercise: source of energy in exercise, Nutrients used during exercise, energy stores.

Energy system for exercise and recovery--Aerobic and anaerobic energy system-anaerobic power, OBLA, Lactate threshold. Aerobic energy system-Aerobic power-VO<sub>2</sub> max; measurements, factors controlling. EPOC or O<sub>2</sub>debt -lactacid & alactacid. Fatigue causes.

Physiological responses in exercise: Effects of exercise on cardio-vascular & respiratory system. Physiological responses to exercise in the heat and cold environment. Heat crams, heat stroke, frostbite.

Women in sports: Sex difference in physiological responses in exercise. Pregnancy and menstruation in relation to exercise and Sports.

Exercise Training: Training principles; aerobic & anaerobic training, resistance training; effects of training on respiratory, cardio-vascular and muscular system. Concept of Overtraining, detraining. High altitude training.

Nutrition and ergogenic aids in sports: Role of nutrients in sports, pregame meal; carbohydrate loading, spacing of meals, glycogen loading, fluid replacement. Ergogenic aids- effects of creatine, carnitine, erythropoietin, alkalinizers, anabolic steroids, amphetamines, caffeine etc. Concept of Doping in sports.

Yoga and Human performance: Introduction to Yoga, traditional yogic practices-Asanas, Pranayamas, meditations. Physiological applications.

Course 16	Work Physiology, Ergonomics and Occupational Health.
Course 10	,, or a ray storogy, Ergonomics and Occupational Ireaten
(2 TH)	
(2 111)	

Work Physiology –definition and nature – isotonic, isometric and isokinetic, positive and negative work.

Concept of physiological work, static and dynamic work. Power and work capacity relation.

Classification of Work-load – light, moderate and heavy work-depending on intensity and duration of work.

Different methods of assessment of energy cost for various physical work-- direct and indirect methods with their limitations. Assessment of energy cost by using bicycle ergometer and treadmill.

Ergonomics—definition, basic concept of ergonomics and its application. Work Study, time study and motion study-basic concept and application.

Concept of system design; Effect of Man, Machine and Environment in System Design; Failure of System – accident.

Static and Dynamic Anthropometry—concept and application in design and development.

Application of Ergonomics for the development of safety.

Occupational health—definition and basic concept, contribution of Bernardino Ramazzini.

Occupational hazards – Physical, chemical and biological hazards. Occupational diseases – silicosis, asbestosis and work-related musculoskeletal disorders.

Course 16	Lab work VIII
(2 p)	

Determination of body fat percentage by indirect method- using skinfold caliper

Determination of somatotyping (endomorphy, mesomorphy & ectomorphy) of the body

Determination/demonstration of muscular efficiency and fatigue by Mosso's ergograph

Determination grip strength by Grip dynamometer

Effect of exercise on respiratory pattern. Effect of hyperventilation on breath holding.

Measurement of wet bulb globe temperature (WBGT) indices.

Measurement of environmental temperature – dry bulb and wet bulb, relative humidity, air velocity.

Determination of sound levels by sound level meter and noise index

#### **Suggested Readings:**

- 1. Text book of Medical Physiology, by A.C. Guyton. W.B. Saunders Co.
- 2. Best & Taylor's Physiological Basis of Medical Practice, O.P.Tandon & Y.Tripathi, Lippincott Williams& Wilkins
- 3. Ganong's Review of Medical Physiology. Barrett et.al, McGraw Hill Lange
- 4. Harper's Illustrated Biochemistry, V.W. Rodwell and others, Lange
- 5. Lehninger's Principles of Biochemistry. By D.L. Nelson and M. M. Cox, Worth Publishers Inc.
- 6. Text Book of Biochemistry, by E.S. West. W.R. Todd. H.S. Mason. J.T. Van Bruggen. The Macmillan Company.
- 7. Biophysics and Biophysical Chemistry, D.Das. Academic Publishers.
- 8. Samson Wright's Applied Physiology, C.A. Keele. E Neil & N. Toels. Oxford University Press.
- 9. Physiology, R.M. Berne & M.N. Levy, C.V. Mosby Co.
- 10. Basic Histology, L.C. Junqueira & J Carneiro, McGraw-Hill.
- 11. diFiore's Atlas of Histology, V.P. Eroschenko, Wolters-Kluwer
- 12. The Cell A Molecular Approach, G.M. Cooper & R.E.Hausman, ASM Press SINAUER.
- 13. Cell Biology, G.Karp, John Wiley & Sons, Inc.
- 14. Core Text Book of Neuro-Anatomy, by M.B. Carpenter; the Williams and Wilkins Company.
- 15. The Human Nervous System, by Charles Nobach, Mc Graw Hill Book Co.
- 16. The Human Nervous System. By M.L. Barr & J.A. Kierman, Harper & Row.
- 17. Essential Food and Nutrition, by M. Swaminathan. The Bangalore Printing & Publishing Co.
- 18. Cell & Molecular Biology, EDP De Robertis & EMF De Robertis; Lea & Febiger
- 19. Molecular Biology of the Gene, by J.D. Watson, H.H. Nancy & others; BenjaminCummings.
- 20. Molecular Biology of the Cell, B. Alberts and others, Garland.
- 21. Textbook of Medical Physiology, Indu Khurana, Elsevier
- 22. Biochemistry, J.M.Berg, J.L
- 23. Tymoczko & L. Stryer, W.H. Freeman
- 24. William's Text Book of Endocrinology Larsen et. al An Imprint of Elsevier.
- 25. Endocrinology, Mac E. Hadley, Pearson Education.
- 26. Vander's Human Physiology, E.P. Widmaier et al., McGraw-Hill, Higher Education.
- 27. Endocrinology. Vols.I, II and III by L.O. DeGroot. W.B. Saunders Co.
- 28. Langman's Medical Embryology by J.W. Sadler, Lippincott Williams and Wilkins.\
- 29. Human Embryology by I. Singh & G.P.Pal, McMillan.
- 30. Statistics in Biology and Psychology by D.Das and A.Das Academic Publishers.
- 31. An Introduction to Biostatistics, N. Gurumani, M.J.P. Publishers, Chennai.
- 32. Microbiology, Pelczar Tata McGrawhill.
- 33. General Microbiology By Stanier et.al, Prentice Hall.
- 34. Kuby Immunology by T.J Kindt et.al, W.H Freeman.
- 35. Cellular and Molecular Immunology, A.K. Abbas et.al, Elsevier.
- 36. Ergonomics Man in His working Environment. Murrell K. 3rd Ed. Springer.
- 37. Introduction to Ergonomics, R.S. Bridger, Routledge: Taylor & Francis group.
- 38. Park's Textbook of Preventive and Social Medicine, K.Park, M/s. Banarasidas Bhanot, 2015.
- 39. Communicable Disease Control Handbook, Jeremy Hawker et.al, Blackwell Publishing.
- 40. Physiology of Sport and Exercise. J. H. Wilmore, D. L. Costill, W. Larry Kenney. Human Kinetics
- 41. Textbook of Work Physiology: Physiological Bases of Exercise. Per- Olof Åstrand, Kaare Rodahl, Hans A. Dahl, Sigmund B. Strømme . Human Kinetics
- 42. Fox's Physiological Basis for Exercise and Sport by M. L.Foss. S. J. Keteyian, E. L. Fox, William C Brown Pub
- 43. Essentials of Exercise Physiology, V.L. Katch, W.D. McArdle, F.I. Katch, Wolters Kluwer.
- 44. Chronobiology The Biological Timekeeping, J.C. Dunlap, Sinauer Associati

## MINOR COURSES TO BE OFFERED: Human Physiology

year	semester	Minor/Elective	Subject Name of the Course	<b>Total Score</b>	Total Marks
	I	Course- 1 (3Th+1P)		4	
1	II	Course-2 (4)(3Th+1P)		4	
2	III	Course- 3 (3Th+1P)		4	
	IV	Course- 4 (4)(3Th+1P)		4	
	V	Course- 5 (3Th+1P)		4	
3	VI	Course- 6 (4)(3Th+1P)		4	
	VII	Course- 7 (3Th+1P)		4	
4	VIII	Course- 8 (4)(3Th+1P)		4	

## **DETAIL COURSE CONTENTS:**

## **MINOR COURSES:**

Semester –I: Total credit – 04 (Theory-03, Practical-01) Total marks:

**Course-1: HP Minor Theory (Credit-3)** 

## General Physiology and basic concepts

**Course objective :** Objective of the course is to give learners fundamental knowledge of human body and different principle governing its function.

**Learning outcome:** At the end of the course, learners will be able to:

Describe the structural framework of human body and organ systems.

Analyze the importance of different biophysical and physiochemical principles.

Summarize the chemistry of different biomolecules.

Demonstrate the skill to explain the basis of normal function of human body Interpret the importance of Human physiology as a basic science subject.

#### Structural and Functional basis of Human Body:

General structure and function of Human cell: cell membrane, Nucleus, Endoplasmic reticulum, Golgi body, Mitochondria, Lysosomes, Peroxisomes, Ribosomes, Cytoskeletal system, Inter cellular connections: Cell junction, Idea about different types

of tissues-Functions.

**Musculo-skeletal system:** Types of muscle-classification. Bones: structure and types. Cartilage & ligaments. Joints types-functions.

General idea about functional aspect of human body organ and organ systems.

Homeostasis and its control systems-Negative & positive feedback -examples.

#### **Biophysics and Physicochemical Principles:**

Movement of substances within the body: Diffusion, Osmosis, Osmotic pressure. Tonicity-isotonic, hypertonic, hypotonic. Basic idea about cell membrane transport: Passive transport-ligand and voltage gated ion channel transport, facilitated diffusion. Active transport, secondary active transport.

Gibbs-Donnan membrane equilibrium- its biological application.

Colloids- Classification, Physiological importance of Colloids.

Acids, bases, pH and Buffers: Definition, biological significance. Henderson-Hasselbalch equation. Important Buffers in the Body. Acidosis, alkalosis-origin.

#### **Chemistry of Bio molecules:**

Chemistry, classification and physiological importance of carbohydrates. Reactions of monosaccharide's with acids and alkali. Reducing properties of carbohydrates. Benedict Test. Glycosides.

Chemistry, classification and physiological importance of Proteins, amino acids. Zwitterion, isoelectric pH. Peptides.

Chemistry, classification and physiological importance of Lipids & fatty acids. Mono and poly unsaturated fatty acids. Sterols- physiological importance.

Enzyme: Nature, classification, and properties- Enzyme. Concept of apoenzyme, holoenzyme, coenzyme, cofactors, isoenzyme. Mechanism of enzyme action-models; activation energy; active site, regulatory site-Allosteric enzyme. Factors affecting enzyme activity-effect of substrate concentration, temperature, pH. Michaelis Menten constant-Km.

Course 1: HP Minor Practical (Credit-01):

**Course objective :** Objective of the course is to train learners on skills for performing different anthropometric and biochemical measurements .

**Learning outcome:** At the end of the course, learners will be able to:

Demonstrate the skill to measure different anthropometric parameters.

Become equipped to do different biochemical analysis.

Describe the models and charts on human body and organ systems.

Analyze the importance of different anthropometric and biochemical parameters.

Interpret the results in light of knowledge on normal values in human systems.

Study of Models / Charts of different body organ systems & organs – Anatomical position, Structure & Functions.

Study of Human Skeleton

Study of Body Anthropometry- Stature, weight, sitting height, shoulder height (standing), Elbow height (standing), Hip height (standing), hand length, shoulder elbow length, leg length, shoulder breadth (biacromial), Arm reach from wall (Arm span), Knee to Knee Breadth, Elbow to elbow breadth, Head circumference, Shoulder circumference, Chest circumference, waist circumference, hip circumference. Calculation of BMI, BSA, WHR, Head and Chest circumference ratio.

Semester – II: Total credit – 04 (Theory-03, Practical-01) Total marks:

<u>Course – 2: Theory : HP Minor (Credit-03):</u>

## Physiology of Blood and body fluids

**Course objective :** Objective of the course is to provide knowledge on functions of blood, body fluid and application of the knowledge.

**Learning outcome:** At the end of the course, learners will be able to:

Describe different formed elements of blood, their formation and function.

Demonstrate the skill to explain the causes of hematological abnormalities.

Express opinion on correction of different diseases associated with blood.

Composition and general functions of blood. **Blood volume**. **Plasma** - Plasma proteins-types and functions.

**Haematopoiesis**-General idea. Haemopoetic stem cell. Site of Blood cells Formation. Erythropoiesis –factors effecting.

**RBC**-morphology. Total RBC count. ESR-its importance. Haemoglobin-structure, types, synthesis. Haemoglobinopathies-sickle cell haemoglobin, thallessemia.

Anaemia-types. PCV, Hb indices. Hemolysis-Fragility of RBC. Degradation of Hb-unconjuguted & conjugated bilirubin.

**WBC**-morphology, types. TLC, DLC, variation in WBC count. Functions of different types of WBC:

**Immunity--** Innate and acquired immunity. Macrophage, T cell, B cell. Humoral immunity - classification, functions of antibodies. General structure of IgG antibody. Cell mediated immunity-cytotoxic T cell. Primary and secondary lymphoid organ. Antigen, Immunogen. Primary and secondary immune response and vaccination.

**Haemostasis: Platelets** -morphology, platelets count, critical count. Role in haemostasis. Platelets plugging. Blood coagulation-Mechanism. Anticoagulants and their mode of action. Prevention of intravascular coagulation. Purpura, Hempphilia. BT, CT. PT.

Blood group -ABO, Rh system . Blood transfusion and its hazards. Rh incompatibility-erythroblastosis foetalis.

Body fluid compartments -types, features. Tissue fluid. Lymph -composition and functions.

## **Course – 2: Practical: HP (Credit-0 1):**

**Course objective :** Objective of the course is to train the students the techniques for measurement different hematological parameters.

**Learning outcome:** At the end of the course, learners will be able to:

Analysis of different hematological parameters.

Develop skills to explain the causes of hematological abnormalities.

Introduction to compound microscope.

Preparation and staining of blood film with Leishman's stain. Identification of blood cells. Haematological indecs.

Determination of differential leukocyte count (DLC).

Hemoglobin estimation by Sahli's hemoglobinometer.

Preparation of haemin crystals.

Determination of bleeding time and clotting time., ESR

Determination of Blood group.

Semester –III: Total credit – 04 (Theory-03, Practical-01) Total marks:

Course – 3: Theory: HP (Credit-03):

Cardiovascular System

**Course objective :** Objective of the course is to provide knowledge on functions cardiovascular system, their regulation and application of the knowledge.

**Learning outcome:** At the end of the course, learners will be able to:

Explain the structural framework of human cardiovascular system.

Summarize the mechanism of cardiovascular homeostasis.

Demonstrate the skill to explain the causes of cardiovascular abnormalities.

Express opinion on correction of different diseases associated with the systems.

Anatomy of the heart. Properties of cardiac muscle. Origin and propagation of cardiac impulse-Junctional tissues. Heart Block.

Electrocardiography- Principles of Electrocardiography, Normal electrocardiogram, different waves, intervals and segments; different electrocardiographic lead systems. Electrical axis of heart.

Cardiac cycle -Pressure and volume changes. Heart sounds. Murmurs. Arterial pulse. Arrhythmia.

Cardiac output - factors affecting, Starling's law of heart. Measurement by application of Fick's principle.

Innervations of the heart and blood vessels, cardiac and vasomotor reflexes.

Blood pressure- Normal value, Physiological variation. Regulation with special reference to sino-aortic mechanism. Hypertension-types.

Blood vessels-types, structure. **Hemodynamics**: velocity of blood flow, nature of blood flow, Flow-Pressure-Resistance relationship.

Coronary Circulation-course, peculiarities and control. Coronary artery disease (CAD)- Atherosclerosis.

Effects of exercise on cardiovascular system. PFI-Harvard step test.

Immediate and delayed effects of hemorrhage on cardiovascular system.

## **Course – 3: Practical: HP (Credit-0 1):**

**Course objective :** Objective of the course is to train the students the techniques for measurement of different cardiovascular parameters.

**Learning outcome:** At the end of the course, learners will be able to:

Record the blood pressure and associated cardiovascular parameters.

Demonstrate ability to do such techniques individually.

Develop skills to explain the causes of cardiovascular abnormalities

Identification of different pulse-Radial, brachial, carotid.

Determination of pulse rate in different posture.

Determination of arterial Blood pressure by sphygmomanometer.

Auscultation of the Heart sounds.

Measurement of PFI by Harvard step test (modified) and graphical presentation of the recovery heart rate. Hand grip

Determination of heart rate, PR interval, QT, QRS and ST segment from electrocardiogram.

Determination of electrical axis by standard limb leads electrogram.

Interpretation of Kymographic recording of the movements of perfused heart of toad and the effects of Excess Potassium, calcium, acetylcholine and adrenaline on the contraction of heart.

Semester –IV: Total credit – 04 (Theory-03, Practical-01) Total marks:

Course – 4: Theory: HP (Credit-03):

## **Respiratory System**

**Course objective :** Objective of the course is to provide knowledge on functions of respiratory system, their regulation and application of the knowledge.

**Learning outcome:** At the end of the course, learners will be able to:

Explain the structural framework of respiratory system.

Summarize the mechanism of respiratory homeostasis.

Demonstrate the skill to explain the causes of respiratory abnormalities.

Express opinion on correction of different diseases associated with the systems.

Functional Anatomy and histology of the lung and airways. Pleural fluid.

Pulmonary Circulation-course, peculiarities.

Physical principles of gas exchange, Partial pressure and composition of normal atmospheric gases in inspired, expired, alveolar airs and blood, Respiratory membrane. Ventilation-perfusion ratio.

**Transport of blood gases:** Oxygen transport-mechanism, oxygen-Hb dissociation curve – factors affecting, Bohr effect. Carbon- di-oxide transport, mechanism, Haldane effect.

**Spirometry**: Lung volumes and capacities, VC, Timed vital capacity (FEV1), MVV, PEFR-measurements and importance. Dead space.

**Mechanics of breathing**: Respiratory pressures, elastic recoil of the lung. Respiratory Muscles. Mechanism of respiration. Pressure changes during breathing cycle, pressure-volume relationships, alveolar surface tension and surfactant. Lung compliance. Air way resistance-Factors affecting.

Regulation of respiration: Respiratory centers, Chemoreceptor's. Neural control and chemical control of respiration.

**Respiratory abnormalities: Hypoxia-** Types. High Altitude Sickness-Acclimatization. High altitude pulmonary edema (HAPO). Oxygen therapy.

**Dysbarism** (Decompression sickness, caisson's disease)-cause, effect.

Hypercapnia, Asphyxia, Cyanosis. Apnea, Dyspnoea, Periodic breathing-brief idea.

Obstructive & Restrictive lung disease-Asthma, Emphysema.

Effect of exercise on respiratory system. Maximal aerobic power- VO<sub>2</sub> max: definition, factors controlling & its measurement.

## **Course – 4: Practical: HP (Credit-0 1):**

**Course objective :** Objective of the course is to train the students the techniques for measurement different parameters to assess condition of respiratory system..

**Learning outcome:** At the end of the course, learners will be able to:

Perform lung function tests using spirometer and other related equipments.

Demonstrate ability to do such techniques individually.

Develop skills to explain the causes of respiratory abnormalities.

Pneumographic recording of normal respiratory movement and Effect of talking, drinking, hyperventilation, breathe holding and exercise on respiratory pattern.

Pneumographic recording of the effect of breath-holding before and after hyper ventilation.

Measurement of VC, FEV<sub>1</sub> and FVC/FEV<sub>1</sub>% by digital spirometer and interpretation of result.

Determination of obstructive or restrictive lung diseases from the supplied chart of FVC–FEV<sub>1</sub> measurement.

Determination of Peak Expiratory Flow Rate and interpretation of result.

Determination of VO<sub>2</sub> max by Queens College step test.

Cardio pulmonary resuscitation-Demonstartion (CPR)

### Semester –V: Total credit – 04 (Theory-03, Practical-01

## **Course – 5: Theory: HP (Credit-03):**

## Digestive system and Nutrient metabolism

**Course objective :** Objective of the course is to explain the process of digestion, absorption, metabolism.

**Learning outcome:** At the end of the course, learners will be able to:

Explain the mechanism of digestion, absorption and metabolism in the body.

Demonstrate the skill to explain the causes of digestive, metabolic abnormalities.

Express opinion on correction of different diseases associated with these.

## **Digestive system:**

Anatomy and histology of alimentary tract & digestive glands. Enteric Nervous system (ENS)

Mastication, Deglutition and movements of alimentary canal. Lower esophageal sphincter.

Composition, function and regulation of secretion of salivary, gastric, pancreatic and intestinal juice and bile.

Formation, secretion and regulation of HCL, concept of hyperacidity, achlorhydria.

Gastro-intestinal hormones.

Entero-hepatic circulation of bile salt. Role of bile in digestion.

Digestion and absorption of carbohydrates, proteins and fats.

Defecation-mechanism, constipation

Basic concept of ulcer, gallstone,

Vomiting center and mechanism. Motion and Morning sickness.

Vitamins-water and fat soluble-source, functions, deficiency. Minerals-source, functions of Calcium, Iodine, Iron etc.

#### **Nutrient Metabolism:**

Glycolysis, TCA cycle, Cori cycle, Gluconeogenesis, Glycogenesis, Pentose phosphate pathway and Cori cycle.

Energetic of glycolysis and TCA cycle

Concept of Electron Transport Chain-Oxidative phosphorylation-ATP synthesis.

β-oxidation and Ketone body metabolism.

Amino acid pool, Transamination, Deamination, Disposal of ammonia-concept of ammoniotelic, uricotelic and ureotelic animals, Urea cycle.

## **Course- 5: Practical: HP (Credit-01):**

**Course objective :** Objective of the course is to train learners on skills for performing biochemical measurements .

**Learning outcome:** At the end of the course, learners will be able to:

Become equipped to do different biochemical analysis.

Qualitative identification of physiologically important substances – HCL, Lactic acid, Uric acid, Albumin, Peptone, Starch, Dextrin, Glucose, Fructose, Lactose, Maltose, Sucrose, Bile salt, Acetone, Glycerol, urea.

Estimation of percentage quantity of glucose by Benedict's method.

Estimation of lactose content of milk.

## <u>Semester -VI:</u> <u>Total credit - 04 (Theory-03, Practical-01)</u> Total marks:

## Course – 6: Theory: HP (Credit-03):

## **Excretory physiology and Body temperature regulation.**

**Course objective :** Objective of the course is to explain the process excretion and body temperature regulation.

**Learning outcome:** At the end of the course, learners will be able to:

Describe the structural and functional significance of human excretory system.

Summarize the mechanism of body temperature regulation.

Demonstrate the skill to explain the causes excretory abnormalities.

Express opinion on correction of different diseases associated with the system.

## **Excretory system**

Histology, Structural and Anatomy of kidney and nephron. Renal circulation – peculiarities and auto regulation. Glomerular filtration, GFR, measurements, regulation. Juxta-glumerular apparatus.

Tubular reabsorption and secretion, diuretics-types & mechanism of action.

Formation of hypotonic and hypertonic urine formation Countercurrent mechanism.

Rregulation of osmolarity and blood volume-Role of kidney.

Regulation of acid-base balance of the body- Role of kidney.

Physiology of urinary bladder and micturition. Abnormalities of micturition.

Normal and abnormal constituents of urine, and pathophysiological significance.

Renal function tests. Disorders of renal functions.

## **Body Temperature Regulation:**

Histology and functions of skin.

Skin wounds, classification and phases and mechanisms of wound healing.

Sweat glands –structure and composition of sweat.

Mechanism of sweat formation, secretion and its regulation. Insensible perspiration.

Regulation of body temperature in homeotherms –its physical and physiological processes, roles of neural and hormonal processes.

Heat Stress, Pyrexia, hyperthermia and hypothermia

## **Course-6: Practical: HP (Credit-01):**

**Course objective:** Objective of the course is to train the students about anatomy-physiology of kidney and also urine analysis techniques.

**Learning outcome:** At the end of the course the learners will be able to;

Identify of different histological slides of the systems in study.

Identify different physiological models.

Perform biochemical analysis of urine samples.

Demonstrate ability to perform such techniques individually.

Develop skills to explain the causes of abnormalities involving these systems of the body.

Study of Models for anatomical position and functions of organs of digestive system and excretory system and skin.

Study and identification of histological slides of digestive system and excretory system.

Urine analysis: Identification of abnormal constituents of urine (albumin, ketone, glucose, bile salt).

Preparation of buffer solution and determination of pH.



(A Central University)
Suryamaninagar
West Tripura, Tripura – 799022

Syllabus for

Four Year Under Graduate Programme

**Subject: Zoology** 

(Major)

(NEP - 2020)

**Year - 2023** 



## **Tripura University**

(A Central University)

# Course Structure of Zoology (UG Programme) As per NEP-2020 under Tripura University

## **ZOOLOGY MAJOR**

Year	Semester	Paper Code	Paper No.	Credits	Marks	Paper Name
	I	ZL101C	Paper 1 Theory	4	100 IA=40 + ESE= 60	Non-Chordates
		ZL102C	Paper 2A Theory	2	50 IA=20 + ESE=30	Economic Zoology
1 <sup>st</sup> Year			Paper 2B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 1 & 2A
1 Tear	II	ZL103C	Paper 3 Theory	4	100 IA=40 + ESE= 60	Chordates
		ZL104C	Paper 4A Theory	2	50 IA=20 + ESE=30	Cell Biology
			Paper 4B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 3 & 4A
	III	ZL201C	Paper 5 Theory	4	100 IA=40 + ESE= 60	Genetics
		ZL202C	Paper 6A Theory	2	50 IA=20 + ESE=30	Developmental Biology
2 <sup>nd</sup>			Paper 6B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 5 & 6A
Year	IV	ZL203C	Paper 7 Theory	4	100 IA=40 + ESE= 60	Animal Physiology
		ZL204C	Paper 8A Theory	2	50 IA=20 + ESE=30	Endocrinology and Reproductive Biology
			Paper 8B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 7 & 8A
3 <sup>rd</sup> Year	V	ZL301C	Paper 9 Theory	4	100 IA=40 + ESE= 60	Evolutionary Biology and Chronobiology
		ZL302C	Paper 10A Theory	2	50 IA=20 + ESE=30	Adaptation and Zoogeography

			Paper 10B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 9 & 10A
		ZL303C	Paper 11 Theory	4	100 IA=40 + ESE= 60	Ecology
		ZL304C	Paper 12A Theory	2	50 IA=20 + ESE=30	Parasitology and Basic Microbiology
			Paper 12B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 11 & 12A
		ZL305C	Paper 13 Theory	4	100 IA=40 + ESE= 60	Basics of Systematic and Biostatistics
	VI	ZL306C	Paper 14A Theory	2	50 IA=20 + ESE=30	Biochemistry
			Paper 14B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 13 & 14A
		ZL307C	Paper 15 Theory	4	100 IA=40 + ESE= 60	Molecular Biology
		ZL308C	Paper 16A Theory	2	50 IA=20 + ESE=30	Applied Entomology and Pest Management
			Paper 16B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 15 & 16A
	VII	ZL401C	Paper 17 Theory	4	100 IA=40 + ESE= 60	Tools and Methods in Biology
		ZL402C	Paper 18A Theory	2	50 IA=20 + ESE=30	Biophysics
			Paper 18B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 17 & 18A
4 <sup>th</sup> Year		ZL403C	Paper 19 Theory	4	100 IA=40 + ESE= 60	Computational Biology and Biotechnology
		ZL404C	Paper 20A Theory	2	50 IA=20 + ESE=30	Aquaculture
			Paper 20B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 19 & 20A
	VIII	ZL405C	Paper 21 Theory	4	100 IA=40 + ESE= 60	Microbiology and Immunology
		ZL406C	Paper 22A Theory	2	50 IA=20 + ESE=30	Medical Zoology

		Paper 22B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 21 & 22A
	ZL407C	Paper 23 Theory	4	100 IA=40 + ESE= 60	Global Environmental Issues and Biodiversity and Conservation
	ZL408C	Paper 24A Theory	2	50 IA=20 + ESE=30	Research Methodology and Animal Ethics and Intellectual property right (IPR)
		Paper 24B Practical	2	50 IA=20 + ESE=30	Based on Theory Paper 23 & 24A

# DETAILED COURSE CONTENT OF ZOOLOGY (MAJOR)

## 1stYear

#### **Semester-I**

## **Paper 1: NON-CHORDATES**

Paper Code: ZL101C

Total Marks: 100(IA = 40 + ESE = 60) Credit = 04

(Credits – 04)\*\* Contribution of National

## **Scientists in Zoology**

Salim Ali, Vishwa Gopal Jhingran, Hiralal Chaudhuri, Gopal Ch Bhattacharya, Ramdeo Mishra, Hargobind Khorana, Lalji Singh, Radha D Kale, M K Chandra Sekheran, C. R. Narayan Rao, M. C. Dash, Valmik Thapar.

### **NON-CHORDATES**

- (i) Protozoa
- General Characteristics and classification of sub-kingdom Protozoa upto Phylum.
- •Locomotion in Amoeba
- Reproduction in *Paramecium*

#### (ii) Parazoa

- General characteristics and classification of Porifera upto classes
- Histology & body wall of *Sycon*
- Canal system of Sycon

### (iii) Metazoa

- General characteristics and classification of Cnidaria upto classes
- Trimorphism& metagenesis of Obelia

### (iv) Platyhelminthes

- •General characteristics and classification upto classes
- •Life cycle of Fasciola hepatica

## (v) Nemathelminthes

- General characteristics and classification upto classes
- Life cycle of *Ascaris*

## (vi) Annelida

- General characteristics and classification upto classes
- Digestive & excretory system of Earthworm

## (vii) Arthropoda

- General characteristics and classification upto classes
- Digestive system of *Periplaneta*
- Circulation in Periplaneta

### (viii) Mollusca

- General characteristics and classification upto classes
- Respiratory system in *Pila*
- •Nervous system in *Pila*
- (ix) Echinodermata
- General characteristics and classification upto classes
- •Water vascular system in Asterias
- Basic larval form and evolutionary significance
  - (x) Hemichordata
- General characteristics of Hemichordata

## Paper 2A: Economic Zoology

Paper Code: ZL102C

**Total Marks:** 50(IA = 20 + ESE = 30) **Credit** = 02

- (i) Vermiculture & Vermicomposting
- Principle of vermicomposting, different ecological categories of earthworm (Epigeic, Endogeic, Anesic), importance of vermicomposting, vermitechnology & management.
- (ii) Sericulture
- Principle, different types of silk moth and their host plants, rearing methods, diseases of silk moth. Management with special reference to local varieties
- (iii) Apiculture
- Principle, different types of honey bees, rearing methods, diseases of honey bees. Management with special reference to local varieties
- (iv) Fresh water pisciculture
- Polyculture
- Induced breeding technology
- Fish seed transportation, fish diseases,
- Management
- (v) Poultry
- Types of breeds
- Methods of rearing
- Diseases and their management
- (vi) Basics of Dairy farming and management.

Paper 2B: Practical(I)
Paper Code: ZL102C

- 1. Identification with reasons
  - Paramoecium, Scypha, Obelia, Physalia, Fasciola, Taenia, Ascaris, Metaphire, Hirudinaria, Periplaneta, Limulus, Mite, Pila, Lamellidens, Octopus, Asterias, Balanoglossus.
- 2. Dissection and display of digestive, reproductive and nervous systems of *Periplaneta*.
- 3. Mouth parts of *Periplaneta*.
- 4. Spot identification and economic importance of—— *Perionyx*, *Apissp*, *Bombyx* and Carps.
- 5. Identification of diseases with reasons from the photographs provided of the faunal group.
  - silk moth, fish, poultry.

## **Semester-II**

## Paper 3: CHORDATES Paper Code: ZL103C

Total Marks: 100(IA = 40 + ESE = 60) Credit = 04

### (i) Protochordata

- General characteristics of Cephalochordata with special reference to the ciliary mode of feeding in *Branchiostoma/Amphioxus*.
- General characteristics of Urochordata with special reference to retrogressive metamorphosis in *Ascidia*

## (ii)Cyclostomata

- General characteristics of Cyclostomata
- Differences between Petromyzon and Myxine

### (iii) Pisces

- General Characteristics of Chondrichthyes & Osteichthyes
- Accessory respiratory organs in fishes

### (iv) Amphibia

- · General characteristics and classification upto order
- Parental care in Amphibia
- Neoteny & Paedogenesis in Amphibia

### (v) Reptilia

- · General characteristics and classification upto order
- Heart of Crocodile
- Differences between venomous and non-venomous snakes
- · Biting mechanism of snake

#### (vi) Aves

- · General characteristics and classification upto order
- Double mode of respiration

## (vii) Mammals

- General characteristics and classification upto order
- Comparative account of heart and aortic arch of mammal with those of bird, reptile, amphibian and fish
- Digestive system of ruminant and non-ruminant

## **Paper 4A: CELL BIOLOGY**

Paper Code: ZL104C

Total Marks: 50(IA = 20 + ESE = 30) Credit = 02

- 1. Basic concept of Prokaryotic and Eukaryotic cells
- 2. Structure and function of-
  - Plasma membrane
  - Nucleus
  - Mitochondria
  - Golgi bodies
  - Ribosomes
  - Endoplasmic reticulum
  - Lysosomes
  - Chromosome
  - Nucleic acid
- 3. Cell cycle and regulations
- 4. Cell divisions Mitosis and Meiosis
- 5. Cancer biology Characteristics of cancer cells, development of cancer, types of carcinogens.

Paper 4B: Practical (II)
Paper Code: ZL104C

- 1. Identification with reasons —Branchiostoma, Ascidia, Petromyzon, Myxine, Scoliodon, Hippocampus, Channa, Rohu, Dipnoi, Hyla, Calotes, Naja, Columba, Chiroptera, Bandicota/Rattus.
- 2. Dissection and display of digestive system, IXth&Xth cranial nerves of Cirrhinusmrigala/Channa
- 3. Study of gill arch, cycloid & ctenoid scales, hyoid & pectin of fowl.
- 4. Study of Mitotic cell division stages
- 5. Study of meiotic cell division stages (permanent slide).
- 6. Study of salivary gland chromosome from larva of *Drosophila*

## 2nd Year

## Semester-III

**Paper 5: GENETICS** 

Paper Code: ZL201

Total Marks: 100(IA = 40 + ESE = 60) Credit = 04

- DNA as a genetic material
- Concept of alleles and multiple alleles (ABO Blood grouping)
- Crossing over and recombination, gene mapping (three-point test cross)
- Gene interaction
- Sex determination in *Drosophila* (Geneic balance theory) and human; Barr body.
- Chromosomal abnormalities and different syndromes in human—: Turner's syndrome, Klinefelter's syndrome, Down syndrome, Cri-du-Chat syndrome
- Autosomal and Sex-linked inheritance: Autosomal- Albinism and Thalasemia.
- Sex linked inheritance—- Colour blindness and Haemophilia
- Mutation: Types of mutation, mutagens, induction and detection of sex chromosomal lethal mutation by ClB method
- Human genetic disorders: Phenylketonuria and Alkaptonuria (Phenylalanine pathway), Albinism (Tyrosine pathway), Sickle cell anaemia.
- Cytoplasmic inheritance

Paper 6A: DEVELOPMENTAL BIOLOGY

Paper Code: ZL202C

Total Marks: 50(IA = 20 + ESE = 30) Credit = 02

- Gametogenesis and ultrastructure of spermatozoa and ova
- Cleavage, Blastulation, and Gastrulation in chick embryo, fate map
- Extra-embryonic membrane formation and function in chick embryo
- Embryonic induction, Organizer concept and Formation of eye in chick embryo
- Placenta: types and function.
- Formation of the placenta in rabbit

Paper 6B: PRACTICAL(III)
Paper Code: ZL202C

- Pedigree analysis in human (charts)
- Karyotyping in human (charts)
- Identification (with reasons) of male and female Drosophila and their mutants (microphotographs)
- Identification of chick embryowith reason (during different incubation period): 16-18 hours, 21-24 hours, 48hours, 72 hours.

## 2nd Year

## **Semester-IV**

## **Paper 7: ANIMAL PHYSIOLOGY**

Paper Code: ZL203C

Total Marks: 100(IA = 40 + ESE = 60) Credit = 04

- Extracellular and intracellular digestions
- Transport of oxygen and carbon dioxide in mammals (Bohr effect and Chloride shift)
- Thermoregulation in Ectotherms and Endotherms, role of hypothalamus in temperature regulation with regard to Endotherms
- Concept of Isotonic, Hypotonic and Hypertonic solution, Osmoregulation in fresh and marine water fishes
- Mechanism of nitrogen excretion in vertebrates
- Mechanism of Urine formation in mammals
- Generation of action potential in neurone, Synapse and synaptic transmission
- Ketogenesis and its regulation
- Catabolism of amino acids: Transamination and Deamination
- Urea-Ornithine cycle and its significance

## Paper 8A: ENDOCRINOLOGY AND REPRODUCTIVEBIOLOGY

Paper Code: ZL204C

Total Marks: 50(IA = 20 + ESE = 30) Credit = 02

- Histological structure and functions of: Pituitary gland, Thyroid gland, Pancreas, Adrenal gland, Testis and ovary
- Types of hormones and their functions in vertebrates and invertebrates (in insects)
- Endocrine disorder in human with special reference to Pituitary and Thyroid glands
- Role of hormones in regulation of spermatogenesis, oogenesis and menstrual cycle
- Oestrus cycle in rat

Paper 8B: PRACTICAL (IV)

Paper Code: ZL204C

- Study of osmosis(using human blood /RBC).
- Study of Haemin crystal formation from human blood
- Study of salivary amylase activity using starch solution
- Identification of permanent slides with reasons of transverse section of mammalian Thyroid gland, Pancreas, Ovary and Testis.
- Identification of leukocyte and ABO blood grouping

## 3<sup>rd</sup>Year

### **Semester-V**

## Paper 9: EVOLUTIONARY BIOLOGY ANDCHRONOBIOLOGY

Paper Code: ZL301C

**Total Marks:** 100(IA = 40 + ESE = 60) Credit = 04

- Origin of Life (Chemical basis): Experimental evidence in favour of abiotic synthesis of basic biomolecules (Miller & Urey Experiment), Protocell or Coacervates.
- Basic idea of Geological Time Scale with major examples of Fauna,
- Fossil—types and age determination by Carbon dating,
- Evolution of horse,
- Neo-Darwinism (Synthetic Theory), Genetic variation and sources of variation in natural populations
- Types of natural Selection: Stabilising, Directional and Disruptive
- Hardy Weinberg Principle and Factors influencing the changes in the gene frequency and genotype frequency
- Isolating mechanisms and importance of Reproductive Isolation
- Mode of Speciation: Sympatric, Allopatric and Parapatric
- Origin and History of Ethology: Brief profile of Karl Von Frisch, Ivan Pavlov, Konrad Lorenz, Niko Tinbergen.
- Proximate and ultimate behavior
- Basics of animal behaviours Innate and Learning behavior, (Characteristics, differences, classifications and examples)
- Communication in animals with reference to pheromones and its role in territory marking, courtship and mating behavior
- Circadian rhythm, Tidal rhythm, Lunar rhythm, Biological clock

Paper 10A: Adaptation and Zoogeography

Paper Code: ZL302C

Total Marks: 50(IA = 20 + ESE = 30) Credit = 02

- Convergent and divergent adaptation and adaptive radiation in Placental mammals with reference to teeth and limbs
- Adaptive features of Camel, Whale and Pigeon (Morphological, anatomical and Physiological)
- Colouration: Cryptic and Warning
- Mimicry: Protective, Aggressive and Warning (Batesian and Mullerian)
- Discontinuous distribution of Animals, Wallace line, Weber's line.
- Zoogeographical realms of the world— Geographical boundary, Climate and Faunal composition

Paper 10B: PRACTICAL (V)
Paper Code: ZL302C

- Problems from Hardy-Weinberg equilibrium (gene and Genotype frequency)
- Adaptive features: Fasciola, Physalia, Hemidactylus, Exocoetus, tree frog, Chameleon, Columba, Chiroptera.
- Placement of faunal groups in respective Zoogeographical realms (map pointing)
- Study of Skull and limb bone of Class Amphibia, Reptiles, Aves and Mammals.

Paper 11: ECOLOGY

Paper Code: ZL-303C

**Total Marks:** 100(IA = 40 + ESE = 60) **Credit** = 04

- Autecology and synecology, Levels of organization, Laws of limiting factors.
- Ecosystem: Definition, food chain, food web, ecological pyramids, energy flow in ecosystems
- Basic concepts of habitat, niche, and types of niches
- Population ecology— Natality, Mortality, Survivorship curves, Population growth curves, r and K strategies.
- Community Ecology species diversity, abundance, dominance, richness, stratification (Forest/lake), Ecotone and edge effect; Ecological succession types and example.
- Applied ecology: Types & level of biodiversity, Definition with example of ——: Biodiversity
  Hot spots, Keystone species, Wildlife Conservation (in situ and ex situ conservation), concept of
  protected areas with special reference to Tripura,
- Red data book, Indian wild life act & Schedule.
- Common threats and conservation strategies for Indian Tiger, Phayre's leaf monkey, Indian Bison, Green Imperial Pigeon.

## Paper 12A: PARASITOLOGY AND BASIC MICROBIOLOGY

Paper Code: ZL-304C

**Total Marks:** 50(IA = 20 + ESE = 30) **Credit** = 02

- Host Parasite interactions with reference to helminthic parasites (*Taenia*, *Ascaris*)
- Lifecycle, Pathogenicity and Prophylaxis of- *Plasmodium*, *Entamoeba*, *Giardia*.
- Classification of microbes with reference to the requirement of oxygen, pH and staining.
- Microbes in animal gut of Collembola, Earthworm, Ruminants and their biological significance,
- Concept of Prebiotic, Probiotic and Symbiotic.
- Microbes in human and animal welfare.

Paper 12B: PRACTICAL (VI)
Paper Code: ZL304C

- Estimation of population density (i) Quadrate method (ii) Capture recapture method
- Identification and ecological role of the following: *Collembola*, Mite, *Daphnia*, *Cyclops*, *Cypris* (Slides)
- Isolation of bacteria by serial dilution method and Gram staining.
- Identification and observation of gut parasite of cockroach / fish/ fowl.

#### 3rd Year

#### Semester - VI

## Paper 13: BASICS OF SYSTEMATICS ANDBIOSTATISTICS

Paper Code: ZL305C

Total Marks: 100(IA = 40 + ESE = 60) Credit = 04

- Preliminary knowledge of Systematics and Taxonomy: definition, Classification, Phenon, Taxon, Category, Sibling species, polytypic species, cline, super species, sub species, Binomial and Trinomial nomenclature.
- ICZN: rules of zoological nomenclature, Principle of priority; Synonymy and Homonymy
- Concept of classification three kingdom concept of Carl Woese, 1977 and five kingdom concept of Whittaker, 1969
- Species Concept: Typological, Nominalistic, Biological and Evolutionary
- Population and sampling: Method of collection of data, Frequency distribution and graphical presentation of data.
- Data tabulation and classification:(i) Bar diagram (ii) histogram (iii) Frequency Polygon (iv) Line Graph (v) Pie Chart
- Measures of central Tendency: Mean, median, mode and related numerical
- Measures of dispersion :— (i) Range (ii) quartile deviation(iii) Mean Deviation(iv) Standard deviation (v) Coefficient of Variation
- Probability and distribution: —- Elementary concepts of probability: addition and multiplication law and related numerical.
- Concept of sampling distribution and Standard error, Chi-square (both Mendelian & Non-Mendelian tests),
- t-test (Definition, Properties and numerical)

## **Paper 14A: BIOCHEMISTRY**

Paper Code: ZL-306C

**Total Marks:** 50(IA = 20 + ESE = 30) Credit = 02

- Concept of pH, buffers and their biological applications
- Biomolecules: Carbohydrates, proteins, lipids and nucleic acids
- Enzymes: General properties, Coenzymes, isoenzymes, ribozymes.
- Mechanisms of enzyme action(Lock and Key and induced feet Theory),
- Enzyme kinetics—- relationship between Km and Vmax
- Factors effecting rate of enzyme catalysed reaction.
- Allosteric enzymes and feedback inhibition
- Glycolysis, Krebs cycle and ETC (including ATP generation)
- Glycogenesis
- Gluconeogenesis
- Citric acid cycle
- Pentose Phosphate Pathway
- $\beta$  Oxidation of saturated fatty acids

Paper 14B: PRACTICAL (VII)
Paper Code: ZL306C

- Problems on chi-square and t-test
- Graphical representation of data on Bar diagram, Histogram and Pie chart
- Qualitative identification of Carbohydrate (mono, di and polysaccharides), protein and lipid
- Quantitative estimation of glucose (titrimetric)
- Preparation of buffers and Estimation of pH (pH meter) of biological samples
- Effects of temperature and pH on salivary amylase activity.

## Paper 15: MOLECULAR BIOLOGY

Paper Code: ZL307C

**Total Marks:** 100(IA = 40 + ESE = 60) Credit = 04

- Replication, Transcription and translation in prokaryotes
- Concept of Cistron, Recon and Muton.
- Gene regulation of prokaryotes (Lac and tryptophan operon)
- Recombinant DNA technology(RDT)
- Basic principles: (i)identification of desired DNA (ii) Restriction endonuclease (iii) Cloning vectors (iv)Host cell and transformation (v) Construction of chimeric DNA (vi) mRNA to cDNA Clones with desired DNA
- Genetic basis of Cancer- Definition of Proto-oncogene and viral oncogenes. Transformation of Proto oncogene to oncogene.
- Functional importance of P53 tumour suppressor gene.
- Potential benefits and hazards of RDT

## Paper 16A: APPLIED ENTOMOLOGY AND PESTMANAGEMENT

Paper Code: ZL308C

**Total Marks:** 50(IA = 20 + ESE = 30) **Credit** = 02

- Insect morphology and anatomy with special reference to mouth parts, digestive and respiratory system.
- Salient features of insect Orders- Lepidoptera, Diptera, Hymenoptera, Coleoptera and Hemiptera.
- Nature of damage, biology and control of *Scirpophagaincertulus* (Paddy pest), *Heliothisarmigera*(Sugarcane pest), *Callosobruchus*sp (Pulses pest), *Aulacophora* sp. (Pumpkin pest), *Leucinodesarbonalis*(Brinjal pest), *Sternochetusmangiferae* (Mango store weevil).
- Nature of damage, biology and control of store grain pests- *Sitophilus*sp, *Tribolium*sp, *Rhyzopertha*sp and *Trogodermagranarium*
- Pollinators- Definition, insect pollinating agents and their mode of pollination, importance of pollinators.
- Lac Culture: Systematic position, Life Cycle, Economic importance, pest and enemies of lac insects and their control.
- Definition of pest, Types of pests
- Methods of pest control- Chemical control, Biological Control and Integrated Pest Management (IPM)
- Studies of different types of insecticides with references to mode of action and examples of the following- Organophosphates, Carbamates and herbal pesticides
- Contact & systemic pesticides: application and their hazards

## Paper 16B: PRACTICAL (VIII) Paper Code: ZL308C

- Identification and economic importance of *Scirpophagaincertulus* (Paddy pest), *Sitophilus*sp, *Tribolium*sp, *Callosobruchus*sp (Pulses pest), Prawns, *Rotifer*, *Cyclops,Daphnia*(Specimens/Slides/Microphotographs)
- Submission of insect pests (at least five number) with their Scientific name, Order, Place of collection, name of host plant, date of collection
- Isolation and quantification of genomic DNA/ Blue and white colony selection method (photographs)
- Identification of cancer cell.

## 4<sup>th</sup> Year

## Semester - VII

## Paper 17: TOOLS AND METHODS IN BIOLOGY

Paper Code: ZL401C

Total Marks: 100(IA = 40 + ESE = 60) Credit = 04

- Microscopy: Basics of Bright field, Dark field, Phase Contrast, Fluorescence microscopy, Transmission and Scanning Electron microscopy
- Centrifugation: Principle, types and uses
- Spectrophotometry: Principle, types and uses
- Principle of pH meter
- Chromatography: Principle, types- Paper Chromatography, Gel filtration, Ion exchange and Affinity chromatography and their uses
- Electrophoresis: Principle, Agarose and polyacrylamide gel electrophoresis
- Principle of X ray diffraction and its uses in biology
- Microtechniques:
  - a) Principle of Microtomy
  - b) Fixatives, types and principle of fixation
  - c) Principle of Dehydration and procedure
  - d) Embedding of tissue- procedure
  - e) Block making-procedure
  - f) Stains, different types principle of staining
  - g) Method of double staining

Paper 18A: BIOPHYSICS Paper Code: ZL402C

**Total Marks:** 50(IA = 20 + ESE = 30) **Credit** = 02

- Concept of Free energy, Enthalpy and Entropy.
- Laws of Thermodynamics and its significance in biology
- Colloids and crystalloids- Properties and their biological importance
- Membrane Biophysics- biophysical nature of cell membrane, ion channels, active and passive transports.
- Proton motive force and transport of ATP
- Couplers and un couplers of ATP synthesis

Paper 18B: PRACTICAL (IX)

Paper Code: ZL402C

- Double staining and identification of histological slides- Mammalian Liver, Testis, Kidney
- Paper chromatography (from leaf extract / amino acid)
- Analysis of genome DNA of various animals (cattle, fish) using BLAST
- Studies of simple and compound microscope
- Studies of stereomicroscope
- Studies of microtome

## Paper 19: COMPUTATIONAL BIOLOGY AND BIOTECHNOLOGY

Paper Code: ZL403C

Total Marks: 100(IA = 40 + ESE = 60) Credit = 04

- Computational Biology: Definition, application in the field of Genomics, proteomics, bio modelling/ bimolecular designing and evolutionary biology.
- Data base management & Bioinformatics: Use of software, packages and tools: Basic features and management systems of following databases: Nucleic acid sequences databases, Genome databases, Protein sequence, structures and interacting proteins databases, Biodiversity and ecosystem-based databases.
- Introduction to data retrieval systems: Search engines, sequence retrieval system (SRS) and protein identification resource (PIR). Introduction to molecular sequence analysis software packages and tools: Prediction of motifs, folds and domains, Sequence alignments (BLAST and Clustal W) and phylogenetic trees, NCBI.
- Biotechnology: Concept and scopes
- Cloning of- Vectors, Phasmids, Cosmids, Lambda phage, BAC, YAC
- Restriction enzymes: Nomenclature and functions
- Construction of Genomic and C-DNA Library
- Southern, Northern and Western blotting techniques- Principles, technique and importance
- DNA Sequencing (Sanger Method)
- PCR and DNA Fingerprinting Principle, technique and importance
- Production of cloned and Transgenic animals
- Use of Recombinant DNA Technology in medicine- Insulin and Growth Hormone production

Paper 20A: AQUACULTURE
Paper Code: ZL404C
Total Marks: 50(IA = 20 + ESE = 30) Credit = 02

- Aquaculture: Principles and Practices
- Kinds of aquatic ecosystem- wetland, pond, lake, river.
- Types of aquaculture: Carp culture, Air breeding fish culture, Prawn culture, Pearl oyster culture
- Selection of species for aquaculture
- Captive breeding technology,
- Supplementary diets and its composition
- Water quality monitoring in captive breeding farm etc.

Paper 20B: PRACTICAL (X)
Paper Code: ZL404C
Total Marks: 50(IA = 20 + ESE = 30) Credit = 02

- Analysis of genome DNA of various animals (cattle, fish) using BLAST
- Identification and causes of various inborn errors of metabolism (PKU, G6PD deficiency etc) using CLUSTALW and allied tools.
- Estimation of dissolved oxygen from water by Winkler's Method
- Estimation of CO2 of pond water ecosystem
- Identification of indigenous minor and major carps with reasons
- Identification of exotic carps with reasons

## 4th Year

## **Semester - VIII**

## Paper 21: MICROBIOLOGY AND IMMUNOLOGY

Paper Code: ZL405C

Total Marks: 100(IA = 40 + ESE = 60) Credit = 04

- Brief history of microbiology- germ theory of disease, Antoine van Leeuwenhoek, Louis Pasteur, Robert Koch, Alexander Fleming, Anandamohan Chakraborty (Superbug)
- Nutrition and Bacterial growth: Autotroph and Heterotrophs, Microbial growth (Requirement of pH, Oxygen and Temperature) Growth curve and different phases.
- Cultivation of Microorganisms: Serial dilution method, Forms of Media, pour plate, streak plate and spread plate technique
- Sterilisation—: Physical, Chemical methods (With special reference to Hot air oven, Autoclave, Laminar flow etc. Organic Chemicals and Phenols etc.)
- Role of Microbes In human and animal health: Bacterial (Shegellosis and salmonellosis) rickettsial (Spotted & Typhus fever), viral diseases (SARS), Fungal Disease: Ringworm Infection and Candidoisis (With reference to causative agents in human beings and prophylaxis), role of normal microbial flora of human body, antibiotics, concepts of Vaccine and antisera.
- Introduction to Immunology
- Cells and organs of immune system
- Cell mediated and humoral immunity
- Antigenicity and immunogenicity
- Immunogens, Adjuvants and Haptens
- Factors influencing immunogenicity
- B and T Cell epitopes
- Immunoglobulins: Structure and functions of different classes of immunoglobulins
- Antigen –Antibody interactions
- Immunoassays, Monoclonal antibodies, Hybridoma
- Structure and functions of MHC molecules
- Complement pathways and its activation, types of Hypersensitivities
- Vaccination: Types of vaccines, Recombinant Vaccines and DNA Vaccines

## Paper 22A: MEDICAL ZOOLOGY

Paper Code: ZL406C

- Systematic position, Geographical distribution, Life cycle, Mode of Transmission, Pathogenicity, Clinical features and Treatment of-
  - A. <u>Protozoa</u>: Plasmodium vivax, Plasmodium falciparum, Entamoeba histolytica, Leishmania donovani.
  - B. Cestoda: Taenia soliumand Echinococcus granulosus.
  - C. C.Nematoda: Wuchereriabancrofti and Ancylostomaduodenalies
- Arthropods of Medico-veterinary importance: General features, Life cycle, Damage and Control measures of
  - a) Mosquitoes: Anopheles sp., Culex sp. and Aedes sp., Tsetse flies.
  - b) House fly (Musca domestica).
  - c) Lice (*Pediculus* sp.)
  - d) Bedbug (Cimex sp.).
  - e) Fleas (Xenopsylla sp.).
  - f) Mites: Sarcoptessp.(Itch mite) and Eutrombicula sp.(Chiggers).
  - g) Ticks: Dermacentorsp.(Hard tick)
  - h) Argas sp. (Soft tick).

## Paper 22B: PRACTICAL (XI)

Paper Code: ZL406C

Total Marks: 50(IA = 20 + ESE = 30) Credit = 02

- Calculation of CFU (Colony Forming Unit) using plate count method
- Direct, indirect Sandwich ELISA through photographs- identification, Principle, Comment
- Identification of medically important fauna (Permanent slides/ Photographs) and comments: Leishmania, Giardia, Signet ring of Plasmodium vivax, Schistoma, Wuchereriabancrofti, Anopheles, Culex, Ades, Musca, Cimex, Pediculus, Xenopsylla (ratflea) Sarcoptessarcoptes (Itch mite)
- Gram's Staining of Bacteria
- Biochemical tests for Identification of bacteria

## Paper 23: GLOBAL ENVIRONMENTAL ISSUES AND BIODIVERSITY AND CONSERVATION

Paper Code: ZL407C

- Environmental pollution of: Air, Water, Sound (Sources, Kind and effect)
- Acid rain: Its causes and effects on human and ecosystem
- Ozone depletion: Importance of Ozone layer, cause of depletion, Ozone depleting substances (ODS), effects of Ozone depletion, mitigation measures and international protocols
- Global Warming: Green house effect, potential Green house gases causing global warming, impact of global warming on agriculture, economy and human diseases
- Climate change: Earth's Climate through ages, Trends of Climate change, Environmental policy and International agreements- Montreal Protocol 1987, Kyoto Protocol 1997, Convention of climate change
- Biodiversity patterns: Spatial patterns- Latitudinal and elevational trends in biodiversity
- Biodiversity estimation: Qualitative and quantitative methods- scoring, habitat assessment, richness density, abundance, diversity. Community diversity estimation- alpha, beta and gamma diversity, molecular techniques- RAPD, RFLP
- Importance of biodiversity
- Threats to Biodiversity: Natural and anthropogenic disturbances, habitat loss, hunting, deforestation, hydropower development, over exploitation, man wildlife conflict
- Biodiversity in India: different Hot spots, National Biodiversity Action Plan
- Conservation of biodiversity: In-situ conservation (Biosphere Reserves, National Parks, Wildlife Sancturies), Ex-situ Conservation (Zoological gardens, gene banks, seedling banks, DNA banks), IUCN Red list categorization, Red Data book, ecological restoration, afforestation, Joint Forest Management

## Paper 24A: RESEARCH METHODOLOGY AND ANIMAL ETHICS AND IPR Paper Code: ZL408C

Total Marks: 50(IA = 20 + ESE = 30) Credit = 02

- Basic concepts of research: Definition and types of research, Research methods vs methodology, Literature review and its consolidation, Library, Field and Laboratory research
- Data collection and documentation: maintaining a laboratory record, tabulation and generation of graphs
- Overview of biological problems: history, Key biology research Model organisms in biology-Genetics, Physiology, Biochemistry, Molecular biology
- The art of scientific writing and presentation: numbers, units, abbreviations and nomenclature used in scientific writing. Writing References, Scientific writing and ethics, Introduction to copy right-plagiarism.
- Respect to animals' dignity
- •The principle of proportionality: responsibility for considering and balancing suffering and benefit
- •Responsibility for:
  - a) considering reducing the number of animals (Reduce)
  - b) minimising the risk of suffering and improving animal welfare (Refine)
  - c) openness and sharing of data and material
  - d) maintaining biological diversity and requirement of due care
- •Basic knowledge about the four types of intellectual property right (IPR)
  - a) Trademarks
  - b) Copyrights
  - c) Patents
  - d) Trade Secrets

Paper 24B: PRACTICAL (XII)
Paper Code: ZL408C

- Comment on the IUCN status of the fauna (Photographs)
- Identification of common GI tags essential for IPR
- Field visit to zoological garden
- Field visit to wildlife sanctuary
- Review of literature on any suitable topic and its presentation

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(A Central University)
Suryamaninagar
West Tripura, Tripura – 799022

Syllabus for

Four Year Under Graduate Programme

**Subject: Zoology** 

(Minor)

(NEP - 2020)

**Year - 2023** 



# Tripura University (A Central University)

## **Course Structure of Zoology (UG Programme)** As per NEP-2020 under Tripura University

## **ZOOLOGY MINOR**

Year	Semester	Paper Code	Paper No.	Credit	Marks	Paper Name
1 <sup>st</sup> Year	I	ZL101C	Paper -1A Theory	3	75 IA=30 + ESE= 45	Non-Chordates and Economic Zoology
			Paper -1B Practical	1	25 IA=10 + ESE=15	Based on Theory Paper -1A
	II	ZL102C	Paper -2A Theory	3	75 IA=30 + ESE= 45	Chordates and Cell Biology
			Paper -2B Practical	1	25 IA=10 + ESE=15	Based on Theory Paper 2A
2 <sup>nd</sup> Year	III	ZL201	Paper -3A Theory	3	75 IA=30 + ESE= 45	Genetics and Developmental Biology
			Paper -3B Practical	1	25 IA=10 + ESE=15	Based on Theory Paper -3A
	IV	ZL202	Paper -4A Theory	3	75 IA=30 + ESE= 45	Animal Physiology, Endocrinology and Reproductive Biology
			Paper -4B Practical	1	25 IA=10 + ESE=15	Based on Theory Paper 4A
3 <sup>rd</sup> Year	V	ZL301C	Paper -5A Theory	3	75 IA=30 + ESE= 45	Evolutionary Biology, Adaptation and Zoogeography
			Paper -5B Practical	1	25 IA=10 + ESE=15	Based on Theory Paper -5A

		ZL302C	Paper -6A Theory	3	75 IA=30 + ESE= 45	Ecology, Parasitology, Microbiology and Basics of Systematics
	VI		Paper -6B Practical	1	25 IA=10 + ESE=15	Based on Theory Paper 6A
4 <sup>th</sup> Year	VII	ZL401C	Paper -7A Theory	3	75 IA=30 + ESE= 45	Applied Entomology and Aquaculture
			Paper -7B Practical	1	25 IA=10 + ESE=15	Based on Theory Paper -7A
	VIII	ZL402C	Paper -8A Theory	3	75 IA=30 + ESE= 45	Biochemistry, Molecular Biology and Immunology
			Paper -8B Practical	1	25 IA=10 + ESE=15	Based on Theory Paper 8A

## 1st Year

## Semester-I

## Paper 1A: NON-CHORDATES AND ECONOMIC ZOOLOGY Paper Code: ZL101C

Total Marks: 75 (IA = 30 + ESE = 45) Credit - 03

## \*\* Contribution of National Scientists in Zoology—

Salim Ali, Vishwa Gopal Jhingran, Hiralal Chaudhuri, Gopal Ch Bhattacharya, Ramdeo Mishra, Hargobind Khorana, Lalji Singh, Radha D Kale, M K Chandra Sekheran, C. R. Narayan Rao, M. C. Dash, Valmik Thapar.

## **NON-CHORDATES - I**

- (i) Protozoa
- General Characteristics
- •Locomotion in Amoeba
- (ii) Parazoa
- General characteristics
- Canal system of *Sycon*
- (iii) Metazoa
- General characteristics
- Trimorphism & metagenesis of Obelia
- (iv) Platyhelminthes
- •General characteristics
- •Life cycle of Fasciola hepatica
- (v) Nemathelminthes
- General characteristics
- Life cycle of *Ascaris*

### NON-CHORDATES- II

- (i) Annelida
- General characteristics
- Digestive system of Earthworm
- (ii) Arthropoda
- General characteristics
- Digestive system of *Periplaneta*
- (iii) Mollusca
- General characteristics
- Respiratory system in *Pila*
- (iv) Echinodermata
- General characteristics
- •Water vascular system in Asterias
- (v) Hemichordata
- General characteristics of Hemichordata

### **ECONOMIC ZOOLOGY**

- (i) Vermiculture & Vermicomposting
- Principle of vermicomposting, different ecological categories of earthworm (Epigeic, Endogeic, Anesic), importance of vermicomposting, vermitechnology & management.
- (ii) Sericulture
- Principle, different types of silk moth and their host plants, rearing methods, diseases of silk moth . Management with special reference to local varieties
- (iii) Apiculture
- Principle, different types of honey bees, rearing methods, diseases of honey bees. Management with special reference to local varieties
- (iv) Fresh water pisciculture
- Polyculture
- Induced breeding technology
- Fish seed transportation, fish diseases,
- Management
- (v) Poultry
- Types of breeds
- Methods of rearing
- Health, diseases and their management
- (vi) Basics of Dairy farming and management.

Paper 1B: PRACTICAL - 1
Paper Code: ZL101C
Total Marks: 25 (IA = 10 + ESE = 15) Credit - 01

## PRACTICAL - I

- 1. Identification, Systematic position, and Specimen Characters
  Paramoecium, Scypha, Obelia, Physalia, Taenia, Ascaris, Metaphire, , Hirudinaria, Periplaneta,
  Pila, Octopus, Asterias,
- 2. Dissection and display of digestive ystems of Periplaneta
- 3. Mouth parts of *Periplaneta*
- **4.** Spot identification and economic importance of—*Perionyx*, *Apis* sp, *Bombyx* and some major Carps (Rohu, Catla, Mrigal).

## Semester-II

## Paper 2A: CHORDATES AND CELL BIOLOGY

Paper Code: ZL102C

Total Marks: 75 (IA = 30 + ESE = 45) Credit - 03

### **CHORDATA - I**

- (i) Protochordata
- General characteristics of Cephalochordata with special reference to ciliary mode of feeding in *Branchiostoma/Amphioxus*.
- General characteristics of Urochordata with special reference to retrogressive metamorphosis in *Ascidia*

## (ii)Cyclostomata

- General characteristics of Cyclostomata
- Differences between Petromyzon and Myxine
- (iii) Pisces
- General Characteristics of Chondrichthyes & Osteichthyes
- Accessory respiratory organs in fishes

### **CHORDATA - II**

- (i) Amphibia
- · General characteristics and classification upto order
- Parental care in Amphibia
- (ii) Reptilia
- General characteristics and classification upto order
- Differences between venomous and non-venomous snakes
- (iii) Aves
- General characteristics and classification upto order
- Double mode of respiration
- (iv) Mammals
- General characteristics and classification upto order
- Digestive system of ruminant and non-ruminant

## **CELL BIOLOGY**

- 1. Structure and function of—-
  - Plasma membrane
  - Nucleus
  - Mitochondria
  - Golgi bodies
  - Ribosomes
  - Endoplasmic reticulum
  - Lysosomes
- 2. Cell cycle and regulations
- 3. Cell divisions
- 4. Cancer cell and its characters

## Paper 2B: PRACTICAL -II Paper Code: ZL102C

Total Marks: 25 (IA = 10 + ESE = 15) Credit - 01

## PRACTICAL - II

- 1. Identification, systematic position, and specimen characters —Branchiostoma, Ascidia, Petromyzon, Scoliodon, Channa, Rohu, Hyla, Naja, Columba, Chiroptera.

  2. Dissection and display of digestive system Cirrhinus mrigala/Channa sp.
- 3. Study of Mitotic cell division stages
- 5. Study of meiotic cell division stages (permanent slide).

## 2nd Year Semester-III

## Paper 3A: GENETICS & DEVELOPMENTAL BIOLOGY Paper Code: ZL201C

Total Marks: 75 (IA = 30 + ESE = 45) Credit - 03

## **GENETICS - I**

- DNA as a genetic material
- Concept of alleles and multiple alleles (ABO Blood grouping)
- Crossing over and recombination
- Sex determination in *Drosophila* (Geneic balance theory) and human; Barr body.
- Chromosomal abnormalities and different syndromes in human—-: Turner's syndrome, Klinefelter's syndrome, Down syndrome

## **GENETICS - II**

- Autosomal and Sex-linked inheritance: Autosomal- Albinism and Thalasemia.
- Sex linked inheritance—- Colour blindness and Haemophilia
- Mutation: Types of mutation, mutagens
- Cytoplasmic inheritance

### **DEVELOPMENTAL BIOLOGY:**

- Gametogenesis and ultrastructure of spermatozoa
- Cleavage, Blastulation, and Gastrulation during the formation of chick embryo
- Extra-embryonic membrane formation and function in chick embryo
- Placenta: types and function.

Paper 3B: PRACTICAL - III Paper Code: ZL201C

**Total Marks: 25 (IA = 10 + ESE = 15)** Credit - 01

#### Practical - III

- Karyotyping in human (charts)
- Identification (with reasons) of male and female Drosophila (microphotographs)
- Identification of chick embryo with reason (during different incubation period): 24 hours, 48hours, 72 hours.

# Semester-IV Paper 4A: ANIMAL PHYSIOLOGY, ENDOCRINOLOGY, AND REPRODUCTIVE BIOLOGY

Paper Code: ZL202C

**Total Marks:** 75 (IA = 30 + ESE = 45) Credit - 03

### **ANIMAL PHYSIOLOGY - I**

- Extracellular and intracellular digestions
- Transport of oxygen and carbon dioxide in mammals (Bohr effect and Chloride shift)
- Concept of Isotonic, Hypotonic and Hypertonic solution, Osmoregulation in fresh and marine water fishes

#### ANIMAL PHYSIOLOGY - II

- Mechanism of nitrogen excretion in vertebrates
- Mechanism of Urine formation in mammals
- Generation of action potential in neurone, Synapse and synaptic transmission

## ENDOCRINOLOGY AND REPRODUCTIVE BIOLOGY

- Histological structure and functions of: Pituitary gland, Thyroid gland, Pancreas, Adrenal gland, Testis and ovary
- Types of hormones and their functions in vertebrates
- Endocrine disorder in human with special reference to Pituitary and Thyroid glands
- Role of hormones in regulation of spermatogenesis, oogenesis
- Oestrus cycle in rat

Paper 4B: PRACTICAL - IV Paper Code: ZL202C

Total Marks: 25 (IA = 10 + ESE = 15) Credit - 01

#### Practical - IV

- Study of Haemin crystal formation from human blood
- Study of salivary amylase activity using starch solution
- Identification of permanent slides with reasons of the transverse section of the mammalian Pituitary, Thyroid gland, Adrenal gland, Pancreas, Ovary, and Testis.

# 3<sup>rd</sup> Year

# **Semester-V**

# Paper 5A: EVOLUTIONARY BIOLOGY, ADAPTATION & ZOOGEOGRAPHY Paper Code: ZL301C

Total Marks: 75 (IA = 30 + ESE = 45) Credit - 03

#### **Evolutionary Biology-I**

- Origin of Life (Chemical basis): Experimental evidence in favour of abiotic synthesis of basic biomolecules (Miller & Urey Experiment), Protocell or Coacervates.
- Evolution of horse,
- Neo-Darwinism (Synthetic Theory), Genetic variation and sources of variation in natural populations

### **Evolutionary Biology-II**

- Types of natural Selection: Stabilising, Directional and Disruptive
- Isolating mechanisms and importance of Reproductive Isolation
- Mode of Speciation: Sympatric, Allopatric and Parapatric

# Adaptation and Zoogeography

- Adaptive features of Camel, Whale and Pigeon (Morphological, anatomical and Physiological)
- Colouration: Cryptic and Warning
- Mimicry: Protective, Aggressive and Warning (Batesian and Mullerian)
- Zoogeographical realms of the world— Geographical boundary, Climate and Faunal composition

Paper 5B: PRACTICAL - V
Paper Code: ZL301C
Total Marks: 25 (IA = 10 + ESE = 15) Credit - 01

### Practical - V

- Adaptive features: Fasciola, Physalia, Hemidactylus, Exocoetus, tree frog, Chameleon, Columba, Chiroptera.
- Placement of faunal groups in respective Zoogeographical realms (map pointing)
- Study of Skull and limb bone of Class Amphibia, Reptiles, Aves and Mammals.

# Semester-VI Paper 6A: ECOLOGY, PARASITOLOGY, MICROBIOLOGY AND BASICS OF SYSTEMATICS

Paper Code: ZL302C

**Total Marks:** 75 (IA = 30 + ESE = 45) **Credit - 03** 

## **Ecology**

- Ecosystem: Definition, food chain, food web, ecological pyramids, energy flow in ecosystems
- Population ecology— Natality, Mortality, Survivorship curves, Population growth curves, r and K strategies.
- Applied ecology: Types & level of biodiversity, Definition with the example of --: Biodiversity Hot spots, Keystone species, Wildlife Conservation (in situ and ex-situ conservation), the concept of protected areas with special reference to Tripura,
- Red data book, Indian wildlife act & Schedule.
- Common threats and conservation strategies for Indian Tiger, Phayre's leaf monkey, Indian Bison, and Green Imperial Pigeon.

# Parasitology and Basic Microbiology

- Host Parasite interactions with reference to helminthic parasites (*Taenia*, *Ascaris*)
- Lifecycle, Pathogenicity and Prophylaxis of Plasmodium, Entamoeba, Giardia.
- Microbes in animal gut of Cockroach, Earthworm, Ruminants and their biological significance,
- Concept of Prebiotic, Probiotic, and Symbiotic.
- Microbes in human and animal welfare.

## **Basics of Systematics**

- Knowledge of Systematics and Taxonomy: definition, Classification, Phenon, Taxon, Category, Binomial and Trinomial nomenclature.
- ICZN: rules of zoological nomenclature, Principle of priority; Synonymy and Homonymy
- Concept of classification –five kingdom concept of Whittaker, 1969, Linnean Hierarchy
- Species Concept: Biological and Evolutionary

Paper 6B: PRACTICAL - VI
Paper Code: ZL302C
Total Marks: 25 (IA = 10 + ESE = 15) Credit - 01

#### Practical - VI

- Estimation of population density (i) Quadrate method
- Identification and ecological importance of the following: *Collembola*, Mite, *Daphnia*, *Cyclops*, *Cypris* (Slides)
- Study of gut parasites of cockroach/fish/ fowl
- Identification of parasitic features Slides of Plasmodium, Entamoeba and Giardia.
- Visit to an Ecological park/Wildlife Sanctuary.

# 4<sup>th</sup> Year

# Semester-VII

# Paper 7A: Applied Entomology and Aquaculture Paper Code: ZL401C

Total Marks: 75 (IA = 30 + ESE = 45) Credit - 03

# **Applied Entomology -I**

- Insect morphology and anatomy with special reference to mouth parts, digestive and respiratory system of Butterfly, Housefly and Honeybee.
- Nature of damage, biology and control of *Scirpophagaincertulus* (Paddy pest), *Heliothis armigera* (Sugarcane pest), *Leucinodes arbonalis* (Brinjal pest), *Sternochetusmangiferae* (Mango store weevil).

### **Applied Entomology -II**

- Nature of damage, biology and control of store grain pests- *Sitophilus* sp, *Tribolium* sp, *Rhyzopertha* sp and *Trogodermagranarium*
- Pollinators- Definition, insect pollinating agents and their mode of pollination, importance of pollinators.
- Lac Culture: Systematic position, Life Cycle, Economic importance, pest and enemies of lac insects and their control.

### Aquaculture

- Aquaculture: Principles and Practices
- Types of aquaculture: Carp culture, Prawn culture
- Selection of species for aquaculture
- Captive breeding technology,
- Supplementary diets and its composition
- Water quality monitoring in captive breeding farm etc.

Paper 7B: PRACTICAL - VII
Paper Code: ZL401C
Total Marks: 25 (IA = 10 + ESE = 15) Credit - 01

#### Practical – VII

- Identification and economic importance of *Scirpophagaincertulus* (Paddy pest), *Sitophilus* sp, *Tribolium* sp, Prawns, *Rotifer, Cyclops, Daphnia* (Specimens/Slides/Microphotographs)
- Estimation of dissolved oxygen from water by Winkler's Method
- Analysis of pH of pond water
- Submission of insect pests (at least five numbers) with their Scientific name, Order, Place of collection, name of the host plant, date of collection

#### **Semester-VIII**

# Paper 8A: Biochemistry, Molecular Biology and Immunology

Paper Code: ZL402C

**Total Marks:** 75 (IA = 30 + ESE = 45) **Credit - 03** 

#### **Biochemistry**

- Concept of pH, buffers and their biological applications
- Biomolecules: Carbohydrates, proteins, lipids and nucleic acids
- Enzymes: General properties, Coenzymes, isoenzymes, ribozymes.
- Glycolysis, Krebs cycle and ETC (including ATP generation)

### **Molecular Biology**

- Replication, Transcription and translation in prokaryotes
- Concept of Cistron, Recon and Muton.
- Gene regulation of prokaryotes (Lac operon)
- Genetic basis of Cancer- Definition of Proto-oncogene and viral oncogenes. Transformation of Proto oncogene to oncogene.
- Potential benefits and hazards of RDT

# **Immunology**

- Introduction to Immunology
- Cells and organs of immune system
- Cell mediated and humoral immunity
- Antigenicity and immunogenicity
- Immunogens, Adjuvants and Haptens
- Factors influencing immunogenicity
- B and T Cell epitopes
- Immunoglobulins: Structure and functions of different classes of immunoglobulins
- Antigen –Antibody interactions

Paper 8B: PRACTICAL - VIII Paper Code: ZL402C

Total Marks: 25 (IA = 10 + ESE = 15) Credit - 01

#### Practical – VIII

- Qualitative identification of Carbohydrates (mono, di and polysaccharides), protein and lipid
- Quantitative estimation of glucose (titrimetric)
- Identification of leukocytes
- ABO Blood grouping

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(A Central University)
Suryamaninagar
West Tripura, Tripura – 799022

Syllabus for

Four Year Under Graduate Programme

**Subject: Fundamental Zoology** 

(Interdisciplinary Course)

(NEP - 2020)

**Year - 2023** 



# **Tripura University**

(A Central University)

# Course Structure of Zoology (UG Programme) As per NEP-2020 under Tripura University

# **FUNDAMENTAL ZOOLOGY**

# (INTERDISCIPLINARY COURSE)

Year	Semester	Paper Code	Paper No.	Credits	Marks	Paper Name
1 <sup>st</sup> Year	I	ZL001C	Paper 1 Theory	3	100 IA = 40 + ESE = 60	Animal Diversity
and Waar	III	ZL002C	Paper 2 Theory	3	100 IA = 40 + ESE = 60	Economic Zoology
2 <sup>nd</sup> Year	IV	ZL003C	Paper 3 Theory	3	100 IA = 40 + ESE = 60	Genetic Disorders and Pathogenic Diseases

#### DETAILED COURSE CONTENT OF

# Interdisciplinary Course FUNDAMENTAL ZOOLOGY

1<sup>st</sup> year Semester – I Paper - 1 (Theory) ZL001: Animal Diversity

Marks: 100 (IA=40 + ESE= 60) Credit 03

#### Non-chordates

Classification (up to class)

Important features of the phylum with examples

Protozoa, Rotifera, Bryozoa, Porifera, Cnidaria, Helminths, Annelida, Arthropoda, Mollusca, and Echinodermata

#### **Chordates**

Classification (up to class)

Important features with examples

Hemichordates, Cephalochordates, Urochordates, and Vertebrates – Cyclostomes, Pisces, Amphibia, Reptilia, Aves, and Mammalia

#### **Books Recommended:**

- Invertebrates L.H. Hyman
- Biology of Animals Vol-I by Ganguly, Sinha & Adhikari, New Central Book Agency, Kolkata
- Modern Text Book of Zoology: Invertebrates by R.L. Kotpal, Rastogi Publications
- Invertebrate Zoology by E.L. Jordan & P.S. Verma, S. Chand & Company Ltd.
- Biology of Animals Vol-II by Ganguly, Sinha & Adhikari, New Central Book Agency, Kolkata
- Modern Text Book of Zoology: Vertebrates by R.L. Kotpal, Rastogi Publications
- Vertebrate Zoology by E.L. Jordan & P.S. Verma, S. Chand & Company Ltd.

# **Interdisciplinary Course (Fundamental Zoology)**

Semester – III

Paper – 2 (Theory)

**ZL002: Applied Zoology** 

Marks: 100 (IA=40 + ESE= 60) Credit 03

# **Vermiculture & Vermicomposting**

Principle of vermicomposting, different ecological categories of earthworm (Epigeic, Endogeic, Anesic), importance of vermicomposting, vermitechnology & management.

#### Sericulture

Principle, different types of silk moth and their host plants, rearing methods, diseases of silk moth. Management with special reference to local varieties

### **Apiculture**

Principle, different types of honey bees, rearing methods, diseases of honey bees. Management with special reference to local varieties

# Fresh water pisciculture

Polyculture Induced breeding technology Fish seed transportation, fish diseases, Management

# **Poultry**

Types of breeds
Methods of rearing
Health, diseases, and their management

# **Basics of Dairy farming and management**

#### **Books Recommended:**

- Economic Zoology by Shukla and Upadhyay
- Text Book of Applied Zoology: Vermiculture, Apiculture, Sericulture, Lac Culture. By Jabde, P.V.,
- Applied Zoology by T.K.Banerjee, New Central Book Agency, Kolkata
- A Hand Book of Economic Zoology by J. Ahsan & bS.P.Sinha, S.Chand & Company Ltd.
- Kenchor Jeeban Baichitra O Kencho Prajukti by Priya Sankar Chaudhuri, Gyan Bichitra Prakashani, Agartala.
- Comprehensive Sericulture Vol. II: Silkworm Rearing and Silk Reeling by Ganga, G. Oxford and IBH, New Delhi. (2003)
- Elementary Applied Zoology by Debiyoti Chattopadhyay, Book Syndicate Pvt. Ltd.

• Livestock production management by Shastry and Thomas

# **Interdisciplinary Course (Fundamental Zoology)**

Semester – IV

Paper – 3 (Theory)

**ZL003: Genetic Disorders and Pathogenic Diseases** 

Marks: 100 (IA=40 + ESE= 60) Credit 03

#### **Genetic Disorders**

Structure and function of chromosome

ABO Blood groups

Concept on -

Haemophilia, colour-blindness, albinism, thalassemia, sickle cell anaemia, Down's syndrome, Turner's syndrome, Klinefelter's syndrome

# **Pathogenic Disease**

Concept of host and parasite

Life cycle and control measures of –

Plasmodium, Entamoeba, Giardia, Liver fluke, Tape worm, Round worm, and Ascaris

#### **Books Recommended:**

- Genetics by M. W. Strickberger, Pearson Education India Ltd.
- Principles of Genetics by E. J. Gardner, M. J. Simmons & D.P. Snustad, Wiley Publishers
- Principle of Genetics, B. D. Singh. Kalyani Publications
- Genetics by P. K. Gupta, Rastogi Publications, Meerut
- Genetics by Verma & Agarwal, S. Chand & Company Ltd.
- Parasitology by K.D. Chatterjee,
- Text Book of Medical Parasitology by P. Chakraborty, New Central Book Agency
- Paniker's Text Book of Medical Parasitology by Paniker, C.K.J., Ghosh, S. Jaypee, New Delhi.
- Medical Parasitology by Dey, N.C., Dey, T.K. and Dey Sinha M. New Central Book Agency, Kolkata (2010)



# **Tripura University**

(A Central University)
Suryamaninagar
West Tripura

# Syllabus for

# Four Years Undergraduate Programme

**Subject: Botany** 

(As per NEP-2020)

**Year - 2023** 



# Tripura University (A Central University)

# Course Structure of Botany (UG Programme) As per NEP-2020 under Tripura University

# **BOTANY MAJOR**

Year	Semester	Paper	Credit	Mark	Unit - I	Unit - II	Unit-III	Unit-IV
1 <sup>st</sup>	1 <sup>st</sup>	Paper-1 Theory	4	100 (IA=20 + ESE=80)	Microbiology-I	Microbiology- II	Phycology-I	Phycology-II
		Paper-2A Theory	2	50 (IA=10 + ESE=40)	Mycology-I	Mycology-II		
		Paper-2B Practical	2	50 (IA=10 + ESE=40)		Based on Theory	y paper 1 & 2A	
	2 <sup>nd</sup>	Paper-3 Theory	4	100 (IA=20 + ESE=80)	Bryophyta	Pteridophyta	Gymnosperms	Basic Paleobotanical Principles
		Paper-4A Theory	2	50 (IA=10 + ESE=40)	Fossil Plants	Principles of Organic Evolution		
		Paper-4B Practicals	2	50 (IA=10 + ESE=40)		Based on Theory	y paper 3 & 4A	
2 <sup>nd</sup>	3 <sup>rd</sup>	Paper-5 Theory	4	100 (IA=20 + ESE=80)	Elementary Phytopathology	Angiosperm Morphology	Plant anatomy	Embryology
		Paper-6A Theory	2	50 (IA=10 + ESE=40)	Taxonomy-I	Taxonomy-II		
		Paper 6B Practicals	2	50 (IA=10 + ESE=40)		Based on theory		
	4 <sup>th</sup>	Paper-7 Theory	4	100 (IA=20 + ESE=80)	Plant Ecology-I	Plant Ecology- II	Natural Resource Management & Sustainable Development	Phytogeograph y
		Paper-8A Theory	2	50 (IA=10 + ESE=40)	Biophysics & Biochemistry-I	Biochemistry- II		
		Paper 8B Practicals	2	50 (IA=10 + ESE=40)		Based on theory	paper 7 & 8A	
3 <sup>rd</sup>	5 <sup>th</sup>	Paper-9 Theory	4	100 (IA=20 + ESE=80)	Cell biology-I	Cell Biology-II	Plant Physiology-I	Plant Physiology-II
		Paper-10A Theory	2	50 (IA=10 + ESE=40)	Genetics-I	Genetics-II		
		Paper 10B Practicals	2	50 (IA=10 + ESE=40)		Based on theory		
		Paper-11 Theory	4	100 (IA=20 + ESE=80)	Molecular Biology-I	Molecular Biology-II	Plant Biotechnology -I	Plant Biotechnology -II
		Paper-12A	2	50	Economic	Economic		

		Theory		(IA=10 +	Botany-I	Botany-II		
		Paper 12B	2	ESE=40) 50		Based on theory	   naper 11 & 12 Δ	<u> </u>
		Practicals	2	(IA=10 +		Based on theory	paper 11 & 12A	
				ESE=40)				
	6 <sup>th</sup>	Paper-13 Theory	4	100 (IA=20 + ESE=80)	Plant Breeding	Biometry	Horticultural Practices	Floriculture & Gardening
		Paper-14A Theory	2	50 (IA=10 + ESE=40)	Pharmacognosy	Ethnobotany		
		Paper 14B Practicals	2	50 (IA=10 + ESE=40)		Based on theory p	papers 13 & 14A	
		Paper-15 Theory	4	100 (IA=20 + ESE=80)	Industrial and Applied Microbiology-I	Industrial and Applied Microbiology- II	Algal Biotechnology	Applied Mycology
		Paper-16A Theory	2	50 (IA=10 + ESE=40)	Palynology	Biodiversity and its Conservation		
		Paper 16B Practicals	2	50 (IA=10 + ESE=40)		Based on theory p	papers 15 & 16A	
4 <sup>th</sup>	$7^{ m th}$	Paper-17 Theory	4	100 (IA=20 + ESE=80)	*	*	*	*
		Paper-18A Theory	2	50 (IA=10 + ESE=40)	*	*		
		Paper 18B Practicals	2	50 (IA=10 + ESE=40)		Based on theory J	papers 17 & 18A	
		Paper-19 Theory	4	100 (IA=20 + ESE=80)	*	*	*	*
		Paper-20A Theory	2	50 (IA=10 + ESE=40)	*	*		
		Paper-20B Practicals	2	50 (IA=10 + ESE=40)		Based on theory J	papers 19 & 20A	
	8 <sup>th</sup>	Paper-21 Theory	4	100 (IA=20 + ESE=80)	*	*	*	*
		Paper-22A Theory	2	50 (IA=10 + ESE=40)	*	*		
		Paper-22B Practicals	2	50 (IA=10 + ESE=40)		Based on theory J	papers 21 & 22A	
		Paper-23 Theory	4	100 (IA=20 + ESE=80)	*	*	*	*
		Paper-24A Theory	2	50 (IA=10 + ESE=40)	*	*		
		Paper-24B Practicals	2	50 (IA=10 + ESE=40)	nalisad latar an	Based on theory J	papers 23 & 24A	

\*to be finalised later on...

# DETAILED COURSE CONTENT OF BOTANY MAJOR

# 1<sup>ST</sup> YEAR

#### **SEMESTER-I**

# Paper- 1 (Theory)

# Total Mark = 100 (IA = 20 + ESE = 80) Credit = 04

# **Unit-I (Microbiology-I)**

- 1. Whittaker's five kingdom system & Carl Richard Woese's three domain system of classification.
- Microbial nutrition & Growth- Nutritional requirements and nutritional types,
  Uptake of nutrients by microbial cells, Types of culture medium, Isolation of
  microbes in pure culture; Microbial growth Phases of microbial growth,
  Measurement of microbial growth.
- 3. Significant contribution of Indian Plant Virologist: Pothur Sreenivasulu.
- 4. **Virus:** Nature of virus particles, Definition of Virion, Viroid, Prion & Satellite viruses; General structure of Virus particles Forms of viral capsids (Helical & icosahadral), Types of nucleic acid in virus with examples, Structure of DNA virus (T4 phage), Lytic and lysogenic cycle, Structure and multiplication of RNA virus (TMV), Classification of Virus (Baltimore).
- 5. Transmission and translocation of Plant virus.

# **Unit-II (Microbiology-II)**

- 1. Significant contribution of Indian Plant Bacteriologist: P. Gunasekaran.
- **2. Bacteria:** Characters of archaebacteria & eubacteria, Morphological forms, Structure of bacterial cell.
- 3. Bacterial chemotaxis (definition & mechanism).
- **4. Bacterial reproduction:** Asexual Binary fission, Conidia, Budding, Cysts and Endospore (structure & formation).
- **5.** Bacterial Plasmids (types) & Episome.
- **6. Genetic recombination in bacteria** Transformation, Transduction (generalised & specialised) and Conjugation (F- factor, F<sup>+</sup> x F<sup>-</sup>, Hfr x F<sup>-</sup>).
- 7. Bacterial nutritional types Photosynthetic bacteria (definition and examples of Green sulphur bacteria, purple sulphur bacteria & non-sulphur bacteria); Chemosynthetic bacteria (definition and examples of Sulphur bacteria, Iron bacteria, Hydrogen bacteria & Nitrifying bacteria); Heterotrophic bacteria (Saprophytic & Parasitic).
- **8.** Economic importance of bacteria: Beneficial role (role in Agriculture, Industry, Biological Control & Waste Water treatment) & Harmful effects (Food spoilage, Water pollution, Reduction of soil fertility & as Disease causing agent).
- **9. Mycoplasma** Definition & structure, Mycoplasmal plant diseases (examples).
- **10. Actinomycetes** Definition, general characters & Economic importance.

# **Unit-III (Phycology-I)**

1. History and significant contributions of Indian Phycologists: **Prof. M. O. P. Iyengar** & **Prof. T. V. Desikachary.** 

- 2. General characters of Algae: Occurrence, Range of thallus organization, Pigment types, Reserve food materials (RFM) in different groups, Algal Reproduction Methods of Vegetative, Asexual and Sexual reproduction; Life cycle types.
- 3. Outline classification of Algae ((Lee, 1999) up to Class.
- 4. General characters of following algal classes Cyanophyceae, Chlorophyceae, Xanthophyceae, Bacillariophyceae, Phaeophyceae & Rhodophyceae.
- 5. Economic importance of Algae.

# **Unit-IV (Phycology-II)**

- 1. Structure, reproduction and life-cycle of the following algal genera:
  - i. Nostoc
  - ii. Oedogonium
  - iii. Chara
  - iv. Vaucheria
  - v. Ectocarpus
  - vi. Polysiphonia
- 2. Diatoms Cell structure, reproduction & economic importance.

# Paper- 2A (Theory)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

# **Unit-I (Mycology-I)**

- 1. History and contribution of **Prof. T. S. Sadasivan.**
- 2. **General characters of Fungi** (i) Vegetative structure (Unicellular and mycelial forms); (ii) Hyphal forms Plectenchyma, Sclerotia, Rhizomorphs, Haustoria, Appresoria, Stroma & Hyphal trap; (iii) Fungal cell wall Composition; (iv) Fungal mode of nutrition.
- 3. Fungal reproduction (i) Holocarpic & Eucarpic fungus; (ii) Vegetative reproduction Fragmentation, Fission & Budding; (iii) Asexual reproduction Different asexual spore forms (Zoospores, Conidia, Oidia, Chlamydospores & Sporangiospores; (iv) Sexual reproduction Stages of sexual reproduction (Plasmogamy, Karyogamy & Meiosis), Different methods of Plasmogamy (Gametic copulation, Gametangial contact, Gametangial copulation, Somatogamy & Spermatization); (v) Different types of sexual spores Ascospores, Basidiospores, Zygospores & Oospores.
- 4. Classification of Fungi (Ainsworth, 1973) up to sub-division.
- Characteristics of important fungal groups Chytridiomycota, Zygomycota, Ascomycota (including types of ascocarps and development of ascus and ascospores), & Basidiomycota (including types and development of basidia and basidiospores) and Duteromycetes (including types of spores).
- 6. **Lichens:** General characters morphological types, internal structure & reproduction; Ecological and economic importance of lichens.

# **Unit-II (Mycology-II)**

- 1. Structure, reproduction & lifecycle of following fungal genera
  - i) Rhizopus
  - ii) Saccharymyces
  - iii) Ascobolous
  - iv) Penicillium
  - v) Agaricus
  - vi) Fusarium.
- 2. **Myxomycetes:** General characters, Status of Slime molds, Types of Plasmodia, Types of Fruiting bodies.
- **3. Mycorrhiza:** Types of Mcorrhizal association, Role of Mycorrhizal fungi in agriculture and Forestry.

# Paper-2B (Practical)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

Sl. No.	Practical	Marks
1.	Workout on Microbiology	08
2.	Workout on Algae	10
3	Workout on Fungi	10
4.	Identification with reasons (2 x 2 marks)	4
5.	Laboratory Note book	4
6.	Viva voce	4
	TOTAL	40

#### **CONTENTS:**

1. Use of Simple and Compound microscope.

# 2. Work out on Microbiology:

- (a) Gram staining of bacterial population from curd.
- **(b)** Demonstration of Sterilization process.
- **3.** Work out of the following algal genera with reproductive structures (Free hand drawing only): *Nostoc* sp., *Oedogonium* sp., *Chara* sp., *Ectocarpus* sp., *Polysiphonia* sp.
- **4. Work out of the following Fungi** with reproductive structures (Free hand drawing): *Rhizopus* sp., *Penicillium* sp., *Ascobolus* sp., *Agaricus* sp., *Polyporus* sp.

# 5. Identifications:

- a) **Permanent slides of Algae:** *Nostoc, Volvox* colony, *Oedogonium* dwarf male, *Ectocarpus* with plurilocular sporangia, *Polysiphonia* cystocarp & tetrasporophyte.
- b) **Permanent slides of Fungi:** Zygospore of *Rhizopus*, Conidiophore of *Penicillium*, T.S. of gills of *Agaricus*, T.S. of basidiocarp of *Polyporus*, Conidia of *Fusarium*.
- c) Macro specimen Fruitbody of Agaricus, Polyporus
- **6. Laboratory Records:** Student must get the laboratory note books duly signed by the respective teacher during practical classes.
- 7. *Viva voce:* Questions based on theory and practical syllabus of 1<sup>st</sup> semester.

#### **SEMESTER-II**

# Paper-3 (Theory)

# Total Mark = 100 (IA = 20 + ESE = 80) Credit = 04

# **Unit-I (Bryophyta)**

- 1. History and contributions of Indian Bryologists: **Prof. Shiv Ram Kashyap.**
- 2. General characters.
- 3. Bryophyta Adaptations to land habit.
- 4. Outline Classification (Strotler and Crandle-Strotler, 2000) up to class.
- 1. Distinctive features of three major groups Liverworts, Hornworts, and Mosses.
- 2. Importance of Bryophyta Ecological significance & economic importance of bryophytes.
- 3. Gametophyte structure, Reproduction, Development and Structure of sporophyte, Spore dispersal of *Riccia*, *Marchantia*, *Anthoceros*, *Funaria*

# **Unit-II** (Pteridophyta)

- 1. General characters.
- 2. Life cycle pattern (Homosporous and Heterosporous).
- 3. Apogamy & Apospory.
- 4. Outline classification (Sporne, 1975) up to Order with example.
- 5. Important characters of Psilophytopsida, Psilotopsida, Lycopsida, Sphenopsida, and Pteropsida.
- 6. Morphology, anatomy and reproduction of *Psilotum, Lycopodium, Selaginella, Equisetum, Pteris*.

# **Unit-III (Gymnosperms)**

- 1. General characters of Progymnosperms, Classification of Progymnosperms, Vegetative and reproductive structures of *Archaeopteris*.
- 2. General characters of Gymnosperms.
- 3. Outline classification (Sporne, 1965) up to Order with example.
- 4. Important characters of Cycadopsida, Coniferopsida, and Gnetopsida.
- 5. Economic importance with reference to Wood, Resins, Essential oils, and Drugs.
- 6. Distribution, morphology, anatomy and reproduction of *Cycas, Pinus, Ginkgo*, and *Gnetum*.

# **Unit-IV** (Basic Paleobotanical Principles)

- 1. History and contributions of Indian Paleobotanist: **Dr. Birbal Sahani.**
- 2. Definition of fossil, Conditions required for fossilisation, fossilisation process.
- 3. Types of fossil (Body fossil Micro- and Megafossils, Trace fossil, Chemical fossil, Index fossil).
- 4. Modes of preservation (after Schopf, 1975).
- 5. Concept of reconstruction and formed genus.
- 6. Geological time scale with dominant plant groups through ages.
- 7. Techniques for studying plant fossils.
- 8. Principles of radiometric fossil dating (brief idea).

9. Importance of fossil study.

# Paper- 4A (Theory)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

# **Unit-I (Fossil Plants)**

- 1. Study of fossil plants:
  - i. Rhynia
  - ii. Lepidodendron
  - iii. Calamites
  - iv. Miadesmia
  - v. Lyginopteris
  - vi. Willimsonia
  - vii. Cordaites.
- 2. Indian Gondwana flora system Three fold division with major megafossil assemblages.

# **Unit-II (Principles of Organic Evolution)**

- 1. Origin of life.
- 2. Biological species concept.
- 3. Reproductive isolation Definition and types (pre zygotic & post zygotic).
- 4. Modes of speciation (Allopatric, Peripatric, Parapatric, & Sympatric).
- 5. Natural selection Definition and types (Directional, Stabilizing, Disruptive).
- 6. Phyletic gradualism, Punctuated equilibrium and Stasis.
- 7. Macro and Micro evolution (definition).
- 8. Adaptive radiation and convergence (definition).
- 9. Darwinism and its limitations.
- 10. Neo Darwinism (only brief idea).
- 11. Coevolution Definition and example.

# Paper-4B (Practical)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

Sl. No.	Practical	Marks
1.	Workout on Pteridophyta	10
2.	Workout on Gymnosperm	10
3	Identification with reasons (5 x 2 marks)	10
4.	Laboratory Note book	05
5.	Viva voce	05
	TOTAL	40

# 1. Work out on:

- (a) **Pteridophytes:** Workout on reproductive structures of the following Pteridophytes: *Lycopodium* sp., *Selaginella* sp., *Equisetum* sp., *Pteris* sp.
- **(b) Gymnosperms:** Leaflet of *Cycas* sp, *Pinus* sp., Microsporophyll of *Cycas sp*.
- 2. Identification:
- (a) Morphological study of the Bryophyte genera: Riccia, Marchantia, Anthoceros, and Funaria.
- **(b) Study of Bryophytes from permanent slides** *Riccia* (V.S. of thallus), *Marchantia* (L.S. of: Gemma cup, antheridiophore, archegoniophore, sporophyte), *Anthoceros* (L.S. of sporophyte), *Funaria* (L.S. capsule).
- **(c) Study of macroscopic structures of Gymnosperm:** *Cycas* microsporophylls, *Cycas* megasporophyll, *Pinus* male cone, *Pinus* female cone, *Gnetum* male cone, *Gnetum* female cone.
- (d) Study of Gymnosperms from permanent slides L.S. of *Cycas* ovule, L.S. of *Pinus* male cone, L.S. of *Pinus* female cone, Pollen grains of *Pinus*, L.S. of *Gnetum* male cone, L.S. of *Gnetum* female cone/ovule.
- (e) Study from permanent slides/macroscopic fossil specimen.
- **4. Laboratory Records:** Student must get the laboratory note books duly signed by the respective teacher during practical classes.
- **5.** *Viva voce*: Questions based on theory and practical syllabus of 3<sup>rd</sup> semester.

# 2<sup>ND</sup> YEAR

### **SEMESTER-III**

# Paper- 5 (Theory)

# Total Mark = 100 (IA = 20 + ESE = 80) Credit = 04

# **Unit-I (Elementary Phytopathology)**

- 1. Significant contribution of Indian Plant Pathologist: K.C Mehta and B.B Mundkur.
- 2. Terms and concepts Infection disease, Non-infection disease, Host (types Primary, Alternate & Collateral), Pathogen (types), Pathogenecity, Pathogenesis, Necrotroph, Biotroph, Koch's postulates, Inoculum (primary & secondary), Inoculum potential, Causal complex, Disease triangle, Disease cycle, Endemic disease, Epidemic disease, Sporadic disease, Resistance (horizontal & vertical), Hypersensitivity & Klenducity.
- 3. Types of symptoms (Necrotic, Atrophic, Hypertrophic).
- **4.** Control measures of plant disease Physical, Chemical, Biological and Cultural methods.
- **5. Specific plant diseases:** Late blight of potato, Brown spot of rice, Black stem rust of wheat, Stem rot of jute, Red rot of sugarcane, Tikka disease of ground nut.

# **Unit-II (Angiosperm Morphology)**

- 1. Root Types and modifications.
- 2. Leaf Types, Phyllotaxy, Stipule types, Venation types.
- 3. Inflorescence Types (Racemose, Cymose, Mixed & Special).
- 4. Types of flower, Complete general morphology of flower, Types of aestivation, Placentation types.
- 5. Types of fruit.
- 6. Structures of typical seeds (endospermic and non-endospermic).
- 7. Fruit and seed dispersal mechanisms.

# **Unit-III (Plant Anatomy)**

- 1. Composition and gross structure of Plant Cell Wall.
- 2. Meristematic tissues: General characters, Classification.
- 3. Permanent tissue: Parenchyma (general character), Collenchyma (general character and classification), Sclerenchyma (general character and types of sclerides).
- 4. Components of Xylem and Phloem.
- 5. Epidermal tissue system Cuticle, Epicuticular waxes (including functions), Trichomes (uni-and multicellular, glandular and nonglandular), Types of stomata.
- 6. Vascular tissue system Types of vascular bundles.
- 7. Stele types and evolution.
- 8. Hydathodes, Lithocysts and Laticifers.
- 9. General anatomical characters of monocot stem and root, Dicot stem and root, Dorsiventral and isobilateral leaf.
- 10. Normal secondary growth in dicot stem and root.

# **Unit-IV (Embryology)**

- 1. Structure of Microsporangium (anther).
- 2. Microsporogenesis & formation of male gametophyte.
- 3. Megasporogenesis & development of female gametophyte (types monosporic, bisporic & tetrasporic).
- 4. Ovule Structure & types.
- 5. Process of double fertilization.
- 6. Embryo development (dicot & monocot type).
- 7. Endosperm development Nuclear, Cellular & Hellobial types.
- 8. Polyembryoni (definition and types) and Apomixis (types).

# Paper- 6A (Theory)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

# **Unit-I (Taxonomy-I)**

- 1. History and significant contribution of plant taxonomist: **H. Santapau** and **Prof. Gurucharan Singh.**
- 2. Definition of taxonomy and Systematics.
- 3. Principles of taxonomy, Aims of taxonomy, Phases of taxonomy.
- 4. Herbarium techniques and importance of herbaria.
- 5. Botanical gardens and their importance.
- 6. Important herbaria and botanical gardens of the world and India.
- 7. Nomenclature Binomial nomenclature & its importance.
- 8. Classification Definition & types with examples.
- 9. Artificial Classification Linnaeus system of classification.
- 10. Natural Classification Bentham and Hooker's classification up to series and its merits and demerits.
- 11. Phyllogenetic Classification Hutchinson's classification with merits and demerits.
- 12. Taxonomic Key Dichotomous key (Indented & Bracketed keys).
- 13. ICBN Principles.

# Unit-II (Taxonomy-II)

- 1. Study of Angiospermic families (diagnostic characters, general characters and economic importance):
  - i. Poaceae
  - ii. Liliaceae
  - iii. Orchidaceae
  - iv. Magnoliaceae
  - v. Malvaceae
  - vi. Cucurbitaceae
  - vii. Solanaceae
  - viii. Lamiaceae
  - ix. Apocynaceae
  - x. Verbenaceae
  - xi. Rubiaceae
  - xii. Leguminosae
  - xiii. Brassicaceae
  - xiv. Asteraceae

# Paper-6B (Practical)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

Sl. No.	Practical	Marks
1.	Workout on Angiospermic plant	10
2.	Workout on Anatomy	08
3	Identification with reasons (4 x 2 marks)	08
4.	Spot identification of plants (3 x 1marks)	03
5.	Submission of Herbarium sheets	03
6.	Submission of Field Note Book	02
5.	Laboratory Note book	03
6.	Viva voce	03
	TOTAL	40

- 1. Workout on Angiospermic plants: Flower dissection, diagram of plant parts, floral diagram, description of plant, floral formula, identification of the family from the families included in the theory syllabus.
- 2. Work out on Plant Anatomy: Study of Primary structures by preparing temporary slides of the following: Monocot stem: T. S. of Canna scape / T. S. of Maize stem, Dicot stem: T. S. of Cucurbita stem / T. S. of Sunflower stem, Monocot root: T. S. of Arum root / T. S. of Orchid root, Dicot root: T. S. of Pisum root, Dorsiventral leaf: T. S. of Mango leaf, Isobilateral leaf: T. S. of Bamboo leaf / T. S. of Phoenix leaf

# 3. Identification:

- I. **Inflorescence types:** Study from fresh or preserved specimens.
- II. **Flowers types:** Study of different types of flowers from fresh or preserved specimens- Achlamydeous, Monochlamydeous, Dichlamydeous, Actinomorphic, Zygomorphic flowers.
- III. **Corolla types:** Study of different types of corolla from fresh or preserved specimens-Cruciform, Rosaceous, Papilionaceous, Tubular, Campanulate, Hypocrateriform, Infundibuliform, and Bilabiate.
- IV. **Types of stamens:** Study of different types of stamens from fresh or preserved specimens Monadelphous, Diadelphous, Polydelphous, Syngenesious, Synandrous, Epipetalous, Gynandrous.
- V. **Types of placentation:** Study of different types of placentaions.
- VI. **Types of fruits:** Study from fresh or preserved specimens.
- VII. **Minor anatomy:** Stomata types, Cystolith, Raphides, Starch grains, Laticiferous ducts.
- VIII. **Pathological specimens:** Name of the disease, Name of Pathogen, Identifying characters of Brown spot of Rice, Late blight of Potato, Stem rot of Jute, Red rot of Sugarcane.
- **4. Spot identification:** Scientific names of common wild plants from the families included in theory syllabus.
- **5. Submission of Herbarium sheets:** At least 20 herbarium sheets must be submitted.

- **6. Field Note book:** Students are required to go for at least one field study tour.
- **7. Laboratory Records:** Student must get the laboratory note books duly signed by the respective teacher during practical classes.
- 8. *Viva voce*: Questions based on theory and practical syllabus of 2<sup>nd</sup> semester.

#### **SEMESTER-IV**

### Paper-7 (Theory)

# Total Mark = 100 (IA = 20 + ESE = 80) Credit = 04

# **Unit-I (Plant Ecology-I)**

- 1. History and significant contributions of **Prof. Ramdeo Misra.**
- 2. Basic ecological concepts (i) Trophic levels, (ii) Food chain & Food web, (iii) Ecological pyramids Pyramids of Number, Biomass & Energy, (iv) Energy flow model.
- 3. Concept of Productivity Primary & Secondary productivity.
- 4. Ecological Niche- (i) Definition of Niche, (ii) Types of Niche Habitat, Trophic and Multidimensional niche, (iii) Fundamental and realized niche, (iv) Niche overlapping and concept of competitive exclusion, (v) resource partitioning, (vi) Ecological equivalent & Guild (definition).
- 5. Ecology of species- (i) Reproductive strategy (r and k selection), (ii) Interaction between species (competition, consumption, cooperation)
- 6. Population ecology- (i) Definition of population, (ii) population growth forms (J-shaped and S-shaped), (iii) Carrying capacity & Biotic potential (definition).

# **Unit-II (Plant Ecology-II)**

- 1. Community ecology- (i) Definition of Biotic Community, (ii) Ecological Succession Types of Succession (Primary and secondary, Allogenic & Autogenic, Autotrophic and Heterotrophic), Stages in successional process, Models of succession Facilitation, Tolerance and Inhibition models, Concept of climax (Characters of climatic vegetation, Monoclimax & Polyclimax theory).
- 2. Hydrosere and Xerosere.
- 3. Ecological adaptations of Hydrophytes, Xerophytes & Halophytes.
- 4. Ecotone and edge effect (only definition)
- 5. Soil Origin; Formation; Composition; Physical; Chemical and Biological components; Soil profile, Types of soil water.
- 6. Biogeochemical cycles C, N, and P cycle.

# **Unit-III (Natural Resource Management & Sustainable Development)**

## 1. Natural resource:

- i. Definition and types of Natural resource.
- ii. Sources of energy Conventional & non-conventional.
- iii. Soil degradation and management strategies and restoration of degraded lands.
- iv. Wetlands major threats and management strategies.
- v. Forest Causes of forest depletion and management strategies.
- vi. Wasteland reclamation.

# 2. Sustainable development:

- i. Definition & concept of Sustainable Development.
- ii. Goals of sustainable development.
- iii. Organic farming (principle, advantages, & disadvantages).

- iv. Bio fertilizers (definition, examples & importance).
- v. Biofuels (concept, example, sources & importance).

# **Unit-IV** (Phytogeography)

- 1. Principles of Phytogeography.
- 2. Concept of Continental drift & Theory of tolerance.
- 3. Theory of Island Biogeography.
- 4. Endemism Definition, types, theories of endemism & factors responsible for endemism.
- 5. Phytogeographical regions of India (D. Chatterjee, 1960).
- 6. Vegetation of Eastern Himalaya, Western Himalaya & Sunderban.
- 7. Vegetation of Tripura.
- 8. Brief concept of major terrestrial Biomes (climatic and geographical conditions & major plant types) Tropical Rain Forest, Tropical Savanna, Temperate Deciduous Forest, Grassland & Tundra.

# Paper-8A (Theory)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

# **Unit-I (Biophysics & Plant Biochemistry-I)**

- 1. Types of chemical bonds.
- 2. Structure and properties of water.
- 3. Solution Percentage, Molar, & Normal solutions (definitions).
- 4. Acid, Base, pH, pKa, Buffer system & its types, Isoelectric point, Zwitterion.
- 5. Bioenergetics- Free Energy (definition) & standard Free Energy change ( $\Delta G^{\circ}$ ), Endergonic and Exergonic reaction.
- 6. Coupled reaction, ATP structure and importance.
- 7. Importance of NADH, NADPH & FADH<sub>2</sub>.
- 8. Carbohydrates- Classification (monosaccharides, disaccharides, oligosaccharides and polysaccharides), Epimers & Anomers (definition), Reducing & non-Reducing sugars, Glycolipids & Glycoproteins.
- 9. Lipids: Types of fatty acids (saturated and unsaturated), Types of lipids Simple, compound (phospholipids and glycolipids) and derived lipids.
- 10. Functions of Carbohydrates and Lipids.

# **Unit-II (Biochemistry-II)**

- 1. Proteins- (i) Types of amino acid & Essential amino acid (ii) Properties of peptide bond, (iii) Levels of protein structure Primary, Secondary (α helix, β-sheet & β-turn), Tertiary and Quaternary.
- 2. Classification of Proteins (Simple, Compound & Derived) & Functions of proteins.
- 3. Enzymes: (i) Structure (holoenzyme, apoenzyme, cofactor, coenzyme and prosthetic group) (ii) Active site Properties, (iii) Classification of enzymes, (iv) Mechanism of enzyme action (activation energy, lock and key hypothesis, induced fit theory), (v) Effect of substrate concentration and Michaelis Menten equation, Concept of K<sub>M</sub> value, (vi) Effect of temperature and pH, (vii) Enzyme inhibition-competitive, uncompetitive and noncompetitive (only definition), (viii) Allosteric enzymes Definition and properties, (ix) Isozymes, (x) Ribozymes (definition).

# Paper-8B (Practical)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

Sl. No	Practicals	Marks
1.	Study of Ecological anatomy	08
2.	Study on properties of soil	08
3.	Preparation of map of Phytogeographical regions of India with plant name.	06
4.	Detection of Biochemical compound from unknown sample.	10
5.	Laboratory Note book	04
6.	Viva voce	04
	TOTAL	40

- **1. Study of Ecological anatomy:** Hydrophytes (*Hydrilla* stem, *Nymphaea* petiole), Xerophytes (*Nerium* leaf).
- 2. Study on physical properties of soil:
  - (a) Determination of pH of different types of soil by pH paper method.
  - (b) Determination of water holding capacity of soil samples.
  - (c) Determination of porosity of different soil samples.
- **3.** Preparation of map of Phytogeographical regions of India (D. Chatterjee, 1962) with plant name.
- 4. Biochemical detection:
  - (a) Detection of carbohydrates: Glucose, Fructose, Sucrose & Starch.
  - (b) Detection of organic acids: Oxalic acid, Tartaric acid, Citric acid.
  - (c) Detection of Proteins
- **5. Laboratory Records:** Student must get the laboratory note books duly signed by the respective teacher during practical classes.
- **6.** *Viva voce*: Questions based on theory and practical syllabus of 4<sup>th</sup> semester.

# 3<sup>RD</sup> YEAR

#### **SEMESTER-V**

# Paper-9 (Theory)

## Total Mark = 100 (IA = 20 + ESE = 80) Credit = 04

# **Unit-I (Cell Biology-I)**

- 1. Origin of eukaryotic cell endosymbiotic theory.
- 2. Ultra structure of cell wall.
- 3. Composition, structure and fluidity of plasma membrane.
- 4. Transport across plasma membrane.
- 5. Structure and function of Mitochondria and Chloroplast & their semiautonomous nature.
- 6. Structure and functions of ER, Golgi body, Ribosome, Peroxisome, Lysosome.

# **Unit-II (Cell Biology-II)**

- 1. History and significant contributions of: Prof. Arun Kr. Sharma.
- 2. Structure of Nucleus and Nucleolus.
- 3. Structure of chromatin (Nucleosome concept and different levels of chromatin organization), Chromosome morphology, Properties of Centromere & Telomere.
- 4. Cell division- Cell cycle (different phases & their significance), Stages of Mitosis and Meiosis.
- 5. C-value, C-value paradox, Relation between chromosome number and C-value through different stages of Mitosis and meiosis.
- 6. Regulations of cell cycle Cell cycle check points, Role of MPF in cell cycle regulation.

# **Unit-III (Plant Physiology-I)**

- 1. Plant water relationship Water Potential and its components, Pathway of water movement (symplast & apoplast), Ascent of sap—cohesion-tension theory.
- 2. Transpiration Types of transpiration, mechanism of stomatal movement, antitranspirants.
- 3. Macro and Micronutrients Mechanism of mineral absorption; Physiological roles and deficiency symptoms of macro nutrients.
- 4. Photosynthetic pigments, Structure of PSI and PSII, Photosynthetic electron transport, Photophosphorylation, Red drop, Emmerson effect.
- 5. C3 cycle, C4 cycle, CAM.
- 6. Photorespiration.

# **Unit-IV (Plant Physiology-II)**

- 1. Glycolysis, Oxidative decarboxylation, TCA cycle, Mitochondrial electron transport.
- 2. Pentose Phosphate pathway.
- 3. Nitrate assimilation, Biological N fixation (nodule formation, role of Nitrogenase and leg haemoglobin), function of *nif* and *nod* genes.
- 4. Plant hormones Chemical nature, source and physiological roles of Auxin, Gibberellins, Cytokinin, Function of Abscisic acid, Ethylene.

- 5. Photoperiodism- Photoperiodic classification of plants, Phytochrome- Chemical nature, mode of action, role in flowering; Floral induction role of Florigen.
- 6. Seed dormancy (Types, causes, methods of breaking seed dormancy).

# Paper-10A (Theory)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

# **Unit-I (Genetics-I)**

- **1. Mendelian genetics** Principles of segregation and independent assortment, Concept of Dominance, Incomplete dominance, Codominance, Multiple allele, Penetrance, Expressivity, Pleotropism, Phenocopy effect and Atavism.
- 2. Determining allelism of mutants complementation test, Concept of pseudoallele
- **3. Gene interactions** with modified dihybrid ratios (12:3:1, 9:7, 9:3:4, 9:6:1, 13:3, 15:1).
- **4. Cytoplasmic inheritance** Features of cytoplasmic inheritance, Plastid inheritance leaf colour in mirabilis, Mitochondrial inheritance Poky & Petite mutation, Maternal effect- shell coiling in snail.
- **5. Linkage & Crossing over** Definitions of complete, incomplete, coupling phase and repulsion phase linkage, linkage group, Crossing over definition and cytological basis (McClintock Experiment).
- **6. Recombination** Basic concept, Recombination frequency, Two point & Three point test cross, Gene mapping from three point test cross data, coefficient of correlation, interference.

# **Unit-II (Genetics-II)**

- **1.** Chromosomal aberration Numerical changes (aneuploidy and euploidy), Polyploidy types, Structural changes (definition and types of deletion, duplication, inversion and translocation).
- 2. Sex determination Mechanism of sex determination in human and Drosophila.
- **3. Sex linkage** Sex linked inheritance, Dosage compensation & Lyon's hypothesis, Sex limited & Sex influenced traits, Problems on Sex linkage (Haemophilia & Colour blindness).
- **4. Population genetics** Concept of Gene pool, Allele frequency & Genotype frequency, Hardy-Weinberg law, Conditions for HW equilibrium, Factors affecting changes in gene frequency Migration, Mutation, Selection & Genetic drift.
- **5. Quantitative inheritance** Characters and examples of quantitative traits and polygenic inheritance.

# Paper-10B (Practical)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

Sl. No	Practicals	Marks
1.	Work out on Mitotic stages	08
2.	Identification with reasons (3 x 2)	06
3.	Testing goodness of fit of modified di-hybrid ratios (12:3:1, 9:7, 9:3:4, 9:6:1, 13:3, 15:1)	08
4.	Plant Physiology experiment	10
5.	Laboratory Note book	04
5.	Viva voce	04
	TOTAL	40

- **1. Work out on Mitotic study:** Temporary preparation of mitotic stages from the root tips of *Allium cepa*.
- **Biometry:** Determination of goodness of fit (chi square test) of modified di-hybrid ratios (12:3:1, 9:7, 9:3:4, 9:6:1, 13:3, 15:1)
- **3. Identification:** Study of different stages of Mitosis and Meiosis (Normal and /or Abnormal) from permanent slides.
- 4. Plant Physiological experiments:
  - i. Comparison of imbibitions of water by Starchy, Proteinaceous and Fatty seeds.
  - ii. Comparison of water loss in dorsiventral leaf by Cobalt Chloride method.
  - iii. Relationship between transpiration and evaporation.
  - iv. Separation of Chlorophyll pigments by paper chromatography.
  - v. Determination of released oxygen during photosynthesis.
  - vi. Measurement of oxygen uptake by respiring tissue (per g/hr).
- **5. Laboratory Records:** Student must get the laboratory note books duly signed by the respective teacher during practical classes.
- **6.** *Viva voce*: Questions based on theory (paper 9 & 10A) and practical (paper 10B) syllabus of fifth semester.

# Paper-11 (Theory)

# Total Mark = 100 (IA = 20 + ESE = 80) Credit = 04

# **Unit-I (Molecular Biology-I)**

- 1. History and significant contributions of: Prof. H. G. Khorana.
- 2. DNA structure (characters of double helix), types of DNA (A, B and Z forms).
- 3. Characters of mRNA, rRNA and tRNA.
- 4. Difference between prokaryotic and eukaryotic gene structure and between prokaryotic and eukaryotic mRNA.
- 5. Transposons and retrotransposons (only definition).
- 6. Organelle DNA Mitochondria and Chloroplast DNA.
- 7. DNA replication (general properties bidirectional, semi conservative, semi discontinuous, concept of replicon), DNA replication mechanism in *E. coli* (role of different enzymes and proteins, synthesis of leading and lagging strands).

# **Unit-II (Molecular Biology-II)**

- 1. Transcription- initiation, elongation and termination in *E. coli*.
- 2. Genetic code- properties, wobble concept.
- 3. Translation- amino-acylation of tRNA, initiation, elongation (peptidyltransferase reaction), and termination in *E. coli*.
- 4. Regulation of Gene expression in Prokaryotes Operon model (general concept), lacoperon with its positive and negative control, trp-operon and attenuation.
- 5. Gene mutation Base substitution and Frame shift mutation, Effect of UV rays, Base analogues, Alkylating agents, Intercalating agents and Deaminating agents.
- 6. DNA repair system Photoreactivation, Mismatch repair, Excision repair.
- 7. Genomics & Proteomics Brief idea.

# **Unit-III (Plant Biotechnology-I)**

- 1. Composition of plant tissue culture medium.
- 2. Sterilization technique.
- 3. Concept of Totipotency.
- 4. Micropropagation (process and importance).
- 5. Plant Regeneration Concept of organogenesis and embryogenesis.
- 6. Haploid production through anther and pollen culture.
- 7. Embryo culture and its application.
- 8. Callus culture and its application.
- 9. Cell suspension culture.
- 10. Protoplast culture and somatic hybrid production.
- 11. Synthetic seed (definition and types).

# **Unit-IV (Plant Biotechnology-II)**

- 1. Vector system: Cloning Vectors– Criteria for good vector, Plasmid vectors pBR322, pUC19, λ-phage vector (Insertional & Replacement), Cosmid vector, Phagemid vector, BAC & YAC.
- 2. Enzymes in DNA cloning Restriction endonuclease (Type I, II, III).
- 3. PCR Basic principle, steps & application.
- 4. Construction of genomic library & Construction of cDNA library.
- 5. Screening of recombinant clones: Blue-White screening & Reporter Gene Assay (GFP).
- 6. Blotting techniques: Principles of Northern, Southern and Western Blotting.
- 7. Production of transgenic plant (Physical delivery and *Agrobacterium* mediated gene transfer).
- 8. Molecular DNA markers (RAPD, RFLP).

# Paper-12A (Theory)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

## **Unit-I (Economic Botany-I)**

- 1. Concept of Centres of Origin and their importance with reference to Vavilov's work (Name of centers, countries included, &examples of crops originated).
- **2.** Crop domestication Definition of Domestication, Changes during domestication, Loss of genetic diversity.
- **3.** Evolution of new crops/ varieties.
- **4.** Importance of germplasm diversity.
- 5. Scientific name, family, part used, and uses of following plants: Cereal Rice, Wheat; Pulses Gram, Moong and Lens; Beverages Tea and Coffee; Fruits Mango, Citrus and Papaya; Drug yielding Cinchona, Rauwolfia, Digitalis, Papaver, Andrographis; Spices Ginger, Cumin and Clove; Oil yielding Mustard, Groundnut, Coconut and Linseed; Vegetables Potato, Radish and Cabbage; Fibre yielding Cotton and Jute; Timber yielding Teak and Sal; Sugar yielding–Sugarcane and Sugar beet; Others Bamboo & Cane.
- **6.** Active principles and medicinal use of Sarpagandha, Brahmi, Aswagandha & Liquorice.
- 7. Examples of plants (two each) as source of essential oil, tannin, gum, resin and dye.

# **Unit-II (Economic Botany-II)**

- 1. Rice cultivation (Rice growing seasons in India, Soil types for rice cultivation, Conventional method and SRI method with advantages and disadvantages).
- 2. Fibers Classification based on the origin of fibres, Jute cultivation and processing.
- **3.** Tea cultivation and processing (orthodox and CTC).
- 4. Rubber cultivation and processing.
- **5.** Morphology and processing of sugarcane and products and by products of sugarcane industry.
- **6.** Paper and Pulp Industry: Major raw materials for paper pulp, Manufacture of pulp and paper production.

# Paper-12B (Practical)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

Sl. No	Practicals	Marks
1.	Demonstration on aseptic explant preparation (from shoot tip and	08
	nodes) and aseptic inoculation of explants.	
2.	Study of economically important plants (Scientific name,	12
	Family, Economically important part, and Uses) as per theory	
	syllabus (4 x 3 marks)	
3.	Comparative microscopic study of starch grains from different	08
	sources with staining - Pea seed, Banana fruit, Sweat potato	
	tuber, Maize grain, Potato tuber	
4.	Submission of economically important plant	04
5.	Laboratory Note book	04
5.	Viva voce	04
	TOTAL	40

- 1. Demonstration on functioning of Autoclave, pH meter, Laminar Air Flow.
- 2. Demonstration on sterilization technique.
- 3. Demonstration of aseptic inoculation technique.
- 4. Study of economically important plants (Scientific name, Family, Economically important part, and Uses)
- **5.** Comparative microscopic examination of different types of starch grains (Type simple / compound, Shape, Position of hilum concentric / excentric) from different sources Pea seed, Banana fruit, Sweat potato tuber, Maize grain, Potato tuber.
- **6.** Submission of economically important plants (herbarium specimen) [at least four].
- **7. Laboratory Records:** Student must get the laboratory note books duly signed by the respective teacher during practical classes.
- **8.** *Viva voce*: Questions based on theory (paper 11 & 12A) and practical (paper 12B) syllabus of fifth semester.

#### **SEMESTER-VI**

# Paper-13 (Theory)

# Total Mark = 100 (IA = 20 + ESE = 80) Credit = 04

# **Unit-I (Plant Breeding)**

- 1. Aims of plant breeding.
- 2. Breeding methods: Plant introduction Process, merits and demerits, Acclimatization.
- 3. Plant domestication Changes in plants under domestication and loss of genetic diversity.
- 4. Mass selection, Pureline selection, Clonal selection.
- 5. Hybridization (different steps) & Production of synthetic variety.
- 6. Heterosis (definition, genetic and biochemical basis, importance in plant breeding) & Inbreeding depression.
- 7. Polyploidy Types, Artificial induction of polyploidy, Effects of polyploidy on crop species, Role of polyploidy in plant breeding.

# **Unit-II (Biometry)**

- 1. Presentation of statistical data Concept of variable and attribute, Primary and Secondary data, Population and Sample.
- 2. Frequency and frequency distribution.
- 3. Graphical presentation of data Bar diagram & Histogram, Pie chart.
- 4. Measures of central tendency (AM, Mode, Median).
- 5. Measures of dispersion (Mean deviation, SD, SE).
- 6. Test of significance Null hypothesis and Alternate hypothesis, Degree of Freedom, Level of Significance, Student t-test, chi square test for Goodness of fit.
- 7. Simple Correlation and Coefficient correlation (r).
- 8. Definition of probability, Addition and Multiplication rule.

# **Unit-III (Horticultural Practices)**

- 1. Green house general construction and types.
- 2. Soilless plant culture water culture (hydroponic culture) and substrate culture, Nutrient Film Technique (NFT).
- 3. Seed propagation Seed structure and types, seed formation, germination types of seed, advantage & disadvantage of seed propagation, Direct and indirect seeding advantages and disadvantages.
- 4. Seed production and certification process, Nuclear seed, Breeder seed, Foundation seed, Registered seed, Certified seed.
- 5. Asexual (vegetative) propagation advantages and disadvantages.
- 6. Natural vegetative propagation (Bulbs, Corms, Tubers, Suckers, Rhizomes, Stolons).
- 7. Artificial vegetative propagation Cutting (Stem cutting softwood cutting, semi-hardwood cutting, hardwood cutting, Herbaceous cutting; Leaf cutting, Root cutting), Factors affecting rooting in cutting.
- 8. Artificial vegetative propagation Grafting (Root stock, Scion, Inter stock, Detached scion grafting & Approach grafting), Healing of graft junction, Graft incompatibility causes and method of overcoming.

- 9. Artificial vegetative propagation Budding (T budding, Patch budding, Chip budding)
- 10. Artificial vegetative propagation Layering (Tip layering, Simple layering, Trench layering, Serpentine layering, Air layering, Mould layering)

# **Unit-IV** (Floriculture & Gardening)

- 1. Definition of Floriculture and importance & scope of Floriculture in India.
- 2. Ornamental plants Flowering annuals, Herbaceous perennials, Divine vines, Shade trees, Ornamental trees, Ornamental bulbous plants, Ornamental foliage plants, Cacti & Succulents, Palms, Cycads & Ferns (Definition and three examples each from all the types).
- **3.** Traditional flower & Cut flower (definition & example).
- **4.** Important floricultural crops.
- **5.** Factors affecting flower production (Quality of seed & planting material, Water, Soil, Temperature, Light, Nutrients, Diseases & pests).
- **6.** Open cultivation practice of floricultural crops.
- 7. Production and packaging of cut flowers.
- **8.** Cultivation of important cut flowers Chrysanthemum, Tuberose & Marigold.
- **9.** Brief concept of Bio-aesthetic planning.
- **10.** Concept of Landscape gardening and definitions of Formal garden, Informal garden, Wild garden.
- 11. Concept of landscaping of cities and Educational institutions.

# Paper-14A (Theory)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

## **Unit-I (Pharmacognosy)**

- 1. A brief idea on ancient Indian knowledge of Botany and medicinal plants.
- **2.** Definition of Pharmacognosy & Pharmacology.
- **3.** Crude drug & Commercial drug.
- **4.** Classification of drugs Morphological, Chemical, & Pharmacological.
- **5.** Preparation of crude drug for commercial market.
- **6.** Drug adulteration (types).
- 7. Evaluation of drugs Physical, Chemical, Organoleptic & Microscopical.
- **8.** Anatomical characters, active principles and pharmacological effects Leaf of *Adhatoda*, Rhizome of *Zingiber*, Bark of *Alstonia*, Tuber of *Dioscoria sp*.
- 9. Source, active constituents, and pharmacological uses of some common plants Datura, Catharanthus, Cassia, Aloe, Asparagus, Centella, Andrographis, Mentha, Ocimum, Ipomoea, Ricinus, Terminalia belerica, Terminalia chebula

# **Unit-II (Ethnobotany)**

- 1. Definition, scope, objective and applications of Ethnobotany.
- 2. Methods of ethnobotanical studies Field work, Herbarium, Ancient literature, Archaeological findings, Temples & sacred places.
- **3.** Role of ethnic groups in the conservation of plant genetic resources.
- **4.** Study of ethnobotanical plants of Tripura: Local name, Family, Brief description, Parts used, Ethnobotanical uses of
  - i) **Food plants** Vigna unguiculata, Luffa cylindrical, Solanum violaceum, Solanum torvum, Canavalia gladiata, Parkia timoriana, Homalomena aromatic, Cajanas cajan.
  - ii) **Medicinal plants** Hellenia speciosa, Andrographis paniculata, Oroxylum indicum, Holarrhena pubescens, Aristolochia tagala, Achyranthes aspera.

# Paper-14B (Practical)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

Sl. No	Practicals	Marks
1.	Analysis of statistical data	10
2.	Demonstration of T-Budding / Air layering	06
3.	Study of powdered drugs	10
	OR	
	Determination of stomatal index from leaf	
4.	Study report on ethnobotanically important plants	06
5.	Laboratory Note book	04
5.	Viva voce	04
	TOTAL	40

- 1. Statistical Data Analysis: Mean, Mode, Median, SD, SE, t-test.
- **2.** Demonstration of T-Budding / Air layering.
- **3.** Organoleptic and microscopic study of powdered drugs Leaf of *Adhatoda*, Rhizome of *Zingiber*, Bark of *Alstonia*, Tuber of *Dioscoria sp*.
- **4.** Determination of leaf constant stomatal index from leaf of *Adhatoda*.
- **5.** Self study of six (06) ethnobotanically important food / medicinal plants of the locality the study should include common name, scientific name, family, habitat, growing season, morphology (along with photograph / free hand drawing), flowering season, part used, uses etc. and the duly signed study report must be submitted during practical exam.
- **6.** Laboratory Records: Student must get the laboratory note books duly signed by the respective teacher during practical classes.
- **7.** *Viva voce*: Questions based on theory (paper 13 & 14A) and practical (paper 14B) syllabus of fifth semester.

# Paper-15 (Theory)

# Total Mark = 100 (IA = 20 + ESE = 80) Credit = 04

## **Unit-I (Industrial & Applied Microbiology-I)**

- **1.** Fermentations Solid-state and Liquid-state (stationary and submerged) fermentations, Batch and continuous fermentations.
- **2.** Components of a typical bioreactor, Types of bioreactors- Stirred tank fermenter, Tower fermenter, Fixed bed and Fluidized bed bioreactors, Bubble Column fermenter, and Air-lift fermenter.
- **3.** Microbial production of industrial products Criteria for selection of microorganisms for industrial use.
- **4.** Microbial sources and uses of Enzyme (Amylase, Protease), Amino acid (Glutamic acid, Lysine), Polysaccharides (Dextran).
- **5.** Microbial enzymes of industrial interest Enzyme immobilization (concept, process and advantages).

# **Unit-II (Industrial & Applied Microbiology-II)**

- 1. Vaccine (definition) & its types.
- 2. Use of microbes as Biofertilizer Production of Rhizobium biofertilizer.
- **3.** Production and use of yeasts.
- **4.** Use of microbes as Biopesticides (microbial biopesticides).
- **5.** Use of microbes in mineral processing (microbial leaching).
- **6.** Microbial waste water treatment and Bioremediation of contaminated soils.
- 7. Microbial biosensors.

#### **Unit-III (Algal Biotechnology)**

- 1. Algae as food (foods from macro algae Nori, Wakame, Kombu).
- **2.** Algae as a source of SCP and cultivation of *Spirulina*.
- **3.** Large scale production of algal biomass Open system & Photobioreactor, Harvesting of algal biomass (dewatering) Flocculation, Electrolysis, Gravity sedimentation, Magnetic separation, Filtration, Evaporation.
- **4.** Algae as source of phycocolloid source & use of Agar-agar, Algin, Carrageenan.
- 5. Algal Biotechnology  $\beta$ -carotene, Biodiesel, Bioethanol, and Bio plastics from algae.
- 6. Diatomite & its use.
- 7. Algal toxins.

# **Unit-IV (Applied Mycology)**

- 1. Cheese and Ethanol- industrial production.
- **2.** Nutritional value and cultivation of *Volvariella volvacea*, *Pleurotus sp*, and *Agaricus bisporus*.
- **3.** Fungal sources and uses of enzyme (Cellulase), amino acid (Tryptophan), vitamin (Riboflavin) and pharmaceuticals (Cyclosporine-A).
- 4. Industrial production of Penicillin.
- 5. Industrial production of Citric acid.
- **6.** Mycotoxins source and effects.
- 7. Mycofungicides, Mycoherbicides, Mycoinsecticides.

# Paper 16A (Theory)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

## **Unit-I (Palynology)**

- 1. Pollen wall structure in Angiosperms and Difference between angiosperm & gymnosperm pollen wall.
- 2. Sporopollenin Definition, chemical nature and function.
- 3. NPC classification (Erdtman, 1969) of pollen based on aperture number, position and characters.
- 4. Types of sculpturing of pollen surface (Psilate, Clavate, Reticulate, Scabrate, Echinate, Baculate, Verrucate, Rugulate, Foveolate, Gemmate, Striate & Frustillate).
- 5. Pollen viability Definition, Causes of loss of pollen viability, Factors affecting pollen viability.
- 6. Application of Palynology.
- 7. Paleo-palynology –Application in Stratiography, Paleoclimate & Hydrocarbon exploration.

# **Unit-II (Biodiversity & its Conservation)**

- 1. Definition, Levels of Biodiversity Genetic diversity, species diversity & Ecosystem diversity.
- 2. Values and uses of Biodiversity.
- 3. Agrobiodiversity (definition and concept).
- 4. Causes of biodiversity loss Loss of Genetic diversity, Loss of Species diversity, Loss of Ecosystem diversity, Loss of Agrobiodiversity.
- 5. Conservation strategies (in situ and ex situ).
- 6. Social approaches to conservation.
- 7. Cryopreservation (brief idea).
- 8. Biodiversity Hotspots & Mega diversity countries.
- 9. IUCN, Red data Book.

# Paper-16B (Practical)

# Total Mark = 50 (IA = 10 + ESE = 40) Credit = 02

Sl. No	Practicals	Marks
1.	Study of pollen sterility & fertility	08
	OR	
	Study of in vitro pollen germination	
2.	Study of Plant community parameters (Frequency, Density,	08
	Abundance & Relative abundance) from vegetation map by	
	Quadrate method [any two]	
3.	Study of amylase activity by starch-iodine method	08
	OR	
	Gram staining of Rhizobium from root nodule of leguminous	
	plants.	
4.	Submission of report on visit to local mushroom cultivation	08
	laboratory / unit	
5.	Laboratory Note book	04
6.	Viva voce	04
	TOTAL	40

- 1. Study of pollen sterility & fertility by acetocarmine staining.
- 2. Study of in vitro pollen germination.
- 3. Study of amylase activity by starch-iodine method.
- **4.** Gram staining of *Rhizobium* from root nodule of leguminous plants.
- **5. Study of Plant community parameters** (Frequency, Density, Abundance & Relative abundance) from vegetation map by Quadrate method.
- **6.** Self visit to local mushroom cultivation laboratory / unit and duly signed report with geo-tagged photographs should be submitted during practical exam.
- **7. Laboratory Records:** Student must get the laboratory note books duly signed by the respective teacher during practical classes.
- **8.** *Viva voce*: Questions based on theory (paper 15 & 16A) and practical (paper 14B) syllabus of fifth semester.



# Tripura University (A Central University)

# Course Structure of Botany (UG Programme) As per NEP-2020 under Tripura University

# **BOTANY GENERAL (MINOR)**

Year	Semester	Paper	Credit	Total marks	Unit-I	Unit-II	Unit-III
1 <sup>st</sup>	1 <sup>st</sup>	Paper – 1A Theory	3	75 (IA=15 + ESE=60)	Microbiology	Algae	Fungi
		Paper-1B Practical	1	25 (IA=05 + ESE=20)	Bas	ased on theory paper 1A	
	2 <sup>nd</sup>	Paper-2A Theory	3	75 (IA=15 + ESE=60)	Bryophyta	Pteridophyta	Gymnosperm & Paleobotany
		Paper-2B Practicals	1	25 (IA=05 + ESE=20)	Bas	ed on theory paper	: 2A
2 <sup>nd</sup>	3 <sup>rd</sup>	Paper-3A Theory	3	75 (IA=15 + ESE=60)	Phytopatholog y	Morphology & Embryology	Plant Anatomy
		Paper 3B Practicals	1	25 (IA=05 + ESE=20)	Bas	ed on theory paper	: 3A
	4 <sup>th</sup>	Paper-4A Theory	3	75 (IA=15 + ESE=60)	Taxonomy	Ecology	Phytogeograph y
		Paper 4B Practicals	1	25 (IA=05 + ESE=20)	Bas	Based on theory paper 4A	
3 <sup>rd</sup>	5 <sup>th</sup>	Paper-5A Theory	3	75 (IA=15 + ESE=60)	Biochemistry	Plant Physiology	Evolution
		Paper 5B Practicals	1	25 (IA=05 + ESE=20)	Bas	ed on theory paper	- 5A
	6 <sup>th</sup>	Paper-6A Theory	3	75 (IA=15 + ESE=60)	Cell Biology	Molecular Biology	Genetics
		Paper 6B Practicals	1	25 (IA=05 + ESE=20)	Based on theory paper 6A		6A
4 <sup>th</sup>	7 <sup>th</sup>	Paper-7A Theory	3	75 (IA=15 + ESE=60)	Biometry	Plant Breeding	Economic Botany
		Paper 7B Practicals	1	25 (IA=05 + ESE=20)	Based on theory paper 7A		
	8 <sup>th</sup>	Paper-8A Theory	3	75 (IA=15 + ESE=60)	Plant Biotechnology	Pharmacognos y	Biodiversity & Sustainable development
		Paper-8B Practicals	1	25 (IA=05 + ESE=20)	Bas	Based on theory paper 8A	

# DETAILED COURSE CONTENT OF BOTANY GENERAL (MINOR)

## 1<sup>st</sup> YEAR

# Semester-I 1st Paper-BOT E1A (Theoretical) Full marks-75 (Internal assessment-15; End Sem. Exam.-60)

# **Unit-1: Microbiology**

- 1. Virus: General properties of plant virus and Bacteriophage, Structure of DNA virus (T4 phage); Lytic and lysogenic cycle; Structure of RNA virus (TMV).
- **2. Bacteria:** General characters of bacteria; Morphological forms, Cell structure (in detail), Bacterial reproduction- binary fission and endospore formation, Genetic recombination in bacteria (transformation, transduction and conjugation.

# **Unit-2: Phycology**

- 1. General characters of Algae Thallus organization, Pigments, Outline classification of Lee (1999) up to phylum with characters, Economic importance of algae. *Spirulina* cultivation, Salient features of Cyanophyceae, Chlorophyceae, Phaeophyceae and Rhodophyceae.
- 2. Life history of the following: *Nostoc, Oedogonium, Ectocarpus and Polysiphonia*.
- 3. Bacillariophyceae (Diatom)- Cell structure, reproduction and economic importance.

# **Unit-3: Fungi**

- 1. General characters of Fungi including fungal mode of nutrition, Classification of Fungi (Ainsworth, 1973) up to sub-division with diagnostic characters and examples; Economic importance of fungi.
- 2. General account of Phycomycetes, Ascomycetes, Basidiomycetes, & Duteromycetes.
- 3. General characters of Myxomycetes.
- 4. Life history of *Rhizopus*, *Penicillium* & Agaricus.
- 5. Mushroom production and harvesting (Volvoriella sp. and Pleurotus sp).

# **Paper-BOTE1B** (Practical)

## Full marks-25 (Internal assessment-05; End Sem. Exam.-20)

Sl. No.	Practical	Marks	
1.	Workout on Microbiology	05	
2.	Workout on Algae or Workout on Fungi	05	
3	Identification with reasons (2 x 2 marks)	4	
4.	Laboratory Note book	3	
5.	Viva voce	3	
	TOTAL		

#### **CONTENTS:**

1. Use of Simple and Compound microscope.

# 2. Work out on Microbiology:

- (a) Gram staining of bacterial population from curd.
- **(b)** Demonstration of Sterilization process.
- **3.** Work out of the following algal genera with reproductive structures (Free hand drawingonly): *Nostoc* sp., *Oedogonium* sp., *Ectocarpus* sp., *Polysiphonia* sp.

Or

**Work out of the following Fungi** with reproductive structures (Free hand drawing): *Rhizopus* sp., *Penicillium* sp., *Agaricus* sp., *Polyporus* sp.

# 4. Identifications:

- a) **Permanent slides of Algae:** *Nostoc, Volvox* colony, *Oedogonium* dwarf male,
  - *Polysiphonia* cystocarp & tetrasporophyte.
- b) **Permanent slides of Fungi:** Zygospore of *Rhizopus*, Conidiophore of *Penicillium*, T.S. of gills of *Agaricus*, T.S. of basidiocarp of *Polyporus*.
- c) Macro specimen Fruitbody of Agaricus, Polyporus.
- **5. Laboratory Records:** Student must get the laboratory note books duly signed by therespective teacher during practical classes.
- **6.** *Viva voce:* Questions based on theory and practical syllabus of 1<sup>st</sup> semester.

#### Semester-II

# 2<sup>nd</sup> Paper- BOTE2A (Theoretical) Full marks-75 (Internal assessment-15; End Sem. Exam.-60)

# Unit-1: Bryophyta

- 1. General characters including Amphibian nature; Origin of Bryophyta.
- Distinctive features of three major groups Hepaticopsida, Anthocerotopsida, & Bryopsida.
- **3.** Life history: Gametophyte structure & reproduction, development and structure of sporophyte in of *Riccia, Marchantia, Anthoceros*, and *Funaria*.

## **Unit-2: Pteridophyta:**

- **1.** General characters, Lifecycle pattern (Homosporous & Heterosporous type).
- 2. Outline classification (Sporne, 1975) up to order with examples.
- **3.** Important characters of the classes Psilophytopsida, Psilotopsida, Lycopsida, Sphenopsida, Pteropsida.
- **4.** Life history: Sporophyte structure, reproduction and structure of gametophyte of *Lycopodium*, *Selaginella*, *Equisetum*, and *Pteris*.

# **Unit-3: Gymnosperms and Paleobotany**

## **Gymnosperms:**

- i. Gymnosperms General characters.
- ii. Outline classification (Sporne, 1965) up to Order with examples.
- iii. Important characters of three classes Cycadopsida, Coniferopsida, & Gnetopsida.
- **iv.** Economic importance of Gymnosperms with reference to Wood, Resins, Essential oils, and Drugs.
- **v.** Life cycle (Morphology, anatomy and reproduction) of *Cycas, Pinus and Gnetum*.

#### Paleobotany:

- **i.** Definition of fossil, Conditions required for fossilization, Fossilization process.
- **ii.** Types of fossil (Microfossil, Mega fossil and its types on the basis of nature of fossilization); Modes of preservation (after Schopf, 1975).
- iii. Importance of fossil study.
- iv. Geological Time scale withdominant plant groups through ages.

# **Paper-BOTE2B** (Practical)

## Full marks-25 (Internal assessment-05; End Sem. Exam.-20)

Sl. No.	Practical	Marks
1.	Workout on Pteridophyta	05
2.	Workout on Gymnosperm	05
3	Identification with reasons (2 x 2 marks)	4
4.	Laboratory Note book	3
5.	Viva voce	3
	TOTAL	20

## **CONTENTS:**

#### 1. Work out on:

- **(a) Pteridophytes:** Workout on reproductive structures of the following Pteridophytes: *Lycopodium* sp., *Selaginella* sp., *Equisetum* sp., *Pteris* sp.
- **(b) Gymnosperms:** Leaflet of *Cycas* sp, Needle leaf of *Pinus* sp., Microsporophyll of *Cycas sp*.

#### 2. Identification:

- (a) Study of Bryophytes from permanent slides *Riccia* (V.S. of thallus), *Marchantia* (L.S. of: Gemma cup, antheridiophore, archegoniophore, sporophyte), *Anthoceros* (L.S. of sporophyte), *Funaria* (L.S. capsule).
- **(b) Study of macroscopic structures of Gymnosperm:** *Cycas* microsporophylls, *Cycas* megasporophyll, *Pinus* male cone, *Pinus* female cone, *Gnetum* male cone, *Gnetum* female cone.
- (c) Study of Gymnosperms from permanent slides L.S. of *Cycas* ovule, L.S. of *Pinus* male cone, L.S. of *Pinus* female cone, Pollen grains of *Pinus*, L.S. of *Gnetum* male cone, L.S. of *Gnetum* female cone/ovule.
- (d) Study from permanent slides/macroscopic fossil specimen.
- **3. Laboratory Records:** Student must get the laboratory note books duly signed by the respectiveteacher during practical classes.
- **4.** *Viva voce*: Questions based on theory and practical syllabus of 2<sup>nd</sup> semester.

# 2<sup>nd</sup> YEAR

#### **Semester-III**

# 3<sup>rd</sup> Paper-BOTE3A (Theoretical)

## Full marks-75 (Internal assessment-15; End Sem. Exam.-60)

# **Unit-1: Phytopathology**

- 1. Terms and concepts (Infection ,disease, Pathogen, Pathogenecity, Pathogenesis, Incubation period, Symptom, Necrotroph, , Inoculum, Inoculum potential, Causal complex, Disease cycle, Endemic disease, Epidemic disease, Sporadic disease);Koch's postulates, Types of symptoms (Necrotic, Atrophic, Hypertrophic); Plant quarantine.
- 2. Symptoms, Casual organisms, Disease cycle and Control measures of the following diseases: Late blight of Potato, Brown sport of Rice, Black stem rust of Wheat

# Unit 2: Morphology and embryology

- **1.** Root- Types and modification.
- **2.** Leaf Types, Shape of lamina, Apex, Margin, Phyllotaxy, Venation, Stipule types.
- **3.** Inflorescence types with examples.
- **4.** Flower Flower types, Floral parts- Calyx (types & modifications), Corolla (types & forms), Aestivation; Stamens (types, cohesion and adhesion); Carpel (Apocarpous and Syncarpous), Ovary (types), Style (types) Placentation types.
- **5.** Fruits-types.
- **6.** Seed types and their dispersal.
- 7. Microsporogenesis, Megasporogenesis (types monosporic, bisporic & tetrasporic).
- 8. Process of double fertilization.
- **9.** Embryo development (dicot & monocot type),
- **10.** Endosperm development Nuclear, Cellular & Hellobial types.

## **Unit-3: Plant Anatomy**

- 1. Cell wall (Chemical composition & Gross structure).
- 2. Meristematic tissue: General characters & Classification.
- 3. Permanent tissue (structure, distribution and function).
- 4. Cell types of Xylem and Phloem, Vascular bundles Types; Stele Types.
- 5. General anatomical characters of monocot stem and root, Dicot stem and root, Dorsiventral and isobilateral leaf.
- 6. Normal secondary growth in dicot stem and root.

# **Paper-BOTE3B** (Practical)

# Full marks-25 (Internal assessment-05; End Sem. Exam.-20)

	Practical	Marks
Sl. No.		
1.	Workout on Anatomy	06
2.	Identification with reasons (4 x 2 marks)	08
3.	Laboratory Note book	03
4.	Viva voce	03
	TOTAL	20

#### **CONTENTS:**

1. Work out on Plant Anatomy: Study of Primary structures by preparing temporary slides of the following: Monocot stem: T. S. of Canna scape / T. S. of Maize stem, Dicot stem: T. S. of Cucurbita stem / T. S. of Sunflower stem, Monocot root: T. S. of Arum root / T. S. of Orchid root, Dicot root: T. S. of Pisum root, Dorsiventral leaf: T. S. of Mango leaf, Isobilateral leaf: T. S. of Bamboo leaf / T. S. of Phoenix leaf.

## 2. Identification:

**Types of placentation:** Study of different types of placentation.

**Types of fruits:** Study from fresh or preserved specimens.

Minor anatomy: Types of Stomata, Cystolith, Raphides, Starch grains.

**Pathological specimens** (fresh or preserved): Name of the disease, Name of Pathogen, symptoms, Identifying characters of – Late blight of Potato, Brown sport of Rice, Black stem rust of Wheat.

- **3. Laboratory Records:** Student must get the laboratory note books duly signed by therespective teacher during practical classes.
- **4.** *Viva voce*: Questions based on theory and practical syllabus of 2<sup>nd</sup> semester.

#### **Semester-IV**

# 4<sup>th</sup> Paper- BOTE4A (Theoretical)

## Full marks-75(Internal assessment-15; End Sem. Exam.-60)

#### **Unit 1: Plant Taxonomy**

- **1.** Components of Plant taxonomy (identification, nomenclature, classification).
- 2. Elementary knowledge of ICN- Principles.
- **3.** Herbaria and Botanical Gardens their role in teaching and research & important Herbaria and Botanical Gardens of India and world (3 each).
- **4.** History of Plant classification: Artificial (Linnaeus), Natural (Bentham & Hooker) and Phylogenetic (Hutchinson).
- **5.** Study of the following families: Poaceae, Orchidaceae, Magnoliaceae, Leguminosae (with sub- families Caesalpiniaceae, Mimosaceae, Papilionaceae), Cucurbitaceae, Brassicaceae, Solanaceae, Apocynaceae, Lamiaceae, Rubiaceae and Asteraceae.

# **Unit-2: Plant Ecology**

- 1. Soil- Origin, Formation, Composition, Physical and Chemical properties, Soil types; Water Typesof soil water.
- 2. Basic ecological concepts (Trophic levels, Food chain, Food web, Ecological pyramids, Energy flow, Production and Productivity).
- 3. Habitat and Ecological niche.
- 4. Succession Hydrosere and Xerosere.
- 5. Adaptations of Hydrophytes , Xerophytes and Halophytes.
- 6. Biogeochemical cycles Cycling of Carbon and Nitrogen.
- 7. Endemism; Red Data book.

# **Unit-3: Phytogeography:**

- 1. Phytogeographical regions of India (D. Chatterjee, 1960),
- 2. Vegetations of Eastern Himalaya, Western Himalaya, Sunderban, and Tripura.
- 3. Endemism Definition, types, theories of endemism & factors responsible for endemism.

# **Paper-BOTE4B** (Practical)

# Full marks-25 (Internal assessment-05; End Sem. Exam.-20)

Sl. No.	Practical	Marks
1.	Workout on Angiospermic plant	06
2.	Workout on Ecological anatomy	04
3	Spot identification of plants (2 x 1marks)	02
4.	Submission of Herbarium sheets	02
5.	Laboratory Note book	03
6.	Viva voce	03
	TOTAL	20

## **CONTENTS:**

- 1. Workout on Angiospermic plants: Flower dissection, diagram of plant parts, floral diagram, description of plant, floral formula, identification of the family from the families included in thetheory syllabus.
- **2. Study of Ecological anatomy:** Hydrophytes (*Hydrilla* stem, *Nymphaea* petiole), Xerophytes (*Nerium* leaf).
- **3. Spot identification:** Scientific names of common wild plants from the families included in theory syllabus.
- **4. Submission of Herbarium sheets:** At least 15 herbarium sheets must be submitted.
- **5. Laboratory Records:** Student must get the laboratory note books duly signed by the respectiveteacher during practical classes.
- **6.** *Viva voce*: Questions based on theory and practical syllabus of 4<sup>th</sup> semester.

# 3<sup>rd</sup> YEAR

#### Semester-V

# 5<sup>th</sup> Paper- BOTE5A (Theoretical)

## Full marks-75 (Internal assessment-15; End Sem. Exam.-60)

## **Unit-1: Biochemistry:**

- 1. Water molecule general properties.
- **2.** Carbohydrates Classification with example.
- **3.** Lipids Classification with example & function.
- **4.** Proteins Levels of protein structure, Classification of proteins with example and biological roles.
- **5.** Nucleic acids Types of DNA and RNA; Enzymes: General properties and classification with examples.

## **Unit-2: Plant Physiology**

- 1. Water potential and its components and their relation, Osmosis, Plasmolysis.
- 2. Water absorption by roots (Apoplastic and Symplastic pathways), Ascent of sap Cohesion-tension theory.
- 3. Transpiration and antitranspirant.
- 4. Photosynthesis: Structure of PSI and PSII, Photosynthetic electron transport (Cyclic & non-cyclic), C3 cycle, C4 cycle, CAM cycle.
- 5. Glycolysis, Oxidative decarboxylation, TCA cycle, Mitochondrial electron transport, Oxidative Phosphorylation and ATPsynthesis.
- 6. Photorespiration; Photoperiodism: Photoperiodic responses and classification of plants.
- 7. Source, physiological role and mode of action of IAA, Gibberellins and Cytokinins.
- 8. Nitrogen metabolism: Biological N<sub>2</sub> fixation (nodule formation, role of Nitrogenase and leg hemoglobin), function of *nif* and *nod* genes.

# **Unit-3: Evolution**

- 1. Origin of life.
- 2. Biological species concept, Modes of speciation (Allopatric, Peripatric, Parapatric, & Sympatric); Natural selection Definition and types (Directional, Stabilizing, Disruptive).
- 3. Macro and Micro evolution (definition).
- 4. Darwinism and its limitations, Neo Darwinism (only brief idea).

# **Paper-BOTE5B** (Practical)

# Full marks-25 (Internal assessment-05; End Sem. Exam.-20)

Sl. No	Practical	Mark
1.	Detection of Biochemical compound from unknown sample.	04
2.	Plant Physiology experiment	10
3.	Laboratory Note book	03
4.	Viva voce	03
	TOTAL	20

#### **CONTENTS:**

- 1. Biochemical compound detection:
  - (a) Detection of the nature of carbohydrate: Glucose, Fructose, Sucrose & Starch.
  - **(b) Detection of organic acids:** Oxalic acid, Tartaric acid, Citric acid.

# 2. Plant Physiological experiments:

- i. Comparison of imbibitions of water by Starchy, Proteinaceous and Fatty seeds.
- ii. Comparison of water loss in dorsiventral leaf by Cobalt Chloride method.
- iii. Relationship between transpiration and evaporation.
- iv. Separation of Chlorophyll pigments by paper chromatography.
- v. Determination of released oxygen during photosynthesis (ml/gm/hr).
- vi. Measurement of oxygen uptake by respiring tissue (per gram/hour).
- **3. Laboratory Records:** Student must get the laboratory note books duly signed by therespective teacher during practical classes.
- **4.** *Viva voce*: Questions based on theory and practical syllabus of 5<sup>th</sup> semester.

#### **Semester-VI**

# 6<sup>th</sup> Paper- BOTE6A (Theoretical)

## Full marks-75 (Internal assessment-15; End Sem. Exam.-60)

# **Unit-1: Cell biology:**

- 1. Composition and structure of Plasma membrane.
- Structural organization and functions of Mitochondria, Chloroplast, Endoplasmic reticulum, Ribosome, Semiautonomous nature of Mitochondria and Chloroplast.
- 3. Structure of Nucleus; Chromosome morphology and organization of eukaryotic chromosome (Nucleosome concept), Euchromatin and Heterochromatin, Telomere & Centromere.
- 4. Cell cycle Various phases & events (G1, S, G2, M), Cell division- Stages of Mitosis & Meiosis.

## **Unit-2: Molecular biology:**

- 1. Nucleoside and Nucleotide, DNA structure (Watson & Crick model).
- 2. Central Dogma of molecular biology.
- 3. DNA replication General properties & DNA replication mechanism in prokaryotes.
- 4. Transcription- Initiation, Elongation and Termination in prokaryotes.
- 5. Genetic code- Properties.
- 6. Translation in prokaryotes.
- 7. Regulation of Gene expression in Prokaryotes Operon model (general concept), mechanism of lac-operon.
- 8. Gene mutation- Base substitution (Transition & Transversion) and Frame shift mutation.

#### **Unit-3: Genetics**

- 1. Mendelian genetics-Principles of segregation and independent assortment; Concept of Dominance, Incomplete dominance, Codominance.
- 2. Gene interactions with modified dihybrid ratios (12:3:1, 9:7, 9:3:4, 9:6:1, 13:3, 15:1).
- 3. Definition of Penetrance, Expressivity, Pleotropism, Phenocopy effect.
- 4. Linkage (definition of complete, incomplete, coupling phase and repulsion phase linkage, linkage group) and Crossing over.
- 5. Chromosomal aberration- Numerical changes (aneuploidy and euploidy), Polyploidy types, Structural changes (definition and types of deletion, duplication, inversion and translocation).

# **Paper-BOTE6B** (Practical)

# Full marks-25(Internal assessment-05; End Sem. Exam.-20)

Sl. No	Practical	Mark
1.	Work out on Mitotic stages	08
2.	Identification with reasons (3 x 2)	06
3.	Laboratory Note book	03
4.	Viva voce	03
	TOTAL	20

## **CONTENTS:**

- **1. Work out on Mitotic study:** Temporary preparation of mitotic stages from directly fixedroot tips of *Allium cepa*.
- **2. Identification:** Study of different stages of Mitosis and Meiosis (Normal and /or Abnormal)from permanent slides.
- **3. Laboratory Records:** Student must get the laboratory note books duly signed by therespective teacher during practical classes.
- **4.** *Viva voce*: Questions based on theory and practical syllabus of sixth semester.

# 4<sup>th</sup> YEAR

### **Semester-VII**

# 7<sup>th</sup> Paper- BOTE7A (Theoretical)

## Full marks-75 (Internal assessment-15; End Sem. Exam.-60)

# **Unit-1: Biometry:**

- 1. Presentation of statistical data Concept of variable and attribute, Primary and Secondary data, Population and Sample, Frequency and frequency distribution, Graphical presentation of data Bar diagram & Histogram, Pie chart.
- 2. Measures of central tendency (Mean, Mode, Median).
- 3. Measures of dispersion (Mean deviation, SD, SE).
- 4. Test of significance Null hypothesis and Alternate hypothesis, Degree of Freedom, Level of Significance, Student t-test, chi square test for Goodness of fit.

# **Unit-2: Plant Breeding**

- 1. Aims of plant breeding.
- 2. Methods of plant breeding: Plant introduction, Acclimatization, Plant domestication.
- 3. Selection-Mass selection, Pureline selection, Clonal selection.
- 4. Hybridization (different steps) & Production of synthetic variety.
- 5. Heterosis (definition, genetic and biochemical basis, importance in plant breeding) & Inbreeding depression.
- 6. Male sterility (definition, types, importance in plant breeding).

# **Unit-3: Economic Botany**

- Scientific name, family, part used, and uses of following plants: Cereal Rice, Wheat; Pulses Gram, Moong and Lens; Beverages Tea and Coffee; Fruits Mango, Citrus and Papaya; Drug yielding –Cinchona, Rauwolfia, Digitalis, Papaver, Andrographis; Spices Ginger, Cumin and Clove; Oil yielding Mustard, Groundnut, Coconut and Linseed; Vegetables Potato, Radish and Cabbage; Fibre yielding Cotton and Jute; Timber yielding Teak and Sal; Sugar yielding Sugarcane.
- 2. Rice cultivation- Conventional method & SRI system.
- **3.** Jute Cultivation and processing.
- **4.** Tea cultivation and processing (orthodox & CTC methods)

# **Paper-BOTE7B** (Practical)

# Full marks-25 (Internal assessment-05; End Sem. Exam.-20)

Sl. No	Practical	Mark
1.	Testing goodness of fit of modified di-hybrid ratios (12:3:1, 9:7, 9:3:4, 9:6:1, 13:3, 15:1)	08
2.	Study of economically important plants (Scientific name, Family, Economically important part, and Uses) as per theory syllabus (2 x 3 marks)	06
3.	Laboratory Note book	03
4.	Viva voce	03
	TOTAL	20

# **CONTENTS:**

- **1. Biometry:** Determination of goodness of fit (chi square test) of modified dihybrid ratios(12:3:1, 9:7, 9:3:4, 9:6:1, 13:3, 15:1).
- **2. Study of economically important plants** (Scientific name, Family, Economicallyimportant part, and Uses of the prescribed syllabus).
- **3. Laboratory Records:** Student must get the laboratory note books duly signed by therespective teacher during practical classes.
- **4.** *Viva voce*: Questions based on theory and practical syllabus of seventh semester.

# Semester-VIII 8<sup>th</sup> Paper- BOTE8A (Theoretical)

## Full marks-75 (Internal assessment-15; End Sem. Exam.-60)

# **Unit-1: Plant Biotechnology**

- 1. Totipotency and concept of plant tissue culture.
- 2. Function and organization of a typical plant tissue culture laboratory.
- 3. Composition of plant tissue culture medium.
- 4. Techniques of plant tissue culture: Callus culture, Cell suspension culture technique, Haploid culture and embryo culture.
- 5. Definition of micropropagation and importance.
- 6. Definition of Recombinant DNA technology.
- 7. Enzymes in DNA cloning Restriction endonuclease (Type I and II).
- 8. Definition of cDNA library and Genomic library.
- 9. Criteria for good Vector, Brief concept of cloning Vectors (plasmid, lambda phage, YAC).
- 10. Production of transgenic plant: Agrobacterium mediated gene transfer.

# **Unit-2: Pharmacognosy**

- 1. Definition of Pharmacognosy & Pharmacology, Crude drug & Commercial drug.
- 2. Classification of drugs Morphological, Chemical, & Pharmacological.
- 3. Preparation of crude drug for commercial market.
- 4. Drug adulteration (types).
- 5. Evaluation of drugs Physical, Chemical, Organoleptic & Microscopical.
- 6. Anatomical characters, active principles and pharmacological effects Leaf of *Adhatoda*, Rhizome of *Zingiber*, Bark of *Alstonia*, Tuber of *Dioscoria sp*.

## **Unit-3: Biodiversity & Sustainable development**

- 1. Definition, Levels of Biodiversity Genetic diversity, species diversity & Ecosystem diversity.
- 2. Values and uses of Biodiversity.
- 3. Agro-biodiversity (definition and concept).
- 4. Causes of biodiversity loss Loss of Genetic diversity, Loss of Species diversity, Loss of Ecosystem diversity, Loss of Agro-biodiversity.
- 5. Definition & concept of Sustainable Development, Goals of sustainable development.
- 6. Organic farming (principle, advantages, & disadvantages), Bio fertilizers (definition, examples & importance), Biofuels (concept, example, sources & importance).

# Paper-BOTE8B (Practical)

# Full marks-25 (Internal assessment-05; End Sem. Exam.-20)

Sl. No	Practical	Mark
1.	Demonstration on aseptic explant preparation (from shoot tip and	06
	nodes) and aseptic inoculation of explants.	
2.	Study of powdered drugs	08
3.	Laboratory Note book	03
4.	Viva voce	03
	TOTAL	20

## **CONTENTS:**

- 1. Demonstration on functioning of Autoclave, pH meter, Laminar Air Flow.
- 2. Demonstration on sterilization technique.
- **3.** Demonstration of aseptic inoculation technique.
- **4.** Organoleptic and microscopic study of powdered drugs Leaf of *Adhatoda*, Rhizome of *Zingiber*, Bark of *Alstonia*, Tuber of *Dioscoria sp*.
- **5. Laboratory Records:** Student must get the laboratory note books duly signed by therespective teacher during practical classes.
- **6.** *Viva voce*: Questions based on theory and practical syllabus of 8<sup>th</sup> semester.

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# NEP 2020 UG Programme Tripura University NCC MINOR

Semester-II

# **Course Title: National Cadet Corps (NCC)-II**

Full marks-60 (Internal assessment-24 + End Sem. Exam.-36) Credit = 4

Course Title: National Cadet Corps II					
Course Code	BNCC02GE02	Credits	2(Thr)+ 2(Pr)=04		
L /T + P	15+30	Course Duration	1 Semester		
Semester	II (Even)	Contact Hours	15(Thr)+30(Pr)=45Hours		
Methods of Content Interaction	Lecture, Tutorials, Group discussion, Collaborative work, self-study, Seminar presentations by students, individual and group drills, group and individual field-based assignments, Educational Excursion				
Assessment and Evaluation	As per the Univers	sity norms.			

# Paper - 2A (Theoretical) Credit=2

#### **COURSE OBJECTIVES:** On completion of the course the student will be able to:

- Understand the thinking & reasoning process.
- Understand the process to cope with Stress & emotions.
- Understand the importance of improving communication skills.
- Identify the leadership traits.
- Admire the qualities of great leaders.
- Know about different legal provisions for children & women safety and protection.
- Understand the various rules & measures to be taken to ensure Road/Rail safety.
- Understand & spread awareness about latest Government initiatives for welfare of citizens and contribute towards Nation building.
- Understand concepts of cyber and mobile security.

#### **EXPECTED LEARNING OUTCOMES:** After completing this course, the cadets will be able to: -

- Define thinking, reasoning, critical thinking and creative thinking.
- To think critically about different life related issues.
- Think divergently and will try to break functional fixedness.
- Creatively in their real-life problems.
- Understand the organizations related to disaster management and their functioning.
- Appreciate the role of NCC cadets in disaster management.

#### (Theory)

#### **Unit 1. Personality Development:**

- Thinking- Meaning and Concept of thinking, Reasoning, Process of thinking.
- Critical Thinking- Meaning & concept of critical thinking, Features of critical thinking, Process of critical thinking.
- Creative thinking- Meaning & concept of creative thinking, Features of creative thinking, Process of creative thinking, levels of Creativity, Characteristics of creative person.

- Group Discussions Change your Mindset
- Public Speaking.

# **Unit 2. Leadership Development:**

- Leadership capsule.
- Important Leadership traits, Indicators of leadership and evaluation.
- Motivation- Meaning & concept, Types of motivation. Factors affecting motivation.
- Ethics and Honor codes.

# **Unit-3. Social Service and Community Development:**

- Protection of Children & Women Safety.
- Road/Rail Safety.
- New Government Initiatives.
- Cyber and mobile Security Awareness.

## **Unit-4: Border and Coastal Areas**

- Types of Borders
- Historical borders
- History of Costal Areas
- Various wars fought to protect its borders
- Geography and topography of Border Areas
- Geography of Costal India

## Part- 2: Practical

Paper – 2B (Practical)

Full marks-40 (Internal assessment-16 + End Sem. Exam.-24) Credit = 2

Sl. No.	<u>Practical</u>	<u>Marks</u>
1.	Drill	05
2.	Weapon Training	05
3.	Map Reading	05
4.	Field Craft & Battle Craft (FC & BC)	05
5.	Social Service and Community Development (SSCD)	04
	Total	24

### COURSE OBJECTIVES: Cadets will be able to: -

- Understand that drill as the foundation for discipline and to command a group for common goal.
- Appreciate grace and dignity in the performance of foot drill.
- Understand the importance of a weapon its detailed safety precautions necessary for prevention of accidents.
- Use terrain effectively for concealment, camouflage, indicate landmarks and give field signals.

## **EXPECTED LEARNING OUTCOMES:** After completing this course, the cadets will be able to: -

- Perform foot drill gracefully.
- Give and follow the different word of command.
- Fire a weapon effectively with fair degree of marksmanship.
- Use of bearing and service protractor and locate the places and objects on the ground.
- Do the social service and feel connected with social problems.

#### (Practical)

#### Unit 1. Drill:

- Foot Drill Dahine, Baen, Aageaur Piche Kadam Lena.
- Tej Chal se Murdna, Tej Chal se Salute Karna, Tej Kadam Taal aur Tham, Tej Kadam Taal se Kadam Badalna.
- Teeno Teen se Ek File aur ek file se Teeno Teen Banana

#### **Unit 2. Weapon Training:**

• Range procedure & Theory of group.

Short Range firing.

#### **Unit 3. Map Reading:**

- Protractor Bearing and its conversion methods.
- Service protractor and its uses.
- Prismatic compass and its uses and GPS.
- Navigation by compass and GPS.

#### **Unit 4. Field Craft & Battle Craft:**

- Indications of landmarks and Targets.
- Intro, Definitions, Types of Ground, Indication of Landmarks, Methods of identifying targets, difficult targets.

#### **Suggested Readings:**

- 1. "NCC as an Elective" Book, Published by Penster Publications, Tripura, ISBN: 978-81-962122-9-2 compiled by Lt Daniel Debbarma, Associate NCC Officer (ANO).
- 2. "Cadet Hand Book" published by Directorate General of NCC, New Delhi under the Ministry of Defence, Govt. Of India.
- 3. "NCC Red Book", published by Directorate General of NCC, New Delhi under the Ministry of Defence, Govt. of India.
- 4. "PI Hand Book", published by Directorate General of NCC, New Delhi under the Ministry of Defence, Govt. of India.
- 5. "NCC Coffee Table Book", published by Directorate General of NCC, New Delhi under the Ministry of Defence, Govt. of India.

Website: NCC Directorate General, New Delhi, Website: https://indiancc.nic.in/

## NEP 2020 UG Programme Tripura University

NCC MINOR

1stYEAR Semester-I Paper-1A(Theoretical)

#### Course Title: National Cadet Corps (NCC)-I

Fullmarks-60(Internalassessment-24+EndSem. Exam.-36) Credit=4

#### Paper-1A(Theoretical)

NationalCadetCorps:CourseDetails							
CourseTitle: NationalCadetCorps-I							
CourseCode		Credits	2(Thr)+2(Pr)=04				
L/T+P	15+30	CourseDu ration	1Semester				
Semester	I (Odd)	Contact Hours	15(Thr)+30(Pr) =45Hours				
Methods of ContentInteraction	Lecture, Tutorials, Group discussion, Collaborativework,self- study,Seminar presentations by students, individual and groupdrills,groupandindividualfield-basedassignments, EducationalExcursion						
Assessment& Evaluation	AspertheUniversitynorms.						

#### **COURSEOBJECTIVES:**Oncompletionofthecoursethestudentwillbeableto:

- Knowabout thehistoryofNCC, its organization, and incentives of NCC for their career prospects.
- Acquireknowledgeofdutiesandconductof NCCcadets.
- Understandabout differentNCCcamps and their conducts.
- Understandtheconcept of national integration and its importance.
- Understandtheconcept of self-awareness and emotional intelligence.
- Understandtheconceptofcritical&creativethinking.
- Understandtheprocessofdecisionmaking&problemsolving.
- Understandtheconceptofteamanditsfunctioning.
- Understandtheconceptandimportanceofsocialservice.

#### **EXPECTEDLEARNINGOUTCOMES:** After completing this course, the cadets will be able to:-

- ImbibetheconductofNCCcadets.
- RespectthediversityofdifferentIndianculture.
- Practicetogetherness andempathyinall walks oftheirlife.
- Dotheirownself
  - analysisandwillworkouttoovercometheirweaknessforbetterperformanceinallaspectsof life.
- Understandcreativethinking&itscomponents.

- Thinkdivergentlyandwilltrytobreakfunctionalfixedness.
- Makeateamand willworktogetherforachievingthecommon goals.
- Dothesocialservicesondifferentoccasions.

#### (Theory)

#### **Unit1-General Concepts & Awareness**

#### Introduction

of NCC, History, Aims, Objective of NCC & NCC as Organization, Incentives of NCC, Duties of NCC Cadet. NCC Camps: Types & Conduct.

National Integration: Importance & Necessity, Factors Affecting National Integration, Unity in Diversity & Role of NCC in Nation Building, Threats to National Security.

#### **Unit2-Connecting with the Society**

Intra &Interpersonalskills-Self-Awareness-

&Analysis, Empathy, Critical & creative thinking, Decision making and problems olving.

Basicsofsocialserviceanditsneed, Typesofsocialserviceactivities, Objectives of rural development programs and its importance, NGO's and their contribution in social welfare, contribution of youthand NCC in Social welfare.

Paper –1B(Practical)
Fullmarks-40(Internalassessment-16+EndSem. Exam.-24) Credit=2

Sl.No.	<u>Practic</u>	<u>Mark</u>
	<u>al</u>	<u>s</u>
1.	Drill	05
2.	WeaponTraining	05
3.	MapReading	05
4.	FieldCraft &BattleCraft(FC&BC)	05
5.	SocialServiceandCommunityDevelopment (SSCD)	04
	<u>Total</u>	24

#### **COURSEOBJECTIVES:**Cadetswillbeableto:-

- Understandthatdrillasthefoundationfordisciplineandtocommandagroup forcommon goal.
- Appreciategraceanddignityintheperformanceof footdrill.
- Understandtheimportanceofaweaponitsdetailedsafetyprecautionsnecessaryforpreventionofacci dents.
- Develop awarenessaboutdifferenttypesofterrainandhowitisused inbattlecraft.
- Develop the concept of various markings on the map and how they are co-related to the ground features.
- Understandthevarious social issuesandtheirimpact onsociallife.
- Developthesenseofself-less socialserviceforbettersocial& community life

#### **EXPECTEDLEARNINGOUTCOMES:** After completing this course, the cadets will be able to:-

- Performfootdrillandfollowthedifferentwordofcommand.
- Fireaweaponeffectivelywithfairdegreeofmarksmanship.
- Undertakepointtopointnavigationandtakepartinroutemarchesbydayandnight.
- Performthesocialservices onvarious occasions forbettercommunity& sociallife.

#### (Practical)

#### **Unit 3- Drill & WeaponTraining:**

Foot Drill- Drill ki Aam Hidayaten, Word ki Command, Savdhan, Vishram, Aram Se, Murdna, Kadvar Sizing, TeenLine Banana, Khuli Line, Nikat Line, Khade Khade Salute Karna Parade Par, Visarjan, Line Tod, Tej Chal, Tham aurDhireChal,Tham.

Introduction&Characteristicsof.22rifle,Handlingof.22rifle.

#### **Unit4-Field Training and Learning**

MapReading:

Definition of Map, Conventional signs, Scale and Grid System, Topographical forms and technical terms, Relief,Contoursandgradients,Cardinalpointsandtypesof North,MagneticVariationandGridConvergence.

FieldCraft &BattleCraft (FC&BC):

IntroductionofFieldCraft&Battlecraft,JudgingDistance,Method ofJudgingDistance.

#### SocialServiceandRuralengagement(SSRE):

Cadets will participate in various activities throughout the semester e.g., Blood donation

Camp,

Swachhata
Abhiyan,ConstitutionDay,JanJeevanHariyaliAbhiyan,BetiBachaoBetiPadhaoetc.

#### **SuggestedReadings:**

- 1. "CadetHandBook" published by Directorate General of NCC, New Delhiundert he Ministry of Defence, Govt. Of India.
- 2. "NCC Red Book", published by Directorate General of NCC, New Delhi under the Ministry of Defence, Govt.of India.
- 3. "PIHandBook",publishedbyDirectorateGeneralofNCC,NewDelhiundertheM inistryofDefence,Govt.of India.
- 4. "NCCCoffeeTableBook",publishedbyDirectorateGeneralofNCC,NewDelhiu ndertheMinistryofDefence,Govt.ofIndia.

Website: NCCDirectorateGeneral, NewDelhi, Website: <a href="https://indiancc.nic.in/">https://indiancc.nic.in/</a>

Foundation of Yoga and Meditation-1

Unit-I

(Fundamentals of Yoga)

- 1.1 Yoga: Etymology, definitions, aim, objectives and misconceptions.
- 1.2 Yoga: its origin, history and development.
- 1.3 Ashtanga Yoga (Yama, Niyam, Asana, Pranayama, Pratyahara, Dharna, Dhyan, Samadhi)
- 1.4 Principles and Practices of Jiana Yoga, Bhakti Yoga, Karma Yoga

Unit-II

(Fundamentals of Meditation)

- 1.1 Introduction to Meditation
- 1.2 Basic principles of medication. Principles of Hatha Yoga.

#### Practical I

- 1. Yogasana
- 1.1 Standing Asana: Tadasana, Trikonasana, Urtihahastotanasana, Vrikshasana, Ardhchakrasna, Padhasta arana, Ashwesi hasana
- 1.2 SittingAsana, Padmasana, Vakrasana, Ardhamatsyendrasana, Janusirsasana, Paschimottanasana, Vajrasan Ushtrasana, Shasankarana, Gomukhasana, ,Mandukasana, Bhadrasana, Singhasana
- 1.3 Prone Lying Asana: Bhujangasana, Shelabhasana, Dhanurasana, Makarasana
- 1.4 Suping Lying Agains, Pawanmuktasana and its variation , setubandhasana, sarvangasana, Ardhahalasana, Uttanpadasana, nalasana, Naukasana, Cakrasana, Markatasana, Shavasana.
- 2. Yogic Sukshinavyayama, Sthulavyayama and Surya Namaskar
- 2.1 Yogic Sakehmayyarma
- 2.2 Your athur vyayana
- 2.3 Surya 11.mg × 113
- 3. Practices leading to Meditation
- 3.1 Pranav and Schamlaga
- 3.2 Yoga Nides

3.3 Chakra Meditation

3.4 AjapaDharana

3.5 Om Meditation

#### Text and References

- 1. Yogic SuksmaVyayma by Dhirendra Brahmachari
- 2. Asana Pranayama Mudra Bandha by Swami Satyananda Saraswati. Publisher: Yoga Publication Trust,

#### Munger, Bihar, India

- 3. Karma Yoga, Bhakti Yoga, Raja Yoga, Jnana Yoga by Swami Vivekananda
- 4. Yoga Sutras of Patanjali by Swami SatyanandaSaraswati. Publisher: Yoga Publication Trust, Munger,

#### Bihar, India

- 5. Hatha Yoga by Swami Sivananda. Publisher: The Divine Life Society, Uttarakhand, India
- GherandaSamhita by Swami NiranjananandaSaraswati. Publisher: Yoga Publication Trust, Munger, Bihar.

India

Physical education -1 Unit-1 Fundamentals of Physical Education: Meaning and definition of physical education. 2. Aim and objective of physical education. 3. Definition, meaning and concept of Health and Health education 4. Dimension of Helth and wellness. Unit-I Anatomy and physiclogy 1. Introduction to Cell structure and function. 2. Fundamentals of body system: Circulatory System, Respiratory System and Digestive Sysytom. 3. Meaning of Concept Posture. 4. Digastive system. Structure and function, essential food elements, carbohydrate, protein and fat, Balance diet. Unit -III Management of Physical education. 1. phase of management Planning, Organisation, Staffing, Directing, Co-ordinating, Supervision, Concept of bridget, 2. Types of turnament, Malhods of preparing fixture: Single knockot, Single League. 3. Concept of ground, court and field; track and field, Footbal, Volleyball, Basketball, badminton, kabadi, Kho-kho, Hockey, Cricket, Swimming Pool. 1. Track and field: Ranning event, Relay race, Walking, 2. Formal Activity Callisticnics, Drills and marching 3. Yagasana 4. L Standing Asana; Tadasana, Trikonasana, Urdhahastotanasana, Vrikshasana, II. Sitting Asanat Padmarana, Vakrasana, Ardhamatsyendrasana, Janusirsasana, Paschimotranamena Vajrasana Ushtrasana, Shasankasana, Gomukhasana, iii. Prono Lying Azena: Snujangasena, Shalabhasana, Dhanurasana, Makarasana iv. Suping Asana: Pawanmuktasana and its variation , setubandhasana, Agricana Urfanpadasana, Halasana, Naukasana, Cakrasana v. Yogic Sukshmat/yuyama, SchulaVyayama and Surya Namaskar Yogle Stane / yayama Surya ta muchina Essential of Physical Education. Ajmer Singh a Hearth Equestion and Wygrama Rai B C. 2. Principal of Physical Ed. cation-Kamlesh M.L.

Practical

Reference

4. Management of Sports Physical Education-

5. Adhunik Sarir Shikhya ki Itihas- P.N. Saha

# Syllabus for Under Graduate studies under NEP-2020 Value Added Course Indian Knowledge System Total- 3 Credits Total Marks-100

Unit-I 12 Hrs

**Introduction to the Vedas and Upaniṣads:** General structure of the Vedic Literature, Gurukul System of Vedic times (Aṣrama Dharma), General Introduction of Upaniṣadic Literature, Philosophical Ideas and Ethics in Upaniṣads, Rṭa, Rṇa, Puruṣārtha, Varṇa Dharma, Brahman and Ātman, Mokṣa.

Unit-II 12 Hrs

Essence of Indian Knowledge- Bhagavadgītā: Jñānayoga, Karmayoga and Bhaktiyoga, Ethics of Niskāma Karma, Law of Karma (Karma-phala) and Freedom of Will, Svadharma, Sādharana Dharma, Lokasaṃgraha, Sthitaprajña.

Unit-III 12 Hrs

Introduction to Indian Philosophical Systems, Scientific aspects of Indian Knowledge Systems: Characteristics of Indian Philosophy, Distinction between Darśana and Philosophy, Pramānas, General Introduction to Indian Philosophical systems, i.e. Orthodox and Heterodox, Glimpses of Ancient Indian Science and Technology.

Unit-IV 12 Hrs

**Introduction to Yoga and Ayurveda:** Origin and development of Patanjali Yoga, Ayurveda and its Relevance, Integrated Approach to Holistic Health Care.

#### **Suggested Readings:**

- **1.** Chakravarthy, G.N. *The Concept of Cosmic Harmony in the Rg-Veda*. Bangalore: Nagasri Book House, 2005.
- 2. Chande, M. B. *Indian Philosophy in Modern Times*. New Delhi: Atlantic Publishers, 2000.
- **3.** Chatterjee, Satish Chandra & D.M Dutta. *An Introduction to Indian Philosophy*. Kolkata: Rupa and co., 2010.
- **4.** Gambhirananda, Swami. *Bhagavad-Gita with the Commentary of Sankaracarya*. Advaita Ashrama, Kolkata, 2018.
- **5.** Gambhirananda, Swami. *Eight Upanishads: With the Commentary of Shankaracharya*. Advaita Ashrama, Kolkata, 2010.
- **6.** Panda, N. C. *Bhagavad Gita: A New Exposition in a Broader Spectrum.* New Delhi: D.K. Print world Ltd. 2009.
- **7.** Radhakrishnan, S and J. H. Muirhead (ed.), *Contemporary Indian Philosophy*. George Allen & Unwin Ltd., 1952.
- **8.** Radhakrishnan, S. *The Bhagavadgita*. USA: Harper Collins, 2011.
- 9. Radhakrishnan, S. *The Principal Upanishads*. USA: Harpercollins, 2006.
- **10.** Vivekananda, Swami. *The Complete Works of Swami Vivekananda*. Kolkata: Advaita Ashrama, 2008.
- **11.** Kapoor, Kapil, Avadesh Kr. Singh (eds.) *Indian Knowledge Systems* (Two Vols), IIAS, Shimla, 2005.
- **12.** Moore, Charles A.(ed.) *The Indian Mind: Essentials of Indian Philosophy and Culture*, University of Hawaii Press, Honolulu, 1967.

# TRIPURA UNIVERSITY UG PROGRAM AS PER NEP 2020 VERMICULTURE & VERMICOMPOSTING

# **<u>Course 1 -</u>** Fundamentals of Vermiculture and Vermicomposting (SEM 1)

#### **Unit-1: Biology of Earthworm:**

Systematic position, Basic body structure of earthworm: General body plan, Prostomium, Peristomium, Metamerism, Cuticle, Setae, Different body pores, Clitellum, Digestive system of earthworms with special emphasis to gizzard, Life cycle and reproduction.

#### **Unit-2: Earthworm Ecology:**

Distribution & Ecological categories: Epigeic, Endogeic and Anecic earthworms and their special characters, Food habit andecological niche. Ecological requirements: moisture, temperature, pH,organic matter etc, Ecosystem services i.e. role played by earthworms in soil ecosystem with special reference to **four R's** of recycling (reduce, reuse, recycle and restore).

#### **Unit-3: Reproduction:**

Life Cycle of composting worms, Hermaphroditism, Copulation and cocoon formation, Cocoon structure, Incubation periodof cocoon in vermicomposting earthworms, Fecundity in surface dwelling (epigeic) and soil dwelling (endogeic and anecic) earthworms.

#### Unit-4: Basic Concepts of Vermiculture & Vermicomposting:

Definition, History of vermiculture & Vermicomposting, Difference between vermiculture and vermicomposting, Selective features of earthworms for vermiculture and vermicomposting, Method of vermiculture of phytophagous and geophagous earthworm, Utility of vermiculture: Source of protein (Vermiprotein) for pisciculture, poultry farming, piggery etc., application in vermicomposting. Use of vermicompost with special reference to organic farming.

#### **VERMICULTURE & VERMICOMPOSTING**

#### Course 2 - Basics of Vermitechnology (SEM 2)

#### **Unit 1: Introduction to Vermicomposting:**

History of vermicomposting in India. Definition, Habitat of vermicomposting earthworms, Scientific names and distinctiveness of native and exotic vermicomposting earthworms (Native Indian earthworms. *Perionyx excavatus,Perionyx ceylanesis*, European earthworms: *Eisenia fetida*, *Eisenia andrei*, SouthAfrican earthworm: *Eudriluseugeniae*. Selection criteria for composting worms, rearing methods of composting worms and parameters like temperature, moisture, pH etc, Cocoons and their maintenance.

#### **Unit-2: Principle & Process of vermicomposting:**

Components and steps of the vermicomposting Process: Principle of vermicomposting: Aerobic decomposition and role of detritivore fauna and symbiotic microflora and endo-enzymes of earthworm gut with special reference to thermophilic, psychrophilic and mesophilic phases. Methods of vermicomposting: (a) Low-cost floor beds/ Heap method (b) Tank Method for largescale production. Appropriate species of earthworms with suitable population characteristics, Substrate of vermicomposting: Ideal substrates and its characters for vermicomposting, Precomposting of substrates and its importance, Preparation of vermibeads / vermireactors with appropriate substrates under Indian condition. Tools and equipments used in vermicomposting.

#### **Unit-3: Management and harvesting of vermicompost:**

Optimization of vermicomposting process through management of different environmental factors like- Temperature, pH and Moisture content, periodic aeration through turning the substrate etc. Care and Precautions during vermicomposting process and common enemies of earthworms and their management. Identification of compost maturity: Time, Mass reduction, odour, C:N Ratio, Oxidation-reduction potential, BOD etc. Methods of harvesting mature compost and storage with special reference to the shelf life.

#### Unit-4: Products of vermicomposting and its uses:

Physical, chemical and biological properties of vermicompost. Benefits of using vermicompostfor production of different cash crops over conventional chemical fertilizers. Limitations of use of vermicompost in organic agriculture. Products of vermicomposting: Earthworm biomass (vermiprotein), Vermiwash and their application in different agrialied sectors for promoting organic agriculture and aquaculture.

#### **VERMICULTURE & VERMICOMPOSTING**

# **Course 3 -** Vermiculture & Vermicompost Production & Beyond (SEM 3)

**Unit-1:** The Economics and budgetary analysis of vermicompost production at farm level and cost benifit analysis / Laboratory grade Composting method for preparation of Vermicompost from kitchen waste/ other organic waste: Demonstration in Laboratory & students will practice in their house hold for preparation of vermicompost and submit sample prepared by their own.

**Unit-2:** Use of Prepared vermicompost in horticulture and floriculture beds (Activity by students in concerned department / home with evidence of photographs / short video clips/ Preparation of vermiprotein as feed for poultry and Fish meal.

**Unit-3:** Enemies of earthworms, sickness and worm's enemies; frequent problems – prevention and fixation / Value addition of conventional vermicompost with further additions of PGPRs and further enhancement of shelf life / Preperation of fortified or enriched vermicompost/ Preparation and mantianance of earthworm cultures.

**Unit-4:** Demonstration of large scale production of vermicompost through Industry/ Field visits and submission of **Project report**.

#### **Suggested Readings:**

- 1. Chaudhuri, P.S. (2005). Vermiculture and vermicomposting.as biotechnology forconversion of organic wastes into animal protein and organic fertilizer. *Asian Jr. ofMicrobiol. Biotech. Env. Sc.*, 7(3):359-37A.
- 2. Chaudhuri, P.S. (2006). Kenchor Jeevan Baichitra: KenchoProjukti. *Jyan BichitraPrakashani*, Tripura, ISBN: 81-8266-088-2, 128 pages.
- 3. Das, M.C. QAD. Charles Darrvin's Plough. Tools for Vermitechnology. *I K International Publishing House*, ISBN: 978-93-81 141-27, 182 pages.
- 4. Ismail, S.A. (i997). Vermicology The Biology of Earthwonns. *OrientLongman*, 92 pages.
- 5. Kals, R.D. (1998). Earthworms: Cinderella of organic farming. *Prism Books Pvt. Ltd.*, Bangalore
- 6. Chattopadhyay G.N. (2012). Use of vermicomposting biotechnology for recycling organic wastes in agriculture. *International Journal of Recycling of Organic Waste in Agriculture*. Vol-1 (8) pp- 01-08
- 7. Paul, N., Giri, U & Roy, G. (2019). Composting. Intech open, 19 pages DOI: <a href="http://dx.doi.org/10.5772/intechopen.88753">http://dx.doi.org/10.5772/intechopen.88753</a>

#### **DESKTOP PUBLISHING-1**

### <u>Course 1 - Introduction to Desktop Publishing</u> (SEM 1)

#### **UNIT I**

A brief introduction to publishing. Understanding the steps involved in book publishing process: acquisitions, contract, cover and page design, proofing, distribution, galley, advanced reader copies, book launch.

Understanding Desktop Publishing (DTP): history of DTP (since 1970s), examples of present and discontinued popular DTP software (both proprietary, like Adobe InDesign and open source, like Scribus), general features of DTP software, alternative digital layout software like TeX, troff, LaTex (advantages and disadvantages only), primary difference between desktop publishing software and word processing software. Common file types associated with DTP.

#### **UNIT II**

Introduction to graphics software related to DTP. Raster graphics - advantages and disadvantages, some popular proprietary and open source software, common associated file types. Vector graphics - advantages and disadvantages, some popular proprietary and open source software, common associated file types. Differences between raster and vector graphics.

#### **UNIT III**

Understanding colours. Color models, color spaces, ICC profile, etc. Brief introduction to typefaces and popular font families related to DTP Understanding the use of text editors and word processors for use with DTP software Word Processors - Microsoft Word, etc vs. LaTex, etc Graphic design software - InkScape vs. GIMP, Adobe Photoshop, etc.

#### **UNIT IV**

Using Word Processors - important features of a word processor; opening, closing, creating and saving documents; entering text; moving around documents; editing documents; searching, inserting and replacing text; understanding undo-redo actions, formatting documents (character, paragraph, alignments, columns, etc.), creating lists, use of indents, header and footer, creating and working with tables, mail merge and printing.

### Course 2 - Graphic Software (SEM 2)

#### UNIT - I

Introduction to the workspace - toolbox, rulers, canvas, page area, tool controls, document properties, etc.

#### UNIT - II

Drawing/ object creation - understanding paths, anchors (or nodes), handles, etc; drawing squares, rectangles, circles, ellipses, arcs, polygons, stars, spirals, etc.; drawing rectangular and polar grids.

#### UNIT - III

Selecting and arranging objects; Use of selection tool objects attributes; Working with groups and layers; Modifying/ manipulating/ reshaping objects - use of anchors (or nodes); Creating special effects; Working with masks; Applying filters and live effects (live trace and live paint); Working with bitmaps in vector files

#### UNIT - IV

Advanced text editing; modifying graphic styles; working with images; Working with Color; Importing and Exporting; Printing

### <u>Course 3 - Desktop Publishing Software</u> (SEM 3)

#### UNIT - I

#### Working with text

- setting paper sizes, paper margins, etc
- import from text editor/ word processor
- using story editor
- formatting texts justification, color, baseline, etc
- text and paragraph attributes
- managing styles/ paragraph styles using style manager
- font family, typeface and font their attributes
- typography
- lists and tables
- text box/ frames
- indents hanging indentations and columns correcting uneven columns
- kerning, line spacing, shadows, drop caps
- orphans and widows
- linking/unlinking frames
- master pages
- sections, numbering pages
- rulers, guides, etc
- working with layers

#### UNIT - II

#### Working with graphic

- Import / draw graphics import from graphic program
- draw basic shapes (line, square, rectangle, circle, ellipse, polygon, etc)
- image frame
- render frame
- grouping/ungrouping objects
- basic object transformation (rotation, reflection, skewing, cropping, etc)
- wrapping text around objects
- working with layers

#### UNIT - III

#### Exporting and printing

- Pre-press
- Imposition
- Crop marks
- Bleed marks
- Registration marks
- Colour bars
- Page information
- Overprinting
- Preflight checks for missing glyphs,
  - items not on page
  - text frame overflows, used transparencies, missing images, image resolution, etc

#### **UNIT-IV**

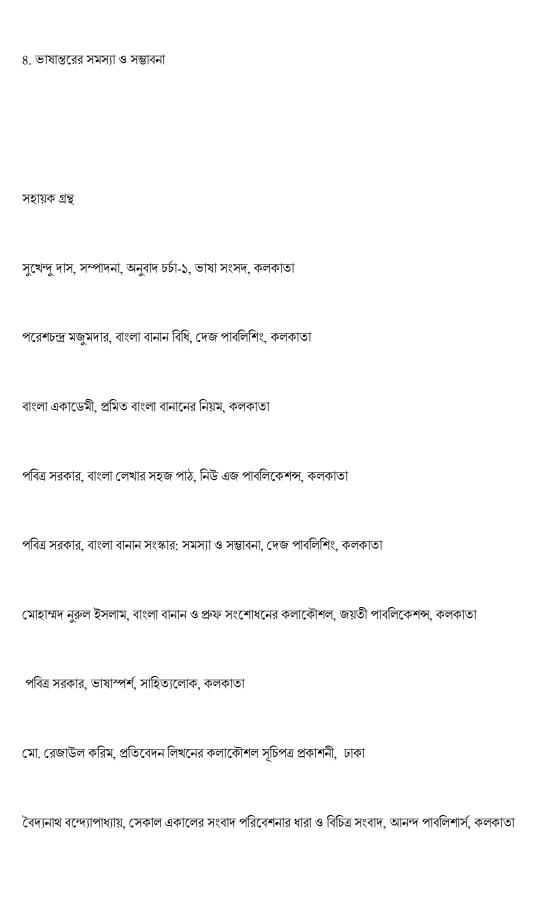
#### Advanced topics

- Creating footnotes, cross-references, table of contents, list of indexes and managing bibliography
- -Understanding and working with colour models (RGB and CYMK), colour space (sRGB) and ICC profile

Ability Enhancement Course (Credit: 3)				
যোগাযোগের ভাষা বাংলা (Communicative Bengali)				
Course Statement				
The aim of this course is to help students become familiar with nuances of grammar, and build confidence in them hat grammar is learnable. The course also helps learners become aware of language, its dependence on grammar and he variety it exhibits.				
Course Level Learning Outcomes				
i) Identify non-standard use of English both in written and spoken forms				
ii) Recognize the errors of usage and correct them				
iii) Recognize students' ability to improve their own competence in using the language				
iv) Understand and appreciate English spoken by people from different regions				
v) Use language for speaking with confidence in an intelligible and acceptable manner				
vi) Understand the importance of reading for life				

vii)	Develop an interest for reading			
viii)	Read independently unfamiliar texts with comprehension			
ix)	Understand the importance of writing in academic life			
x)	Write simple sentences without committing errors of spelling and grammar			
Unit I: বাংলা ভাষা ও বানানরীতি				
১. ধ্বনি ও বর্ণ				
২. বাংলা বাক্য গঠন				
৩. প্রবাদ-প্রবচন ও কথোপকথন				
৪. বাংলা বানানরীতি				
Unit II: পঠন ও লিখনরীতি				

১. বাংলা গদ্য ও পদ্যের পঠনরীতি
২. বক্তৃতা, সংবাদপত্রের প্রতিবেদন ও ব্যক্তিগত প্রতিবেদন
৩. ম্যাগাজিন, বেতার, দূরদর্শন, সামাজিক যোগাযোগ মাধ্যম
Unit III: কর্মক্ষেত্রে বাংলা ভাষার ব্যবহার
১. জ্ঞাপন (একান্ত জ্ঞাপন ও গণজ্ঞাপন)
২. ব্যবহারিক পত্র
৩. ই-মেইল
৪. দরখাস্ত ও নির্দেশনামা
৫. পরিভাষা
Unit IV: সমাজভাষা, উপভাষা ও ভাষান্তর
১. সমাজভাষা
২. উপভাষা
৩. ভাষান্তর



রবিন ঘোষ, বিজ্ঞাপনের ধারা, আত্মজা পাবলিকেশন্স, কলকাতা

A.R. Fatihi, 1991, The Language of Advertising and T.V Commercials, Mumbai, Bahri Publications.

নীরেন্দ্রনাথ চক্রবর্তী, ২০১৪, বাংলা কী লিখবেন, কেন লিখবেন, আনন্দ পাবলিশার্স, কলকাতা।

পার্থ চট্টোপাধ্যায়, ২০১৮, গণজ্ঞাপন: তত্ত্বে ও প্রয়োগে, দেজ পাবলিশিং, কলকাতা।

সুভাষ ভট্টাচার্য (সম্পা), ২০১৩, বাংলা লেখক ও সম্পাদকের অভিধান আনন্দ পাবলিশার্স কলকাতা

বাংলা একাডেমী, ২০১৯, প্রশাসনিক পরিভাষা, বাংলা একাডেমী, ঢাকা, বাংলাদেশ।

#### **English Communication**

#### AECC 2nd/3rd/4th SEMESTER

#### 3 CREDITS

(Full Marks: 100)

#### **Course Statement:**

The aim of this course is to help students become familiar with nuances of grammar, and build confidence in them that grammar is learnable. The course also helps learners become aware of language, its dependence on grammar and the variety it exhibits. This course will be offered under four headings as given below:

- A. Grammar
- B. Listening and Speaking
- C. Basics of Reading
- D. Basics of Writing

#### **Course Level Learning Outcomes**

- i) Identify non-standard use of English both in written and spoken forms
- ii) Recognize the errors of usage and correct them
- iii) Recognize students' ability to improve their own competence in using the language
- iv) Understand and appreciate English spoken by people from different regions
- v) Use language for speaking with confidence in an intelligible and acceptable manner
- vi) Understand the importance of reading for life
- vii) Develop an interest for reading
- viii) Read independently unfamiliar texts with comprehension
- ix) Understand the importance of writing in academic life
- x) Write simple sentences without committing errors of spelling and grammar

#### **Course Content**

#### Unit-I: Major Basic Grammatical Categories in English

Notion of correctness and attitude to error correction in sentences with practice exercises:

- i) Simple sentences [use of primary auxiliary] and Descriptive Sentences
- ii) Expressing possibilities and probabilities: [Use of can, may etc]
- iii) Expressing future plans, goals, expectations and declarations [shall/will]
- iv) Expressing obligations, duties, responsibilities [should, ought, might]
- v) Expressing possessions [use of have/has/had]
- vi) Subject-Verb Agreement, Art, modal verbs, articles, Prepositions, Modal Verbs, Active and Passive Voice
- vii) Sentences: Declarative, Interrogative, Imperative, Exclamatory
- viii) Types of Questions (Wh-, Yes-No, Tag)

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#### Unit-II:

#### Introduction to Reading Skills

- i) Introducing different types of texts narrative, descriptive, extrapolative;
- ii) Reading and Comprehension of different types of texts stated above

#### Unit III

#### Introduction to Writing Skills

**Technical Writing** 

#### I: Report Writing

- i) News report writing, project report design and writing, event reporting
- ii) Use of language in formal reportage

#### II. Academic Writing in English:

- i) Abstract Writing
- ii) Proposal Abstract Formats, Research Article Abstracts, Keywords
- iii) Effective and economical use of language in scientific abstract writing

#### Unit IV: Official Communication

#### I. Letter Writing

- Official letter writing format and Use of the passive voice in letter writing
- Use of formal English in official letters
- Letters making request, Joining letters, Letters of Invitation, etc
- Email-letter communication to Faculties/Universities abroad
- Use of the tentative register in English towards effective scientific communication
- Impersonal language skills

#### II. CV drafting

- CV Format, Quantitative and Qualitative data, the notion of the dynamic CV.
- · Cover letter writing

### Internal Assessment may be based on the following areas:

- i) Importance of listening skills, problems of listening to unfamiliar dialects,
- ii) Aspects of pronunciation and fluency in speaking
- iii) Intelligibility in speaking to be tested in short seminar presentations

#### Suggested Reading

- i) Acevedo and Gower M (1999): Reading and Writing Skills, London, Longman
- ii) Raymond Murphy: Essential English Grammar, CUP
- iii) Eastwood, John (2008). Oxford Practice Grammar. Oxford, OUP
- iv) Hadefield, Chris and J Hadefield (2008). Reading Games. London, Longman
- v) Saraswati, V (2005). Organized Writing 1. Hyderabad, Orient Blackswan



#### PERSONAL COMMUNICATION

AEC- (2 Credits): Full Marks: 100

#### NEP 2020 Undergraduate 5th Semester

#### **Course Outcomes**

To develop personal communication skills for entrepreneurial competence in students to brave the emerging challenges in the professional sphere

To equip the students with required skills to write, edit and present reports & projects

To prepare them for interviews and group discussion

To learn to communicate technical information to non-technical audience

To aid the students in personality development

To equip the students with nonverbal communication skills towards effective communication

#### **UNITI**

#### Soft Skills

- 1. Conversational Strategies:
- How to give Introductions, Use of Lubricants, Effective communicating with teachers, researchers and resource persons, relationship building
- Use of Lubricants and Etiquette in smooth communication
- 2. Nonverbal Communication and Body Language
- Basics of Nonverbal communication, smiling, use of gestures, posture, dressing etc

#### **UNIT II**

Group Discussion

- Strategies of launching a GD, Confidence building measures.
- Bridging dialogues, Concluding

#### UNIT III

Interview Skills

- Use of Modules in Interview Preparation and Body language
- Interview conversation Strategies

#### Unit IV

#### Presentation Skills

• Use of the transcript, Academic Presentation strategies, PPT, Use of multimedia.

#### Recommended Reading:

- 1. Keval J. Kumar, Mass Communication in India, Jaico Publishing House
- 2. Gill Brandston, Roy Stafford, The Media Student's Book, Routledge.
- 3. Stephen M. Croucher, Understanding Communication Theory: A Beginner's Guide, Taylor and Francis



# TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar-799022

Syllabus OF

History (General & Major)

Semester - III

2014

#### B.A. Semester-III

#### History (Major)

#### Paper-III: History of India (A.D. 1550- A.D. 1818)

#### Unit-1

- 1. Sources and Historiography of Mughal History
- 2. Mughal- Afghan contest for supremacy
- 3. Sher Sha's administrative reforms
- 4. Establishment of Mughal rule: Babur and Humayun

#### Unit-II

- 1. Religious and Rajput Policies of Mughals: from Akbar to Aurangzeb
- 2. Administration under the Mughals: from Akbar to Aurangzeb
- 3. Revenue Reforms under the Mughals: from Akbar to Aurangzeb
- 4. Central Asian and Deccan Policy of the Mughals: from Akbar to Aurangzeh

#### Unit-III

- 1. Art and Architecture under the Mughals
- 2. Music, literature and society under the Mughals
- 3. Religious Developments: Sufi and Bhakti traditions, Sikhism
- 4. Decline of Mughal power: major debates

#### Unit-IV

- Colonialist and Nationalist perceptions of 18<sup>th</sup> century India
- 2. Expansion and Consolidation of British power (1740s-1818): military expansions and commercial interests
- 3. British administration in India: Clive, Warren Hastings, Cornwallis, Wellesley
- 4. Impact of colonial policies: Bengal famine of 1770; Sannyasi and Fakir uprisings

#### commended readings:

- 1. R.C. Majumdar (ed.): History and Culture of the Indian People. Relevant volumes (Bharatiya Vidyabhavan)
- 2. R.C. Majumdar, et al., : An Advanced History of India (Macmillan)
- 3. Satish Chandra: Medieval India, Part -II: Mughal Empire (Har Anand Publications)
- 4. Satish Chandra: Medieval India (Orient Blackswan) Bengali translation vailable.
- 5. Anil Chandra Bannujee: A New History of Medieval India (S. Chand)
- 6. Muzaffar Alam and Sanjay Subrahmanyam (eds.): The Mughal State (OUP)
- 7. S.A.A. Rizvi: The Wonder that was India Vol: II (Rupa)
- Eugenia Vanina: Ideas and Society: India between the 16<sup>th</sup> and 18<sup>th</sup> centuries (OUP)
- 9. John F. Richards: The Mughal Empire (Cambridge: Foundation Books)
- 10. Stewart Gordon: The Marathas (Cambridge: Foundation Books)
- 11. J.S Grewal: The Sikhs (Cambridge: Foundation Books)
- 12. Irfan Habib: The Agrarian System of Mughal India (OUP)
- 13. Michael Fisher(ed.): The Politics of British Annexation in India (OUP)
- 14. P.J. Marshall: Bengal, the British Bridgehead, Eastern India, 1740-1828 (Cambridge)
- 15. Bipan Chandra: Modern India (Orient Blackswan) Bengali translation available
- 16. Vincent Smith: Oxford History of India (OUP)
- 17. Sekhar Bandyopadhyay : From Plassey to Partition: A History of Modern India (
  Orient Blackswan) Bengali translation available

- 18. Lakshmi Subrahmaniyam: A history of India, 1757-1857 (Orient Blackswan)
- 19. Seema Alavi: The Eighteenth Century in India (OUP)
- 20. Gautam Bhadra: Mughal Juge Krishi Arthaniti O Krishak Bidroha
- 21. P. Maiti: Bharat Itihas Parikrama
- 22. Telslim Choudhury: Bharater Itihas (1556-1818)
- 23. Subodh Mukhopadhyay: Mughal Jug theke British raj (1556-1818)
- 24. Jiban Mukhopadhyay: Bharater Itihas, relevant volumes.

### TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar-799022

Syllabus OF

Political Science (Major & General)

Semester - III

2014

#### BA Major/ Honours

#### Semester- III: Indian Government of Politics (Paper- III)

#### Unit-I

- Framing of the Indian Constitution: Role of the Constituent Assembly.
- Preamble to the Indian Constitution- Fundamental Rights and Duties and Directive Principles of State Policy.
- Nature of Indian Federation- Amendment to the Constitution.
- Centre- State Relations: Legislative, Administrative and Financial.

#### Unit- II

- Union Executive: President Position and functions Prime Minister, Council of Ministers.
  - State Executive: Chief Minister, Governor-Functions and position.
- Union and State Legislature- composition and functions, Law making process.
- Provisions for official language and National Integration.

#### Unit - III

- Composition and functions of the Supreme Court and High Court in India- Lokpal, Judicial Activism.
- Constitutional Provisions for Scheduled Castes and Scheduled Tribes.
- Election Process: Election Commission: Composition, functions and role, Electoral Reforms.
- · Public Service Commission- Union and State.

#### Unit-IV

- Some issues in Indian Politics: Caste, Tribe, Women's Political Participation, Identity Politics.
- Political Parties and Interest Groups.
- Local self governments in Tripura.
- Panchayat (b) Municipality (c) Tripura Tribal Areas Autonomous District Council (TTAADC).

#### Suggested Readings:

- Mohanty, Manoranjan., (ed.) Class, Class, Gender, Sage Publications, New Delhi, 2004.
- Mehra, Ajay K. and Khanna, D.D. (cds.) Political Parties and Party Systems, Sage Publications, New Delhi, 2003.
- Vora, Rajendra and Palshikar Suhas (eds.) Indian Democracy, Sage Publications, New Delhi, 2004.
- Kumar, B.B. Small State Syndrome in India, Concept Publishing Company (P) Ltd., New Delhi, 1998.
- Singha, Komol. (ed.) Rural Development in India, Concept Publishing Company (P) Ltd., New Delhi, 2010.
- Datta, Prabhat & Sen Payel, Good Governance and Development: Contexts and Concerns, Progressive Publishers, Kolkata, 2009.
- Johari, J.C., Indian Government and Politics, Sterling Publishers, 2011.
- Ghai, K.K., Indian Government and Politics, Kalyani Publishers, New Delhi, 2011.
- Das, Nityananda, Grassroot Democracy and Panchayati Raj in Tripura, Progressive publications, Kolkatta, 2012.



### TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar-799022

Syllabus OF

Education (General & Major)

Semester - III

2014

#### **HONOURS**

#### Semester-III

#### Paper -H3:

#### Development of Education system in India

Full marks: (80+20)=100

#### Course Objective

- 1) To develop an understanding of the Evolution of the Educational system in India
- 2) To develop familiarity with the legal & constitutional provisions in Education
- 3) To create an awareness of the main challenges and problems faced by the system.

### Unit -l: Education in Ancient and medieval India with special reference to

- Education in Vedic period
- Education in Bramanic period &
- Education in Buddhistic Period
- Education in Medieval India

(With special reference to Basic Ideas, Objectives, Curriculum, Method of teaching & Role of Teachers)

#### Unit-II: Education During Pre- independence Period

- Charter Act (1813)
- Macaulay's Minute (1835)
- Adams Reports on Indigenous Educaion
- Wood Despatch(1854)
- Hanter commission (1882)
- Indian University Commission (1902)
- Sadler Commission (1917).
- Hartog Committee Report (1929).
- Sargent Report (1944)

#### Unit - Ill: Education during Post - Independence Period

- Education in Indian Constitution.
- University Education Commission (1948-49).
- Secondary Education Commission (1952-1953)
- Education Commission(1964-66)

- National policy of Education (1986) & Programme of Action (POA, 1992) with special reference to: Primary, Secondary, and Higher Education

#### Unit-IV: Recent Issues in Education

- Knowledge Commission Report with reference to school education
- Right to Education Act
- SSA, RMSA, RUSA
- Education in Tripura with special reference to Problems and Issues of Secondary & Higher Education.

#### **Essential Readings**

- Aggarwal, J, C, (2010) Landmarks in the History of Modern India Education (7th Ed)
   New Delhi: Vikash Publishing Pvt. Ltd.
- Das, K.K. (1993) Development of Education in India. New Delhi: Kalyani Publishers.
- Dash, B.N (1991). Development of Education in India: Ajanta Prakashan.
- Keay, F.E & Mitra, Sukumar (1078). A History of Education in India. New Delhi: Oxford University Press,
- Mookherjee, R.K. (1988). Ancient Indian Education. New Delhi: Motilal Banarsidass.
- Mookherjee, R.K (1989). The Gupta Empire. New Delhi: Motilal Banarsidass.
- Naik, J.P. & Narullah, S. (1996) A Student's History of Education in India New Delhi: Mc Millan India Ltd.
- Rawat, P.L (1089). History of India Education New Delhi: Ram Presad & Sons.
- Narulla &Naik A Student's History of Education in India, Macmillan India Ltd. New Delhi.(2000)
- NCERT Education and National Development NCERT, 1964-65 New Delhi.
- Pandey, R.S. Development of India System of Education, Vinod Pustak Mandir, Agra, (2003).
- Pandey, R.S Indian Educational System, Anubhav Publication House, Allahabad(2008)
- Rai, L. National Education in India, Bani Mandir, Pan Bazar, Guwahati -1 (2001)
- Shukla; P.D Towards the New Pattern of Education in India, Sterling Publishers, New Delhi,
- Sharma, R.N History & Problems of Education in India, Laxmi Narain Agarwal Publisher, Agra, (2006)
- Singh, M.S Educational Development in India, Anubhav Publication House, Allahabad (2007)
- Das Gupta, S.N.(1988). A History of India Philosophy. (5 Vols) Delhi: Motilal BanarasiDass.
- Ghosh, S.C (1989). Educational Policy in India since warren Hastings, Calcutta: N-

Prakashan.

- Altekar, A.S.(1934). Education in Ancient India. Banaras: India book Shop.
- Ministry of Education, GOI (1964-66) New Delhi : The Author
- MHRD, GOI (1986). National policy on Education. New Delhi
- Shanker, Uday (1984). Education of Indian Teachers. New Delhi: Sterling Publishers Pvt.Ltd
- Sing.R.P (1970) Education in Ancient and Midievl India. Delhi: Arya book depot
- Ministry of Education-Report of the University Education Commission 1948-89. Ministry of Education, Government of India, New Delhi.
- Ministry of Ministry of Education-Report of the Secondary Education Commission 1952-53. Ministry of Education, Government of India. New Delhi(1953).
- Ministry jof Education Challenge jof Education A Policy perspective, Ministry of Education, Government of India, New Delhi(1985).

-www.knowledgecommission.govt.in knowledge Commission Report 2007

- mhrd.gov.in



## ত্রিপুরা বিশ্ববিদ্যাল্য

# স্নাতক বাংলা সাধারণ ও সাম্মানিক পাঠক্রম

সেমেস্টার

ত্রিবার্ষিক ডিগ্রী কোর্স

সেমেস্টার : প্রথম, দ্বিতীয় ও তৃতীয়

(3028)

### তৃতীয় পত্র: বাংলা কাব্য (মধ্য ও আধুনিক যুগ)

প্রথম একক : কৃত্তিবাসী রামায়ণ (আদিকাণ্ড) / সাহিত্য সংসদ প্রকাশিত / ২০

দ্বিতীয় একক :

२०

বীরাঙ্গনা – মধুসূদন দত্ত / দুষ্মন্তের প্রতি শকুগুলা, সোমের প্রতি তারা, দারকানাথের প্রতি রুক্মিণী, দশরখের প্রতি কেক্য়ী, লক্ষণের প্রতি শূর্পনথা, শান্তনুর প্রতি জাহ্নবী, নীলধ্বজের প্রতি জনা

তৃতীয় একক : সারদামঙ্গল - বিহারীলাল ৮ক্রবর্তী

২০

চতুর্থ একক : বনলতা সেন – জীবনানন্দ দাশ [সিগনেট প্রেস] ২০ বনলতা সেন, কুড়ি বছর পরে, হায় চিল, নগ্ন নির্জন হাত, অন্ধকার, সুচেতনা



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Syllabus OF

History (General & Major)

Semester - III

#### B.A. Semester-III

#### History (General)

Paper-III: History of India, 1757-1947

#### Unit-I

- 1. Third battle of Panipat: causes and Significance.
- 2. British expansion and consolidation in Bengal, Mysore, Maharastra . Punjab.
- 3. Land Revenue Settlements: Permanent, Ryotwari and Mahalwari: salient features and impact.
- 4. Deindustrialisation debate.

#### Unit-II

- Spread of Western Education and its impact; Growth of Press- English and Vernacular
- 2. 19th century 'Bengal Renaissance'; Derozians and Young Bengal.
- Socio-religious Movements in 19<sup>th</sup> century: Brahmo samaj, Arya Samaj, Ramkrishna Mission, Jyotiba Phule; Women in modern India
- Peasant Movements in 19<sup>th</sup> century India: Restorative-Kol & Santhal, Reformative-Indigo and Deccan Uprising

dr.

#### Unit-III

- 1. Revolt of 1857: causes, nature and impact.
- 2. Foundation of the Indian national Congress; the Moderates and the Extremists
- 3. Partition of Bengal and Swadeshi Movement; Formation of Muslim League
- 4. Constitutional reforms: Morley-Minto, Montagu-Chelmsford, Government of India Act, 1935: major features

#### Unit-IV

- Gandhi and the National Movement: Rowlatt Satyagraha, Khilafat-Non-Cooperation, Civil Disobedience, Quit India
- 2. Emergence of Left Ideas in India: CPI and CSP
- 3. Subhash Chandra Bose and INA
- 4. Circumstances leading to partition of India: RIN Mutiny, Mour hatten Plan Indian Independence Act, 1947

#### Recommended readings:

- 1. R.C. Majumdar, et al.: (An Advanced History of India (Macmillan)
- 2. Michael l'isher(ed.): The Politics of British Annexation in India (OUP)
- 3. Bipan Chandra; Modern India (Orient Blackswan) Bengali translation available
- 4. Bipan Chandra, et al., India's struggle for Independence (Penguin) Bengali translation available
- 5. Vincent Smith: Oxford History of India (OUP)
- 6. Sekhar Bandyopadhyay: From Plassey to Partition: A History of Modern India ( Orient Blackswan) *Bengali translation available*
- 7. Sumit Sarkar: Modern India (macmillan) Bengali translation available
- 8. Lakshmi Subrahmaniyam: A History of India, 1757-1857 (Orient Blackswan)

2,74

- 9. P. Maiti: Bharat Itihas Parikrama
- 10. Jiban Mukhopadhyay: Bharater Itihas, relevant volumes.
- 11. Suchibrata Sen: Adhunik Bharat
- 12. Samar Kumar Mallik: Raj Theke Swaraj
- 13. Samar Kumar Mallik: Adhunik Bharater Dersho Bochhor

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Syllabus OF

Political Science (Major & General)

Semester - III

#### **BA General Course**

#### Semester- III: Indian Government and Politics (Paper- III)

#### Unit-I

- 1. Framing of the Indian Constitution, salient features.
- 2. Preamble- its significance.
- 3. Fundamental Rights and Duties of the citizens.
- 4. Directive principles of State policy-their significance.

#### Torit- II

- 1. Nature of Indian Federal system.
- 2. Legislative, Administrative and financial relations between the union and the statesrecent trends.
- 3. Amendment to the constitution.

#### Unit - III

- 1. Union and State Executive: The President, The Prime Minister, The Governor, The Chief Minister, Union and State Council of Ministers.
- 2. Union and State Legislature- composition and functions, Law making process, nature of Parliamentary privileges.

#### Unit-IV

- 1. Supreme Court and High Courts- Composition, functions, Lokpal.
- 2. Election Commission- Composition, functions and role.
- 3. Public Service Commission (Union and State)-Composition, functions and role.
- 4. Provisions for Scheduled Castes and Scheduled Tribes.
- 5. Local Government in Tripura: Panchayat, Municipality and Tripura Tribal Areas Autonomous District Council (TTAADC).

#### ₹eadings:

- Mohanty, Manoranjan(ed.), Class, Class, Gender, Sage Publications, New Delhi,
   2004.
- Mehra, Ajay. K., and Khanna, D.D. (ed.) Political Parties and Party Systems,
   Sage Publications, New Delhi, 2003.
- Vora, Rajendra., &PalshikarSuhas, (ed.) Indian Democracy, Sage Publications,
   New Delhi, 2004.
- Kumar, B.B., Small State Syndrome in India, Concept Publishing Company (P)
   LTD., New Delhi, 1998.
- Singha, Komol (ed.), Rural Development in India, Concept Publishing company
   (P) LTD., New Delhi, 2010.
- Datta, Prabhat & Sen Payel, Good Governance and Development: Contexts and Concerns, Progressive Publishers, Kolkatta, 2009.
- Johari, J.C., Indian Government and Politics, Vishal Publications, New Delhi, 1976.
- Ghai, K.K., Indian Government and Politics, Kalyani Publishers, New Delhi, 2011.
- Das, Nityananda, Grassroot Democracy and Panchayati Raj in Tripura,
   Progressive publications, Kolkatta, 2012.

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Suryamaninagar-799022

Syllabus OF

Education (General & Major)

Semester - III

#### Semester - III

#### Paper- p3

#### HISTORY OF EDUCATION IN INDIA

Full marks: (80+20)=100

#### Unit- I: Education in Ancient and Medieval Period

- Vedic Education: aims, curriculum, methods of teaching, rituals, and ceremonies.
- Bhramanic Education: aims, curriculum, methods of teaching, rituals and ceremonies.
- Buddhist Education: aims, curriculum, methods of teaching, rituals and ceremonies.
- Islamic Education: aims, curriculum, methods of teaching, rituals and ceremonies.

#### Unit- II: Education in Early British Period

- Activities of Serampore Mission and Fort William College.
- Historical perspective of Macaulay's Minutes and Bentinck's resolution; Adam's Report and its recommendation.
- Bengal Renaissance; educational contribution of Raja Rammohan Roy, Derozio and Vidyasagar.
- Woods Despatch (1854): historical perspective and its influence on the subsequent development of Indian education.

#### Unit- III: Education during Pre- independence Period

- Recommendations of Indian Education commission -1882.
- Lord Curzon's educational policies and their impact on Indian education.
- National Education Movement.
- Sadler Commission -1917: historical perspective, reports and their influence on the subsequent development of Indian education.

#### Unit- IV: Education in Post- independence Period

- Radhakrishnan Commission-1948 with special reference to rural university.
- Mudaliar Commission-1952-53.
- Kothari Commission- 1964-66.
- National Education Policy1986 and Revised Educational Policy of 1992.

Essential Readings

Aggarwal, J.C(2010) Landmarks in the History of Mordern Indian Education (7ht Ed). New Delhi: Vikas Publishing Pvt Ltd.

Das, K.K (1993), Development Of Education in India. New Delhi: Kalyani Publisher.

Dash, B,N (1991). ). Development Of Education in India. New Delhi: Ajanta Prakashan.

Keay, F.E & Mitra, Sukumar (1978). A History of Education in India . New Delhi: Oxford University Press.

Mookherjee, R.K (1988) Ancient Indian Education in India. New Delhi Motila Banarsidass.

Naik, J.P & Narullah,S (1996) A Student's History of Education in India. New Delhi : Mc Millan India Ltd.

Rawat, P.L (1989). History of Indian Education. New Delhi: Ram Prasad & Sons.

- Narulla & Naik. A Student History of Education in India, Macmillan India Ltd..New Delhi. (2000).
- Rai , L National Education In India, Bani Mandir, Pan Bazar, Guwahati-1(2001).
- Shukla, P.D Towards the New Pattern of Education in India, Sterling Publishers, New Delhi.
- Sharma, R.N History and Problems of Education in India. Laxmi Narain Aggarwal Publisher, Agra(2006).
- Singh, M.S Educational Development in India, Anubhav Publication House, Allahadad, (2007).

#### **Suggested Readings**

- Das Gupta, S.N (1988). A History of Indian Philosophy. (5 Vols.) Delhi : Motilal Banarasi Dass.
- Altekar, A.S (1934). Education in Ancient India, Banaras: Indian book Shop.
- Ministry of Education GOI (1964-66). Education and National Development.
   Report of the Education Commission (1964-66). New Delhi: The Author.
- MHRD.GOI(1986). National Policy on Education. New Delhi. The Author.
- MHRD GOI (1993) Learning without Burden. Yashpal Committee Report (1993) New Delhi. The Author.
- Shanker, Uday(1984). Education of Indian Teachers . New Delhi : Stering Publisher Pvt. Ltd.
- Singh.R.P(1970). Education in Ancient and Medieval India ,Delhi : Arya Book
   Deput.



## ত্রিপুরা বিশ্ববিদ্যাল্য

# স্নাতক বাংলা সাধারণ ও সাম্মানিক পাঠক্রম

সেমেস্টার

ত্রিবার্ষিক ডিগ্রী কোর্স

সেমেস্টার : প্রথম, দ্বিতীয় ও তৃতীয়

(3028)

### তৃতীয় পত্র: নাটক-কাব্য-উপন্যাস

প্রথম একক : নীলদর্শণ – দীনবন্ধু মিত্র

20

দ্বিতীয় একক : ডাকঘর – রবীন্দ্রনাথ

२०

তৃতীয় একক :

কল্পনা – রবীন্দ্রনাথ (দুঃসম্ম, বর্ষামঙ্গল, স্বগ্ন, মদনভস্মের পর, বর্ষশেষ, বৈশাথ) ২০

চতুর্থ একক : রাজর্ষি – রবীন্দ্রনাথ



(A Central University)
Suryamaninagar-799022

Syllabus

For

Elective English Semester: I - V

Year 2014

#### TRIPURA UNIVERSITY ENGLISH ELECTIVE SYLLABUS

#### Semester-3

			CONTENT		MARKS	
SEM	PAPER	UNIT	CONTENT		End Sem.	Interna
ш	G-3	1	Phonetics	Air Stream Mechanism and Organs of Speech, Classification of Speech Sounds, IPA.	20	20
		11	Phonetics	Accent, intonation, syllables and consonant clusters, Transcription (Phonemic and English)	20	
		111	Literary Types	Lyric	20	
		1V	Rhetoric and Prosody	Figures of speech, their identification in a given passage; Prosodic analysis and scansion	20	

G-3 Recommended reading - Unit 1 & II: A Textbook of English Phonetics for Indian Students- T.

Balasubramanian; Phonetics- J.D. O' Conor. Phonetics- Daniel Jones.

Unit III: Hudson: An Introduction to the Study of Literature.

Prasad: A Background to the Study of Literature

Unit IV: Elements of English Rhetoric and Prosody- Bose & Sterling.

- QUESTION PATTERN: i) Internal Assessment:20 marks (8+8+4=20)

  a) Sessional Examination I (Written)-40% of the marks allotted for Internal assessment i.e. 40% of 20 = 8 marks.
  - b) Sessional Examination I (Written)-40% of the marks allotted for Internal assessment i.e.
  - 40% of 20 = 8 marks.
    c) Seminar/ Group Discussion- 20% of the marks allotted for Internal Assessment i.e. 20% of 20 = 4 marks.
  - ii) End Sen. exams: 80 marks (8x10) 40 marks of MCQ type (40 questions with 4 alternatives) 40 marks of Broad/ Descriptive types.



## SYLLABUS OF KOKBOROK GENERAL COURSE

SEMESTER SYSTEM
THREE YEAR DEGREE COURSE
SEMESTER - III
2014

#### 3rd Semester

#### Paper III Kokborok Grammar, Translation and Transcription Marks: 100

#### Unit-1 Kokborok Phonology and Morphology

Kokborok vowels and consonants (articulation and distribution) – Contrastive Pairs, Clusterisation, Assimilation, Syncope (Vowel deletion and Consonant deletion) – Syllable, its types and Structure – Free and Bound Morphemes – Pronouns and case particles – Verbal postpositions – Lexical Tone and its role in meaning distinction

#### Unit-11 Kokborok Syntax and Semantics

Distinction between Roots and Affixes – Types and functions of affixes in Kokborok – Comparative Vocabulary – Indic Loans and Recent Neologisms – Semantics of words (Synonyms, Antonyms, Homonyms) – Semantics of sentences elements (Agent. Experiencer, Relativiser-Nominalizer, Positioner, Causativizer and Transitiviser, Instrument, Recipient and Beneficiary)

#### Unit-III Basic concepts of Translation and Transcription

Differences between Translation and Transliteration, Transliteration and Spelling pronunciation – Differences between Transliteration and Transcription – Source Language and Target Language – Basic Concepts of Orthography, Symbol, Alphabet, Grapheme, Alpha-syllable, IPA and Phonetic Alphabet – Types of Transcription

#### Unit IV Exercises in Translation and Transcription

- (a) Translation of words, phrases and sentences (source language: English/ Bengali; target language: Kokborok)
- (b) Transcription of words and sentences (Kokborok to IPA and/or IPA to Kokborok)

#### References

- 1. Daulat Ahmed & Mohammed Umar, Kokboroma (1897: Amar-Jantra, Comilla)
- 2. Radhamohan Debbarma Thakur, Kok-Borok-ma (1900: Chaitanya-Jantra, Comilla)
- 3. Pushpa Pai Karapurkar, Kokborok Grammar (1972: Central Institute of Indian Languages, Mysore)
- 4. Dasarath Debbarma, Kog-borok Swrwng (1980, 2nd Edn: Directorate of School Education, Govt. of Tripura, Agartala)
- 5. François Jacquesson, A Kokborok Grammar (2008: Kokborok Tei Hukunu Mission, Agartala)
- 6. Rupak Debnath, A Glossary of Phonetics and Phonology (2004; Reprinted 2010: Abhijit Publications, New Delhi)
- 7. Kumud Kundu Choudhury, Kokborok Dhvani-Bichar (2010: Akshar Publication, Agartala)

- 8. Nitai Acharya, Kokborok bai Sahaj Bangla-Bhasha Shiksha (2010: 2nd Edn 2013: Yakhrai Publication, Agartala)
- 9. Nitai Acharya, Sorol Kokborok Byakoron (2014: Yakhrai Publication, Agartala)
- 10. Naresh Chandra Devvarma, An Introduction to Kokborok Grammar and Translation (2006: Dey Publication, Agartala)
- 11. Binoy Debbarma and Brijesh Debbarma, Kokborok Terminology (2010: Language Wing, TTAADC, Khumlwng)
- 12. Rabindra Kishore Debbarma. Kokborok Kokma Kwtal (2002: Tribal Research Institute. Agartala)
- 13. Rabindra Kishore Debbarma, *Sahaje Sikhun Kokborok* (2011: Tripura Bani Prakashan, Agartala)
- 14. Ajita Tripura, A Comparative Study of Kokborok, English and Bengali Language (2011: Tribal Research and Cultural Institute, Agartala)



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### SYLLABUS

OF

Philosophy (Major and General)

Semester III

Year 2014 SYLLABUS B.A. TDP/TDPH (Honours/Major)

#### Semester – III (Paper-III) Ethics (Indian and Western) (Full Marks: 100)

Unit -1: Indian Ethics: Purusarthas and their inter-relations, Purusartha Sadhana, Law of Karma, Carvaka Ethics.

Unit-II: Indian Ethics: Buddhist Ethics, The Four Noble Truths, Jaina Ethics: Anuvrata, Mahavrata, Triratna.

Unit-III: Western Ethics: Nature and Scope, Voluntary and Non-Voluntary Actions.
Moral Judgements, Postulates of Moral Judgements, Objects of Moral
Judgements.

Unit-IV: Western Ethics: Theories of Moral Standard (Hedonism, Rigorism of Kant, Perfectionism),
Practical Ethics: Rights and Human Rights: Their Characteristics (Racism, Castecism), Feminism (Radical & Spiritaul), Environmental Ethics.

#### Suggested Readings:

- 1. Carvaka Darsanam: Panchanan Sastri
- 2. Carvaka darsan: Daksina Ranjan Sastri
- 3. Bharatiya Darsan: Pradyot Kumar Mandal
- 4. Bharatiya Darsan: Nirode Baran Chakraborty
- 5. Bharatiya Darsan: Dipak Kumar Bagchi
- 6. Buddha Darsan: Panchanan Sastri
- 7. Purva Mimansa Darsan: Sukhomay Bhattacharya
- 8. Nitividya: Samarendranath Bhattacharya
- 9. Nitividya: Shibapada Chakraborty
- 10. Nitividyar Tattvakatha: Somnath Chakraborty
- 11. The Ethics of Hindus: S.K. Maitra
- 12. Fundamentals of Hinduism: S.C. Chatterjee
- 13. Indian Philosophy: S. Radhakrishnan
- 14. Introduction to Indian Philosophy: D.M. Dutta and S.C. Chatterjee
- 15. A Critical Survey of Indian Philosophy: C.D. Sharma
- 16. Principles of Ethics: Phani Busan Chatterjee
- 17. Manual of Ethics: Mickenzie
- 18. An Introduction to Ethics: William Lillie



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Syllabus OF

**Environmental Studies** (Foundation Course)

Semester - III

# SYLLABUS OF ENVIRONMENT STUDIES FOR UNDER GRADUATE FOUNDATION COURSE OF THIRD SEMESTER FOR ALL BRANCHES OF HIGHER EDUCATION

#### Unit 1: Nature of Environmental Studies and Natural Resources

15 lectures

- o Environmental Studies: Definition, scope and importance
- o Renewable and non-renewable resources
- o Natural resources and associated problems
  - a. Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction, mining, dams and their effects on forests and tribal people.
  - b. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
  - c. Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
  - d. Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
  - e. Energy resources: Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources, case studies.
  - f. Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification

Role of an individual in conservation of natural resources

#### Unit 2: Ecosystems and Biodiversity Conservation

15 lectures

- o Concept of an ecosystem
- o Structure and function of an ecosystem
- o Producers, consumers and decomposers
- o Energy flow in the ecosystem
- o Ecological succession
- o Food chains, food webs and ecological pyramids
  - a. Forest ecosystems: Structure and functions

Syllabus of Environment Studies for Under Graduate Foundation Course of Third Semester for All Branches of Higher Education



- Biodiversity: Definition: Genetic, Species and Ecosystem diversity
- Value of biodiversity: Consumptive use, Productive use, Social, Ethical, Aesthetic and option values
- Hotspots of biodiversity
- Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts
- Endangered, endemic, exotic species in India
- Conservation of biodiversity: In-situ and Ex-situ conservation
  - Wildlife Protection Act
  - Forest Conservation Act

#### Unit 3: Environmental Degradation and Management

15 lectures

- o Definition, Causes, effects and control measures of:
  - a. Air pollution
  - b. Water pollution
  - c. Soil pollution
  - d. Noise pollution
- Environmental Protection Act
- Air (Prevention and Control of Pollution) Act
- Water (Prevention and Control of Pollution) Act
- Climate change and global warming
- Water conservation, Rain water harvesting, Watershed Management
- Vermicomposting: Definition, Vermicomposting species and importance
- Disaster management: floods and earthquakes
- Role of Tripura State Pollution Control Board (TSPCB)

#### Unit 4: Human Population and Social Issues

15 lectures

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- o Sustainable Development
- o Environmental ethics: Issues and possible solutions
- o Environmental awareness
- Social Impact Assessment (SIA) and Cumulative Effects Assessment (CEA)
- Demographic structure

Syllabus of Environment Studies for Under Graduate Foundation Course of Third Semester for All Branches of Higher Education

- Population explosion Family welfare Programme
- Environment and human health
- Human Rights
- HIV/AIDS
- Women and Child Welfare

### Suggested Books

- 1. Textbook of Environmental Studies for Undergraduate Courses by Erach Bharucha Second edition, 2013 Publisher: Universities Press (India) Private Ltd, Hyderabad.
- 2. Bharucha Erach, Text book on Environmental Studies, UGC, New Delhi
- 3. Borua P.K., J.N.Sarma and others, A Text book on Environmental Studies, Banlata, Dibrugarh.
- 4. Priyasankar Chaudhuri, 2006 Kenchor Jeevan Baichaltra : Kencho Prajukti, , Jyan Bichitra Prakashani, Agartala.
- 5. De A.K., Environmental Chemistry, Wiley Eastern Ltd.
- 6. Environmental Sciences by Daniel B Botkin & Edward A Keller Publisher: John Wiley & Sons.
- 7. Environmental Studies by Anindita Basak ,2009 Publisher: Drling Kindersley(India)Pvt. Ltd Pearson
- 8. Environmental Studies by Benny Joseph, TMH publishers.
- 9. Environmental Studies by Dr. Suresh K Dhameja, 2007 Published by : S K Kataria & Sons New
- 10. Basics of Environmental Studies by U K Khare, 2011 Published by Tata McGraw Hill.
- 11. Dutta Prasanna, Rofique Ahmed & Sumbit Chaliha, Environmental Studies, Eunika Publication, Jorhat.
- 12. Environment Studies, by Sangram Sinha, Basant Kumar Agarwala, Badal Kumar Datta, Tripura University



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**Syllabus** 

OF

History (Major & General)

Semester - IV to VI

### ANTINY MAJARI FOURTH SEMESTER

#### 7 / 27 5 (3-17

#### HISTORY OF PURISH SEER A.D. JOST & D.

#### L'NIT-1 Colonial Polity and Popular Resistance

- Expansion and consolidation of British power in India (18)8-1856); Charter Acts of 1813 and 1833.
- 2. Ideology of Expansion-Mercantilism. Orientalism.
- 3. Popular resistance to colonial rule: a) Santhal -causes, nature and impact: b) Revolt of 1857- causes, nature, impact and historiography.
- 4. Major constitutional reforms since 1909 to 1935.

#### UNIT-2: Colonial Society and Economy

- 1. Spread of western education, growth of press; Debate on nineteenth century ' Bengal Renaissance'.
- 2. Socio- religious reform movements: Young Bengal, Rammohun Roy. Arya Samaj.
- · Vidyasagar, Vivekananda and Sir Syed Ahmed Khan.
- 3. Agriculture and Land Revenue Settlements: Ryotwari, Mahalwari and commercialisation of Agriculture.
- 4. Drain of Wealth and Deindustrialisation of traditional industries: emergence of modern industries and transportation facilities- cotton, Steel and Railways.

#### UNIT-3: NATIONAL MOVEMENT (I)

- 1. Formation of Indian National Congress-background; Moderates and Extremists-their activities.
- 2. Partition of Bengal and Swadeshi Movement; Revolutionaries and their activities: Bengal, Punjab and Maharashtra
- 3. Gandhian Movements: Non-cooperation, Civil Disobedience, Quit India Movements: womens' participation
- 4. Subhash Chandra Bose and his role; INA, RIN Mutiny

#### UNIT-4: NATIONAL MOVEMENT (II)

- 1. Rise of Left wing and their role; Telengana uprising
- 2. Depressed caste movements: Phule and Ambedkar
- 3. Growth of Communalism: Muslim League and demand for Pakistan
- 4. Circumstances leading to the partition of India: Cripps Mission to Mountbatten Plan

#### Papamintended Respings: (Paper Historias Course)

- R.C. Mejumdar(ed.): History and Culture of the Indian Fedole. Rejevant Volumes in parative Vidyabhaban)
- 2. R.C. Majumdar , et al. : An Advanced History of India ( Macmillan)
- 3. Michael Fisher (ed.): The Politics of British Annexation in India (OUP)
- 4. Bipan Chandra: Modern India ( Orient Blackswan) Bengoli version available
- 5. Bipan Chandra et.al., : India's Struggle for Independence (Penguin) Bengali version available
- 6. Bipan Chandra, Barun De, Amalesh Tripathi: Freedom Struggle ( NBT) <u>Bengali version</u> available
- 7. Percival Spear : Oxford History of Modern India (OUP)
- 8. Sekhar Bandyopadhyay : From Plassey to Partition : A History of Modern India ( Orient Black swan) <u>Bengali version available</u>
- 9. Sumit Sarkar : Modern India (Macmillan) Bengali version available
- 10. Ranjan Chakraborty: Random Notes on Modern Indian History( Readers' Service)
- 11. Kenneth Jones: Socio- religious Reform Movements in British India (Cambridge India)
- 12. Tirthankar Roy: The Economic History of India 1857-1947 (OUP)
- 13. Suranjan Chatterjee and Siddhartha Guha Roy: History of Modern India ( Progressive Publishers) <u>Bengali version available</u>
- 14. Anthoney Copley: Gandhi (OUP)
- 15. Judith M. Brown: Gandhi: Prisoner of Hope (Yale University Press)
- 16. A.R. Desai: Social Background of Indian Nationalism (Popular Prakashan) <u>Bengali version</u> available
- 17. Amalesh Tripathi: Swadhinata Samgrame Bharater Jatiya Congress ( Ananda)
- 18. Samar Kumar Mallik: Adhunik Bharater Dersho Bochhor (West Bengal Publishers)
- 19. SamarKumar Mallik: Adhunik Bharater Rupantar ( West Bengal Publishers)
- 20. Saktisadhan Mukhopadhyay: Italio Renaissancer Aloke Banglar Renaissance ( Progressive)
- 21. Suprakash Roy; Bharater Krishak Bidroho o Ganatantrík Samgram
- 22. Subodh Kumar Mukhopadhyay : British Raj Theke Purna Swaraj ( Progressive)
- 23. Provatanshu Maiti: Bharat Itihas Parikrama, Vol-II ( Sridhar)
- 24. Pranab Kumar Chattopadhyay : Adhunik Bharat, Vols-1 & 2 ( Paschimbanga Rajya Pustak Parshad)
- 25. Jiban Mukhopadhyay : Adhunik Bharat o Biswer Itihas ( Sridhar)



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**Syllabus** 

OF

Political Science (Major & General)

Semester - IV

#### 34 Major Econ

#### Samestor-IV: Public Administration Liaber-Till,

#### C'nit-1

- Definition, Nature, Scope and Evolution of Public Administration.
- Public and Private Administration.
- Different theories of Administration: Scientific Management Theory. Classical Theory of Management, Human Relations Theory, NPA (New Public Administration).

#### Unit- 2

- Principles of Formal Organization: Hierarchy, Span of Control, Unity of Command. Centralization and Decentralization, Staff and Line.
- Administrative Behaviour: Authority and Supervision, Leadership, Accountability, Delegation, Communication, Decision Making-Herbert Simon's Behaviour Alternative Model.
- · Policy Making in Government, Policy Making Models, Need for Policy Analysis

#### Unit-3

- Bureaucracy: Max Weber and Karl Marx on Bureaucracy.
- Comparative Public Administration and Development Administration- The Riggsian Model.
- · Basic Principles of Socialist Management- Lenin's concept of Building Socialism.
- · Capitalist Management vs. Socialist Management.
- Public Administration in the age of Globalization.

#### Unit: 4

- Evolution of Public Administration in India.
- District Administration in India.
- Public Accounts Committee, Estimates Committee, Planning Commission and National Development Council of India-Their composition, functions and role.
- Lokpal, Lokayukta.

#### Suggested Readings:

• Self, Peter, Administrative Theories and Politics: An Enquiry into the Structure and Processes of Modern Government, Allen & Unwin, Michigan, 1977.

- Blancountries, birkit. Public deliminimenters Arm in the First on Endowing and P. etc. Brit and Call. Column. 2007.
- s Varianica. E. Soriansi Managementi The Lentury of vorge Fire R. "
  Biosper. 1977
- Sharma, M.F., Public Administration in Theory & Previoe Cital Menal, a symptom 5000
- Maheswari, S. R., Administrative Theory, Macmillan India Ltd. New Delhi. 2000.
- Sapru. R.K., Development Administration, Sterling Publishers Pvt. Ltd., New Webs., 2012.
- Nigro, F. A. and Nigro, L.G., Modern Public Administration. Harper Collins Publishers. 1988.
- Jain, R. B., Contemporary Issues in Indian Administration, Vishal Publications, New Delhi, 1976.
- Singh, H and M. Singh, *Public Administration in India: Theory and Practice*, Sterling Publishers Pvt. Ltd., New Delhi, 1993.
- Bhambri, C. P., Administrators in a Changing Society, Bureaucracy and Politics in India, Vikas Publications, New Delhi, 1971.
- Dey, B. K., Personnel Administration in India: Retrospective Issues and Perspective thoughts, Uppal Publishing House, New Delhi, 1991.
- Bhattacharya, Mohit, Bureaucracy and Development Administration. Uppal Publications, New Delhi. 1979.
- Maheswari, S.R., Indian Administration, Orient Blackswan Pvt Ltd, New Delhi. 2000.
- Arora, Ramesh, Public Administration in India, Rajat Publications, New Delhi, 2008.
- Fadia, B.L. and & Kuldeep Fadia, *Public Administration: Administrative Theories and Concepts*, Sahitya Bhawan, Agra, 2009.



## TRIPURA UNINTERCEITS

(A Central University)
Suryamaninagar-799022

**Syllabus** 

OF

Education (Major & General)

Semester - IV

#### **HONOURS**

#### Semester-IV

#### Paper -H4

#### Contemporary Trends and Issues in Education

Full marks: (80+20)=100

#### Unit-I: Education and Child Welfare

- · Pre- primary Education
- Anganwadi's, Balwadi's, Creches', Day Care Center.
- Integrated Child Development Service (ICDS)
- Role of Indian Council for Child Welfare (ICCW)

#### Unit - II: Educational Organizations and their roles

- Role of NCERT, SCERT, DIET, TBSE in School Education.
- Role of UGC, NAAC, AICTE, ICSSR, NUEPA, CSIR, in Higher Education.
- Globalization, Privatization & Liberalization of Higher Education.
- · Quality and Excellence in Higher Education

#### Unit-III: Contemporary Trends in Education

- Vocationalization of Education.
- Value oriented Education.
- Inclusive Education
- Current Problems of Indian Education; with special reference to
  - -Language Problem,
  - -Student unrest,
  - -Education and unemployment

#### Unit - IV: Emerging Issues in Education

- Population Education
- Environmental Education

- Education for Woman Empowerment
- Teacher Education in India.

#### **Essential Readings**

- Gupta, P.K Population Education, H.P.Bhargava, Book House, Agra.
- Saxena N.R.& Misra B.K. and Mohanty R.Y. Teacher Education, R. Lall Book Depot Meerut, (2004)
- Sharma R.A & Sharma R.K. Problems of Education, H.P. Bhargava, Book House, Agra (2001)
- Singh & Surdarshan Population Education, H.P. Bhargava, Book house, Agara (1996)
- Simgoh, S.M. An Introduction to Environmental Education. Akashi Book Depot. Shillong- 2006
- Tilak, J.B.G. Women's Education and Development Gyan Rooks Pvt. Ltd. New Delhi, 2007

#### Suggested study

- Abhinarayana P Readdy Post literacy and Contunuing Education, H.P. Bhargava, Book house, Agara (1999)
- Chauhan, C.P.S Modern India Education, Kanishk Publisher, New Delhi, 2004
- Joshi, K.M. Higher Educational Developmental Issues, H.P.Bhargava, Book house Agara (2000)
- Kumar, K Life long Education, Eastern Bookd House, Shantipur, Guwahati
   (2000)
- Misra, B.K and Mahanty R. Trends and Issues in Education R.Lall Book Depot, Meerut, (2003)
- Mohanty . J. Human Rights, Education , Deep and Deep Publications, New Delhi (2007)
- Narkhedi, S.P. Challenge of Higher Education in India, Bani Mandir, Guwahati (2000)
- Rao , V.K. and Reddy R.S. Adult and Non Formal Education , H.P. Bhargava , Book house , Agra (1999)
- Shirur, R.R. Non-Formal Education fjor Development, H.P. Bhargava, Book house (1999)
- Sharma, r.n. History and Problems of Education in India. Laxmi Narain Agarwal
   Publisher, Agra(2006)



# ত্রিপুরা বিশ্ববিদ্যালয়

স্নাতক বাংলা সাধারণ ও সাম্মানিক পাঠক্রম সেমেস্টার

ত্রিবার্ষিক ডিগ্রী কোর্স

সেমেস্টার: চতুর্থ, পঞ্চম ও ষষ্ঠ (সাম্মানিক)

চতুর্থ ও পঞ্চম (সাধারণ)

### স্নাতক সান্মানিক বাংলা পাঠক্রম চতুর্থ সেমেস্টার

### চতুর্থ পত্র প্রবন্ধ ও সাহিত্যের রূপ ও রীতি

প্রথম একক: বিবিধ প্রবন্ধ: বঙ্কিমচন্দ্র চট্টোপাধ্যায়: (নির্বাচিত) দ্রৌপদী (প্রথম প্রস্তাব), বঙ্গদর্শনের পত্রসূচনা, বঙ্গদেশের কৃষক, বাঙ্গালার ইতিহাস	20
দ্বিতীয় একক: জীবন স্মৃতি: রবীন্দ্রনাথ ঠাকুর (নির্বাচিত অংশ) শিক্ষারম্ভ, কবিতা-রচনারম্ভ, সাহিত্যের সঙ্গী, রচনা প্রকাশ, স্বাদেশিকতা, ভগ্নস্কদয়, প্রকৃতির প্রতিশোধ, মৃত্যুশোক।	२०
তৃতীয় একক: প্রবন্ধ সংগ্রহ: প্রমথ চৌধুরী ভারতচন্দ্র, বই পড়া, সবুজপত্রের মুখপত্র, বঙ্গসহিত্যের নব্যুগ	২০
চতুর্থ একক: সাহিত্যের রূপ ও রীতি ক) কাব্য ও নটক: আখ্যানকাব্য, মহাকাব্য, গীতিকবিতা, সনেট, ট্র্যাজেডি ও করে ঐতিহাসিক নাটক, পৌরাণিক নাটক, সামাজিক নাটক, প্রহসন, রূপক ও সাংবে নাটক, একাঙ্ক নাটক।	২০ মডি, <b>চ</b> তিক

খ) উপন্যাস ও ছোটগল্পের সংজ্ঞা ও পার্থক্য, উপন্যাসের শেণীবিভাগ (সামাজিক, ঐতিহাসিক,

মনস্তাত্ত্বিক, চেতনাপ্রবাহ মূলক), ছোটগল্পের শ্রেণীবিভাগ (সাংকেতিক, অতিপ্রাকৃত,

মনস্তাত্ত্বিক, হাস্যৱসাত্মক)।



(A Central University)
Suryamaninagar-799022

**Syllabus** 

OF

History (Major & General)

Semester - IV to VI

### TINGTH (CENERAL) FOUNTE SENSETTER

#### LAFERAN

### HISTORY OF TRIPLIED AND ASSAM, 1534 A B. 1047 - J.

#### UNIT-1: TRIPURA-I

- 1. Princely Tripura, social, political and economic condition, before the acception of Birchandra Manikya.
- 2. British relation with Chakla Roshanabad and Hill Tripura; appointment of Political
- 3. Resistance Movements in the 19th century- Tipra (1850), Kuki (1860-61). Jamatia
- 4. Revolt of 1857 and Tripura.

#### UNIT-2; TRIPURA-II

- 1. Era of modernisation and reformative measures Birchandra Manikya to Bir Bikram Kishore Manikya.
- 2. Socio-political movements in Tripura: Reang Uprising and Janashiksha Movement.
- 3. Rabindranath Tagore and Tripura; Contribution of Princely Court towards development of Bengali language and literature.
- 4. World war I & II and Tripura; integration of Tripura to Indian Union

#### UNIT-3: ASSAM-I

- 1. Causes of decline of the Ahom Kingdom
- 2. First Anglo-Burmese War: background, impact; Treaty of Yandaboo- provisions and
- 3. David Scott and his reforms; occupation of upper and lower Assam; Annexation of Cachar plains and Hills.
- 4. Economic Changes under British rule: Tea Plantation, coal and petroleum, mining and

#### UNIT-4: ASSAM-II

- 1. Spread of western education and cultural awakening in Assam-press, literature and
- 2. Revolt of 1857 and Assam
- 3. Non-Cooperation, Civil Disobedience and Quit India Movements in Assam.
- 4. Cabinet Mission and Independence.

#### Recommended Readings: (Paper –IV: General Course)

- 1. Edward Gait: A History of Assam (Eastern Book House)
- 2. Priyam Goswami : A History of Assam( Orient Blackswan )
- 3. H.K. Barpujari: Assam in the Days of the Company (NEHU)
- 4. H.K. Barpujari: Political History of Assam Vol-! (Assam Publication Board)
- 5. A.C. Bhuyan: Political History of Assam, Vols II and III (Assam Publication Board)
- 6. R. M. Lahiri: Annexation of Assam (Firma KLM)
- 7. Amalendu Guha: Planter Raj to Swaraj (Tulika)
- 8. N.R. Roychudhury: Tripura Through the Ages (Sterling)
- 9. H.K. Sur: British Relations with the State of Tripura (Naba Chandana)
- 10. Banikantha Bhattacharjee: Tripura Administration (Mittal)
- 11. Dipak Kumar Choudhury: Political Agents and native Raj (Mittal)
- 12. Ranjit Kumar De : Scio-political Movement in India: A Historical Study of Tripura ( Mittal )
- 13. Mahadev Chakravarti : Assamer Itihas ( Progressive)
- 14. Kailash Chandra Singha: Rajmala (Akshar)
- 15. Nalini ranjan Choudhury: manikya sasanadhin Tripurar Itihas ( Jyan Bichitra)
- 16. Dipak Choudhury: Political Agent O Desiya Rajya (Progressive)
- 17. Dipak Choudhury: Tripurar Arthanaitik Itihas (Jyan Bichitra)



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Suryamaninagar-799022

**Syllabus** 

OF

Political Science (Major & General)

Semester - IV

### BA General Course

# Seniester, IV: Comparetive Covernment of Famous (Paper-18)

## Unit-1; United Kingdom

- 1. Sources and features of the Constitution, Conventions, Rule of the Law.
- 2. Position and power of the Crown.
- 3. Prime Minister: UK.
- 4. Parliament- Composition and functions.
- 5. A comparative study: UK Cabinet with US Cabinet.

### Unit-2: United States of America

- 1. Salient features of the Constitution.
- 2. President- Powers and position.
- 3. Congress- Composition and functions.
- 4. Supreme Court- its Composition, Jurisdiction and Role.
- 5. A Comparative Study: a) US President with UK Prime Minister. b) US Speaker with

### Unit-3. France Republic (5th)

- 1) Salient features of the Constitution.
- 2) President- election, power and role.
- 3) Prime Minister- functions and role- Council of Ministers.
- 4) Parliament- Composition and Functions.
- 5) A Comparative study: U.S President with French President.

# Unit-4 People's Republic of China (Constitution of 1982)

- 1) Features of the Constitution, General Principles of the Constitution.
- 2) Fundamental Rights and Duties.
- 3) National People's Congress- Composition and Functions- Standing Committee.
- 4) State Council- Composition, Functions and Role.
- 5) Role of the Communist Party.
- 6) A Comparative Study: Unitary and Federal Form of Government with special reference to U.K, U.S.A and P.R.C.

### Readings:

- S. Marsill. C. evel. Companions. Folias Folias, 22 forms from recess events. New Delni, 2004.
- Klag, A., The Acu American Political System, AE1 Press, Michigan 1990.
- Lijphart, A. (ed).. Parliamentary Versus Presidential Government: Oxford Readings in Folitics and Government. Oxford University Press. United Kingdom. 1992.
- Drogus, Carol Ann & Orvis, Stephen, Introducing Comparatives Politics, Sage Publications, 2011.
- Roberts William et. Al., Principles of Comparative Politics, Sage Publications, 2012.
- Ghai. K.K., Major Governments, Kalyani Publishers, New Delhi, 2011.
- Finer, H., Theory and Practice of Modern Government, H. Holt, 1949.
- Roberts, G. K., An Introduction to Comparative Politics, Arnold, London, 1986.



# TRIPURA UNINTERCEITS

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**Syllabus** 

OF

Education (Major & General)

Semester - IV

#### Pass/ Elective

#### Semester- IV

#### Paper- p4

### MEASUREMENT, EVALUATION AND STATISTICS IN EDUCATION

Full marks: 80+20= 100

#### Objectives:

- To enable the students to understand the concept of measurement and evaluation as applied to education.
- To familiarize the students about the various types of educational and psychological tests.
- To enable the students to develop the competency in solving various statistical problems.

#### Course contents

### Unit- I: Introduction to Measurement and Evaluation

- Concept of Measurement and Evaluation
- Distinction between Measurement and Evaluation
- Needs and types of Evaluation
- Bloom's Taxonomy of Educational Objectives under Cognitive Domain

#### Unit- II: Tools and Techniques of Evaluation

- Different types of Tools and Techniques of evaluation
- Concept of Standardized and Teacher Made Test
- Characteristics of a good Test
- Reliability and Method of Determining Reliability by Tests- Retest Method
- Validity and Method of Determining Concept Validity
- Factors Effecting Reliability and Validity

### **Unit-III: Basic Concept of Educational Statistics**

- Tabulation of Educational data
- Measures of Central Tendency: Mean, Median & Mode
- Measures of Dispersion: Range, Quartile Deviation, and Standard Deviation.
- Graphical Representation of Educational data (Histogram ,Frequency Polygon & Cumulative Frequency Curve)

### Unit - IV: Correlation and Normal probability curve

- Concept of Correlation
- · Spearman's Rank Difference Method of Correlation,
- Product moment method of correlation
- Normal Probability Curve: Concept & characteristics

#### **Essential Reading**

- Agarwal. J.C. Essentials of Examination System: Evaliation Tests & Measurement. Vikas Publishing House New Delhi (1997)
- Best J.W.& Khan J.V. Reseach in Education (Sixth Edition) Prentice Hall of India, Pvt. Ltd. New Delhi (1998)
- Cronbanch, L.J. Essentials of Psychological Testing, New York, Harper and Brothers, (1960)
- Garrett. H.E. Statistics in Psychology and Education, Easternm Book House,
   Shantipur Guwahati (1995)
- Julian C. Stanley & Kenneth D. Hopkin Educational and Psychological Measurement and Evaluation, Prentice Hall of India, Pvt. Ltd. New Delhi, (1978)
- Kerlinger, F.N. Foundations of Behavioural Research, Surject Publications, Delhi. (1978)
- Rajamanickam, M. Statistical Methodd in Psychological and Educational Research, H.P. Bhargava Book House, Agra- (2001)
- Singha, H.S. Modern Educational Testing, Sterling Publisher & Co. New Delhi (1974)
- Sharma, R.A. Essentials of Measurement in Education & Psychology. R.Lall Book Depot Meerut, (2004)
- Sungoh, S.M. Educational Evaluation and Testing Himalaya Book House Shillong (2006)

#### Suggested Readings

- Noll, N.H.S. Cannell, D.P. & Craig, RC, (1979). Intriduction to Educational Measurement. Boston: Houghton Miffin.
- Macmillan, J.H.(1997). Classroom Assessment, Principles and Practice for Effective Instruction. Boston: Allyn and Bacon
- Hopkins, KD.(1998) Educational and Psycholigical Measurement and Evaluation. Boston: Allyn and Bacon

- Cohen, R.J., Swerdlik, M.E., & Phillips , S.M. (1996). Psychological testing and Assessment. An Introduction to the Tests and Measurement. California: Mayfield Publishing Co.
- NCERT(2005) National Curriculum Tramework, 2005. New Delhi : NCERT
- NCERT (2006). Fkocus Group Position Paper : Examination Reforms. New Delhi: NCERT
- NCERT (2008). Source Book on Assessment for class I-V: Social Sciences. New Delhi: NCERT



# ত্রিপুরা বিশ্ববিদ্যালয়

স্নাতক বাংলা সাধারণ ও সাম্মানিক পাঠক্রম সেমেস্টার

ত্রিবার্ষিক ডিগ্রী কোর্স

সেমেস্টার: চতুর্থ, পঞ্চম ও ষষ্ঠ (সাম্মানিক)

চতুর্থ ও পঞ্চম (সাধারণ)

### মাতক বাংলা সাধারণ পাঠক্রম চতুর্থ সেমেস্টার

# চতুর্থ পত্র সাহিত্যের রূপ-রীতি ও গদ্যসাহিত্য

প্রথম একক: সাহিত্যের রূপ-রীতি:

<ul> <li>ক) কাব্য ও নাটক: আখ্যানকাব্য, মহাকাব্য, গীতিকবিতা ঐতিহাসিক নাটক, পৌরানিক নাটক, সামাজিক নাটক নাটক, একাঙ্ক নাটক</li> </ul>	, সনেট, ট্র্যাজেডি ও কমেডি, , প্রহসন, রূপক ও সাংকেতিক
খ) উপন্যাস ও ছোটগল্প: উপন্যাস ও ছোটগল্পের সংজ্ঞা ঐতিহাসিক উপন্যাস, সামাজিক উপন্যাস, আঞ্চলিক উ আত্মজীবনী মূলক উপন্যাস, কাব্য-উপন্যাস	ও পার্থক্য, নভেল ও রোমান্স, টপন্যাস, মনস্তাত্ত্বিক উপন্যাস,
দ্বিতীয় একক: কমলাকান্তের দপ্তর – বক্কিমচন্দ্র চটোপাধ্যায় (নির্ব আমার মন, বসন্তের কোকিল, বিড়াল	গিচিত) মনুষ্যফল, পতঙ্গ, ২০
ভৃতীয় এককঃ ছিন্নপত্র-রবীন্দ্রনাথ ঠাকুর (পত্র সংখ্যাঃ ৫২, ৫৯, ৮০, ৯২, ১০৩, ১১৫, ১৫	20) 20
চতুর্থ একক: তিতাস একটি নদীর নাম-অদ্বৈত মল্লবর্মণ	2,0



(A Central University)
Suryamaninagar-799022

Syllabus

For

Elective English Semester: I - V

Year 2014

#### TRIPURA UNIVERSITY ENGLISH ELECTIVE SYLLABUS

#### Semester IV

				CONTENT	MARKS		
SEM	PAPER	UNIT		CAMITES	End Sem.	Internal	
IV	G-4	1	Indian English Novel	R.K.Narayan-The Guide	20		
		П	Indian English Poetry	Toru Dutt- Our Casuarina Tree, Sarojini Naidu- If Yau Call Me, Tagore-Heaven of Freedom, Nissim Ezekiel- Night of the Scarpion.	20		
			m	Short Stories from Indian English	J.Lahiri; When Mr. Piirzaada Came to Dine, Keki, N. Daruwalla- Love Across the Salt Desert.	20	
		IV	North Eastern Poetry in English	Indira Goswami- The Journey (in trans.) Robin S. Ngangom- A Poem for Mother. Nanda Debbarma (in trans.)—I shall go to you. Sachlang Tripura (in trans.)—Denvn at Hokutwisa. Temsula Ao- Jungle Major.	20		

Recommended reading — Unit I- R.K.Narayan-*The Guide*,

Unit II-V.K.Gokak- The Golden Treasury of Indo-Anglian Poetry:
Unit III- J.Lahiri: The Interpreter of Maladies, HarperCollins
Keki N. Daruwalla: \*Love Across the Salt Desert', Golden Rendezvous,

Macmillan

Unit IV- Writings from North east India- ed. Tilottama Misra.

The Fragrant Joom; A Translation of Kokbarak Poetry in English- translated by

Ashes Gupta, Akshar Pub.

The Journey: http://www.krachtvancultuur.nl/ en/current

/2008/december/journey;

Temsula Ao: These Hills Called Home: Stories from a Wor Zone.

- OUESTION PATTERN: i) Internal Assessment; 20 marks (8+8+4=20)

  a) Sessional Examination I (Written)-40% of the marks allotted for Internal assessment i.e. 40% of 20 = 8 marks.

  b) Sessional Examination I (Written)-40% of the marks allotted for Internal assessment i.e. 40% of 20 = 8 marks.
  - c) Seminar/Group Discussion-20% of the marks allotted for Internal Assessment i.e. 20% of 20 = 4 marks.
  - ii) End Sem. exams: 80 marks (8x10)
    40 marks of MCQ type (40 questions with 4 alternatives)
    40 marks of Broad/ Descriptive types,



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**Syllabus** 

Of

Kokborok (General)

Semester IV & V

### 4th Semester Full Marks: 100 Paper - 4

#### Novels, Dramas, Short Stories & Literary Essays

Unit-I	Novels
(i)	Hachuk Khurio (Part-1) by Sudhanwa Debbarma
(ii)	Langmani Rukungo by Sunil Debbarma
Unit-II	Short Stories
(i)	Hathairai by Nagendra Jamatia
(ii)	Choba Kaisani Ulo by Shyamlal Debbarma
(iii)	Swmai by Binoy Debbarma
(iv)	Mahajon Kusu by Atul Debbarma
Unit-III	Dramas
(i)	Hakor Bisingni Nokharbaisidi By Nagendra Jamatia
(ii)	Longtraini Ekyalavya by Nanda kumar Debbarma
· Unit-IV	Literary Essays
(i)	Samaj bai Sonskriti by Alindralal Tripura
(ii)	Jora tai Tongthai Hano Rwgwi Kokrwbai by Naresh Chandra Dev Varma
(iii)	Sachwlangni Kungkila (Translated) by Nagendra Chandra Debbarma
(iv)	Aming (Translated) by Nagendra Chandra Debbarma
References	

- 1. Chakraborty, Dipankar. 2011. Rangbwtang. Agartala: Akshar Publications.
- 2. Debbarma, Atul. 2006. Toksa Hakaya. Agartala: Hachukni Khorang Publishers...
- 3. Debbarma, Binoy. 1989. Nakhwrai. Agartala: Presina.
- 4. Debbarma, Jugendra Chandra, 1992. Kamala Kantani Doptor, Agartala: Subrai Publication.
- 5. Debbarma, Nanda Kumar. 2015. Thungnuk Bwchap. Agartala: Akshar Publications.
- 6. Debbarma, Sunil. 2003. Langmani Rukungo. Agartala: Kokborok Sahitya Sansad.
- 7. Debbarama, Shyamlal. 1995. Choba Kaisani Ulo. Agartala: Kokborok Sahitya Sansad.
- 8. Dev Varma, Naresh Ch. 2006. Jorani Mwkhang. Agartala: Hachukni Khorang
- 9. Jamatia, Nagendra. 2015. Hakhor Bisingni Nongkharbaichhidi. Agartala: Tribal Research Institute.



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Suryamaninagar-799022

Syllabus

OF

Philosophy (Major & General)

Semester - IV to VI

### SYLLABUS — B.A. TDP (Elective/Pass/General)

# Semester - IV (Paper-IV) Philosophy of Mind and Socio-Religious Philosophy (Full Marks: 100)

Unit-I: Psychology: Nature and Scope of Psychology, Psychological Methods (Introspection, Extrospection, Perception)

Unit-II: Psychology: Memory, Dream, levels of mind (Concious Unconscious, Sub-Concious), Learning (Theory of Insight & Trial & Error).

Unit-III: Philosophy of Religion: Theories of the Origion of Religion (Anthropological & Psychological), Tribal, National and Universal Religion.

Unit-IV: Social Philosophy: Basic Concepts: Society, Social Groups, Association,
Institution, Community, Law and Custom. Relation between Society and Individual
(Socialism and Individualism)

#### Suggested Readings:

- 1. Manovidya: Pareshnath Bhattacharya
- 2. Manovidyā: Jagadishwar Sanyal
- 3. Manovidya: Samarendranath Bhattacharya
- 4. Manovidyā: Priti Bhusan Chattopadyaya
- 5. Samaj Darsan Dipika: Priti Bhusan Chatterjee
- 6. Samai Tattva: Parimal Kar
- 7. Rastra: Sudarshan Roy Choudhury
- 8. Adhunik Rastriya Matabader Bhumika: D.K. Chakraborty
- 9. Samaj Darsan O Rastra Darsan: Samarendranath Bhattacharya
- 10. Rastra Darsaner Dhara: Amal Kumar Mukhopadhayay
- 11. A Text Book of Psychology: P.N. Bhattacharya
- 12. A Modern Introduction to Psychology: Rex and Knight
- 13. Society: Malever and Page
- 14. The Philosophy of Religion: M. Edwards
- 15. An Intruduction t to Philosophy of Religion: J. Caird
- 16. Philosophy of Religion: John Hick
- 17. Idea of God: Pringle Pattison

10,04, 199, 1944 (1997)



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Suryamaninagar-799022

**Syllabus** 

OF

Computer Skills FNDC-V

Semester - IV

#### Syllabus

#### Computer Foundation

#### (FNDC-V)

Full marks: 100

Credits: 5

Introduction: introduction to computer system, Characteristics of Computers, Uses of computers, Types and generations of Computers, Basic Applications of Computer.

Data Representation: Number systems and character representation, decimal, binary, Octal and hexadecimal system, conversion from one number system to another number system, binary arithmetic (addition, subtraction using 1's complement & 2's complement, multiplication).

Representation of data/Information concepts of data processing,

Definition of Information and data, Basic data types, Storage of data/information as files

Human Computer Interface: Types of software, Operating system as user interface, utility programs.

Devices: Input and output devices (with connections and practical demo), keyboard, mouse, joystick, scanner, OCR, OMR, bar code reader, web camera, monitor, printer, plotter

Memory: Primary, secondary, auxiliary memory, RAM, ROM, cache memory, hard disks, optical disks

Use of Computers in Education and Research: Data analysis, Heterogeneous storage, e-Library, Google Scholar, Domain specific packages such as office, SPSS, Mathematica etc.

#### Reference Books:

- 1. A. Goel, Computer Fundamentals, Pearson Education, 2010.
- 2. P. Aksoy, L. DeNardis, Introduction to Information Technology, Cengage Learning, 2006
- 3. P. K.Sinha, P. Sinha, Fundamentals of Computers, BPB Publishers, 2007



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**Syllabus** 

**OF** 

History (Major & General)

Semester - IV to VI

#### Matarian (Marata)

#### FIFTH SEMESTER

#### PAPER-V

### RISE OF THE MODERN WEST, MID 15<sup>TH</sup> TO LATE 18<sup>TH</sup> CENTURIES

#### UNIT-1:

- 1. Crisis and decline of Feudalism in western Europe and forms of survival in eastern Europe.
- 2. Rise of absolute monarchies in England, France and Spain: reasons
- 3. Thirty Years' War and Treaty of Westphalia- causes and significance.
- 4. Economic origins of modern western society: Mercantilism, Commercial Revolution

#### UNIT-2:

- 1. Renaissance: Meaning, causes, nature, spread, limitations; growth of Humanism.
- .2. Reformation: origin, varieties , significance; Counter Reformation
- 3. Modern Science and Technology: Leonardo Da Vinci, Copernicus, Galileo and Newton: their contribution; Printing Revolution—impact
- 4. Geographical Explorations: motives and early voyages and beginnings of colonialism with special reference to Spain, Portugal and England.

#### UNIT-3:

- 1. Price Revolution: causes, nature and impact; Enclosure Movement
- 2. Industrial Revolution in England: background and features.
- 3. Challenge to colonialism: American War of Independence- causes and significance.
- 4. Debate on transition from feudalism to capitalism: Dobb-Sweezy debate

#### UNIT-4:

- 1. Political patterns- I: conflict between parliament and Crown in England in the 17th century: Long parliament and civil war; Glorious Revolution of 1688, growth of liberalism
- 2. Political patterns-II: Royal Absolutism in France, Louis XIV and his policies.
- 3. Eighteenth century as Age of Enlightenment: Features and impact on society and polity
- 4. French Revolution: background, nature, and impact.

### Raut Hygensen Restlings: (Raper 4M Mejor Course)

- 2 Roomey Hilliam Fransision from Faudalism, C. Capitalion, 145 8 6 1017
- J.D. Bernall Science in History <u>Bengal' Translation available</u>
- 3. Euan Cameron (eu.): Early Modern Europe: An Oyford History ( OUF libbiar edition:
- Eugene F. Rice and Anthony Grafton: The Foundations of Farly Modern Eurape 1460-1555 ( WW Norton & Company, Indian Edition)
- 5. Richard Dunn: The Age of Religious Wars, 1559-1715 (WW Norton & Company, Indian Edition)
- 6. Arvind Sinha: Europe in Transition: From Feudalism to Industrialism (Manohar)
- 7. Rila Mukherjee: Europe Transformed ( Progressive)
- 8. Meenakshi Phukan : Rise of Modern West (Macmillan)
- 9. P. Deane: The First Industrial Revolution (Cambridge, Indian edition)
- 10. B.V. Rao: History of Europe, 1453-1815 (Sterling)
- 11. L. Mukherjee: A Study of European History 1453-1815 (J.N. Ghosh and Sons, Kolkata)
- 12. C.J. H. Hayes: Modern Europe to 1870 ( Surject Publications)
- 13. Perry Anderson : Lineages of the Absolutist States (Verso)
- 14. K.C. Choudhury: British History ( New Central Book Agency)
- \* 15. J.R. Tanner: English Constitutional Conflicts of the Seventeenth century ( Cambridge)
  - 16. Henry Bamford Parkes: A History of United States of America (Khosla Publishing House)
  - 17. Nirmal Chandra Datta: madhyajug Theke Europer Adhunikatar Uttaran ( Mitram )
  - 18. Pulakesh Roy & Sayantan Das, Uttaraner pathe Europe (Progressive)
  - 19. Rila Mulherjee : Rupantarita Europe( Progressive)
  - 20. Bhaskar Chakaravarti, Subhash Ranjan Chakravarti & Kinshuk Chatterjee: Europe Yugantar ( Naba Bharati Prakashani)
  - 21. Samarendra Nath Sen: Bigyaner Itihas (Saibya Prakashani)



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**Syllabus** 

OF

Political Science (Major & General) Semester – V &VI

#### BA Major/ Honours

### Semester- V: Indian Political Thought (Paper- V)

#### Unit-I

- Sources and salient features of Ancient Indian Political Ideas.
- Theory of kingship: Manu and Sukra.
- Kautilya: Views on King, Concept of State and Foreign Policy.
  - Salient features of Medieval Indian Political Ideas.

#### Unit - II

- Rammohan Roy His contribution to Indian Liberalism and Socio-economic reforms.
- Ideas of Nationalism: Bankim Chandra, Aurobinda and Rabindranath Tagore.
- Syed Ahmed Khan: Colonial role and Modernization.

#### Unit-III

- · Vivekanand Views on Socialism.
- · S.C. Bose-Concept of Socialism.
- J. Nehru Concept of Socialism.
- M. K. Gandhi- Concept of State.
- · M.N Roy- Concept of Neo-Humanism.
- · Gokhle's Economic Ideas.
  - Aurobinda- Concept of Passive Resistance.

#### Unit- IV

- · Naraedra Deva Socialism.
- Jay Prakash Narayan Partyless Democracy and Social Revolution.
- B.R. Ambdedkar Social Justice, Democracy and Constitutionalism.

### Suggested Readings:

- Sharma, R.S., Aspects of Political Ideas and Institutions in Ancient India, Motilal Banarsi Dass Publishers Pvt. Ltd., Delhi, 1991.
- Ghoshal, U.N., A History of Hindu Political Theories, Hard Press Publications, Lenox, Massachusetts, 2012.
- Kosambi, D. D., Ancient India, Pantheon Books, New York, United States, 1966
- Sharma, V. P., Hindu Political Theory, Motilal Banarsi Dass, Delhi, 1974.
- Nanda, B.R., Gandhi and his Critics, Oxford Paperbacks (OUP India), England, 1994.
- Nehru, J., Discovery of India, Oxford University Press, England, 1989.
- Chakraborty, Bidyut, Indian Political Thought, SAGE Publications, Delhi, 2013.
- Pantham, Thomas and Kenneth L. Deutsch, Political Thought in Modern India, SAGE Publications, Delhi, 2013.
- Singh, Akash and Silika Mahapatra, (Eds), Indian Political Thought, Routledge, London. 2010.
- Chakraborty, Debasis, Baratiya Rastrachintar Dhara, Central Book Publishers,
   Kolkata,
- Mahapatra, Anadi Kumar, Bharatiya Rastra Dharsan, Suhrid Publication, Kolkata.
- Sarkar, Sumit, Adhunik Bharat, K.P Bagchi and Company, 1993.
- Chakraborty, Satyabrata (Ed.), Bharatborsa Rastra Bhavna, Ekushe Dhaka, 2001.



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**Syllabus** 

OF

Education (General & Major)

Semester - V & VI

### **EDUCATION**

### Syllabus for Semester - V

#### **B.A HONOURS**

Paper: H5 (Major)

#### Measurement & Evaluation in Education

Full Marks: 100 (80+20)

#### **Objectives**

- To enable the students to understand the concept of measurement & evaluation as applied to education.
- To familiarize the students about the various types of educational and psychological tests.
- To enable the students to develop the competency in solving various problems of evaluation.

#### COURSE CONTENT

#### Unit - 1: Measurement, Assessment and Evaluation in Educatio

Measurement: concept, purpose and scales of measurement.

Evaluation: concept, types and its importance in education.

Assessment: Concept, Norm Referenced Vs Criterion Referenced Assessment, Role of Assessment in Education.

- Interrelationship among measurement, assessment and evaluation.
- Taxonomy of Educational Objectives: Cognitive domain, Summative and Formative evaluation.(to be discussed only)

#### Unit - II: Tools and Techniques of Assessment

- Different tools and techniques of assessment: Tests, Observation, Assignment, Anecdotal Records and Project.
- General principles of test construction and standardization.
- Teacher made test and Standardized test.

#### Unit -III: Characteristics of a Good Test

- Reliability concept, methods and factors affecting reliability.
- Validity concept and methods.
- Objectivity and Norms

#### Unit - 'IV: Modern Trends in Evaluation

- CCE(Continuous and Comprehensive Evaluation)
- Grading and Credit System
- Question Bank
- Semester System

#### Essential Readings

^

Mangal, S.K (2008) Statistics in Education System, Evalution; Test and Measurement. New Delhi: Vikas Publishing House Pvt Ltd.

Aggrawal, J.C 91997). Essentials of Examination System, Evaluation; Tests and Measurement. New Delhi: Vika Publishing House Pvt.Ltd.

Banks, S.R. (2005). Classroom Assessment: Issues and practices. Boston: Allyn & Bacon.

Blooms, B.S (1956). Taxonomy of Educational Objectives: New York: Longman Green and Company.

Cooper, D. (2007). Talk About Assessment, Strategy and Tools to Improve Learning. Toronto: Thomson Nelson.

Earl, L.M. (2006). Assessement as Learning: Using Classroom Assessment to Maximize Student Learning. Thousand Oaks, California: Corwin Press.

Macmillan, J.H. (1997). Classroom Assessment, Principles and Practice for Effective Instruction. Boston: Allyn and Bacon.

Hopkins, KD. (1998). Educational and Psychological Measurement and Evaluation. Boston: Allyn and Bacon. Suggested Readings

Noll, N.H.S cannel, D.P. & Craig, RC.(1979). Introduction to Educational Measurement. Boston: Houghton Miffin.

Linn, R.L. & Gronlund, N.E. (2000). Measurement and Assessment in Teaching. London: Merrill Prentice Hall. Kaplan, R.M & Saccuzzo. D.P. (2000). Psychological Testing, Principles, Applications & Issues. California: Wordswort



# ত্রিপুরা বিশ্ববিদ্যালয়

স্নাতক বাংলা সাধারণ ও সাম্মানিক পাঠক্রম সেমেস্টার

ত্রিবার্ষিক ডিগ্রী কোর্স

সেমেস্টার: চতুর্থ, পঞ্চম ও ষষ্ঠ (সাম্মানিক)

চতুর্থ ও পঞ্চম (সাধারণ)

### পঞ্চম লেমেস্টার

### পঞ্চম পত্ত ভাষাতত্ত্ব ও নাটক

প্রথম	্য একক:	20
	ক) পৃথিবীর বিভিন্ন ভাষাবংশগুলির সংক্ষিপ্ত পরিচিতি খ) ভারতের অন্-আর্য ভাষাগুলির সংক্ষিপ্ত পরিচিতি ও বাংলা ভাষায় তাদের প্রভাব গ) বাংলা স্বর ও ব্যঞ্জন ধ্বনির উচ্চারণ স্থান ও উচ্চারণ রীতি ঘ) ধ্বনি পরিবর্তনঃ ধ্বনি পরিবর্তনের কারণ, পরিবর্তনের বিভিন্ন ধারা ভ) শব্দার্থ পরিবর্তনের কারণ, শব্দার্থ পরিবর্তনের বিভিন্ন ধারা	
দ্বিতীয়	য় একক: বাংলা ভাষার বিবর্তন, বাংলা উপভাষা, সাধু ও চলিত ভাষা, বাংলা শব্দ ভান্ডার।	২০
তৃতীয়	া এককঃ একেই কি বলে সভ্যতাঃ মাইকেল মধুসূদন দত্ত	20
চতুৰ্থ	একক: নবান্ন: বিজন ভট্টাচাৰ্য	২০



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Suryamaninagar-799022

**Syllabus** 

**OF** 

History (Major & General)

Semester - IV to VI

### HISTORY (GENERAL)

### FIFTH SEMESTER

#### PAPER-V

# HISTORY OF EUROPE AND WORLD. C. 1760 A.D-1871 A.D.

#### UNIT-1:

- 1. 18th century as Age of Enlightenment: Features and impact on society and polity.
- 2. French Revolution: causes, Reign of Terror, Constituent Assembly.
- 3. Napoleon Bonaparte: Rise, Reforms and Downfall.
- 4. Era of Conservatism: The Congress of Vienna, Metternich system

#### UNIT-2:

- I. Industrial Revolution in England: causes and consequences.
- 2. American War of Independence: causes; institution of slavery, American Civil warcauses and results, role of Abraham Lincoln.
- 3. China: Opium Wars: causes and consequences; unequal treaties.
- 4. Japan: Commodore Perry and opening of Japan; impact on Shogunate

#### UNIT-3:

- 1. The July Revolution of 1830-causes and results.
- 2. The February Revolution of 1848: causes and results;
- 3. Political development in France between 1848 and 1871, Paris Commune.
- 4. Russia: Modernisation under Alexander II.

#### UNIT-4:

- I. Unification of Italy-Background, Roles of Mazzini, Garibaldi and Cavour.
- 2. Unification of Germany-Background, from Zollverein to Bismarck.
- 3. Chinese response to colonialism: Taiping Rebellion, Tungchi Restoration
- 4. Japan: Meiji Restoration- background, impact

### Recommended Readings: ( Paper – V: General Course)

- 1. David Thomson : Europe Since Napoleon ( Penguin), Bengali Translation available.
- 2. E. Lipson: Europe in the 19th and 20th Centuries ( Allied Publishers)
- 3. David S. Mason: A Concise History of Modern Europe (Orient Blackswan)
- 4. Henry Bamford Parkes: A History of United States of America (Khosla Publishing House)
- 5. L. Mukherjee: A Study of modern Europe and the World (J.N. Ghosh and Sons)
- 6. Ranjan Chakraborty: A History of the Modern World, An Outline (Primus Books)
- 7. B.V. Rao: History of Modern Europe, 1789-2010 (Sterling)
- 8. Provatanshu Maiti: Europer Itihaser Ruparekha (1789-1950), (Sridhar)
- 9. Subodh Kumar Mukhopadhyay: Adhunik Europe: Farashi Biplab Theke Dwitiya Biswajuddha ( Mitram )
- 10. Atul Chandra Roy: Adhunik Europer Itihas, 1789-1939 ( Moulik Library)
- 11. Jiban Mukhopadhyay: Adhunik Europe ( Sridhar)
- 12. Siddharta Guha Roy: Adhunik Purba Asia, Chin o Japaner Itihas ( Progressive)
- 13. Amit Bhattacharyya: Transformation of Japan ( Setu) <u>Bengali Translation available</u>
- 14. Amit Bhattacharyya: Transformation of China ( Setu) Bengali Translation available



(A Central University)
Suryamaninagar-799022

**Syllabus** 

OF

Political Science (General - V<sup>th</sup> Semester & Major - V<sup>th</sup> & VI<sup>th</sup> Semester)

#### **BA General Course**

### Semester- V: International Relations and Organizations (Paper- V)

Della della

Ache of International Relations.

international society- The State and the Non-State Actors- their role in the politics- crisis in territorial states.

ef ef National Power-Elements of national power

- 1) Definition of foreign policy- Various factors in shaping the foreign policy. Determinants of Foreign Policy: a) Legislature b) Public Opinion c) Civil Services.
- 2) National Interest- role of National interest in the formulation of foreign policy of a country.
- 3) Instruments and techniques of state interaction- a) Propaganda,b) Diplomacy.
- 4) Foreign Policy: India, UK, USA and China.

#### Unit- III

- 1) Post-Cold War politics, Neocolonialism.
- 2) Emergence of the Third World / Nature and Problems of the Third World Countries...
- 3) Non-Aligned Movement, Universal declaration of Human Rights.

#### Unit- IV

- 1) The League Covenant and the United Nations Charter Compared.
- 2) Purposes and Principles of the UNO, UN charter, Principal organs of the UNO.
- 3) International Organizations-SAARC, OPEC, WTO, IMF.

#### Readings:

- Frankel Joseph, International Relations in a Changing World, Oxford University Press, Michigan, 1988.
- Calvocoressi, Peter, World Politics since 1945, Longman Publications Group, New Delhi, 2009.
- Palmer, N.D. and H.C. Perkins, International Relations: The World Community in Transition, Houghton Mifflin Publishers, Michigan, 1957.
- Organsky, A.F.K., World Politics, Knopf, California, 1968.
- Friedmann, W. G., An Introduction to World Politics, Macmillan, New York, 1968.
- Goodrich, L.M., The UN in a Changing World, Manchester University Press, Manchester, 1969.
- Worsly, Peter, Third World. University of Chicago Press, Chicago, 1977.
- Ghai, K.K., International Relations, Kalyani Publishers, New Delhi, 2011:
- Mukherjee, Shakti and IndraniMukherjee, International Relations and Organisations, World Press, Kolkata, 2011.
- Robert Jackson, Introduction to International Relations: Theories and Approaches, Oxford University Press, United Kingdom, 2010.
- A.J. Bellamy (ed.), International Society and its Critics, Oxford University Press. United Kingdom, 2005.
- Tin Dunneet.al., International Relations Theories: Discipline and Diversity, Oxford University Press, United Kingdom, 2013.
- Eric B. Shiraev, Vladislav M. Zubak, International Relations, Oxford University Press, New York, 2013.



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Suryamaninagar-799022

**Syllabus** 

OF

Education (General & Major)

Semester - V & VI

# B.A EDUCATION PAPER – P5 (GENERAL)

### THOUGHTS AND IDEAS OF GREAT EDUCATORS

Full Marks: 100 (80+20)

#### UNIT-I

- Swami Vivekananda (1863-1902)
- Sri Aurobindo (1872-1950)

#### UNIT-II

- Rabindranath Tagore (1861-1941)
- Mahatma Gandhi (1869-1948)

#### UNIT -III

- Jean Jacques Rousseau (1712-1778)
- F.W.August Froebel (1782-1852)

#### UNIT-IV

- John Dewey (1859-1952)
- Madam Maria Montessori (1870-1952)

#### BOOKS RECOMMENDED

- Mukherjee, K.K.: Some Great Educators of the World, Das Gupta & Co.pvt.Ltd, Calcutta
- Purkait, B.K.: Great Educators, New Central Book agency, London
- Guha, Bibhuranjan: Shikshay Pathikrit (Bengali), Sobha Publisher, Kolkata.
- Prof.B.C Rai: Theory of Education, Prakasan Kendra, Lakhnow
- Vidya ratna Tancja:Educational Thought and practice, Sterling Publishers Pvt.Ltd, New Delhi



# ত্রিপুরা বিশ্ববিদ্যালয়

স্নাতক বাংলা সাধারণ ও সাম্মানিক পাঠক্রম সেমেস্টার

ত্রিবার্ষিক ডিগ্রী কোর্স

সেমেস্টার: চতুর্থ, পঞ্চম ও ষষ্ঠ (সাম্মানিক)

চতুর্থ ও পঞ্চম (সাধারণ)

## স্নাতক সান্মানিক বাংলা পাঠক্রম চতুর্থ সেমেস্টার

## চতুর্থ পত্র প্রবন্ধ ও সাহিত্যের রূপ ও রীতি

প্রথম একক: বিবিধ প্রবন্ধ: বঙ্কিমচন্দ্র চট্টোপাধ্যায়: (নির্বাচিত) দ্রৌপদী (প্রথম প্রস্তাব), বঙ্গদর্শনের পত্রস্চনা, বঙ্গদেশের কৃষক, বাঙ্গালার ইতিহাস	20
দ্বিতীয় একক: জীবন স্মৃতি: রবীন্দ্রনাথ ঠাকুর (নির্বাচিত অংশ) শিক্ষারম্ভ, কবিতা-রচনারম্ভ, সাহিত্যের সঙ্গী, রচনা প্রকাশ, স্বাদেশিকতা, ভগ্নস্কদয়, প্রকৃতির প্রতিশোধ, মৃত্যুশোক।	20
তৃতীয় একক: প্রবন্ধ সংগ্রহ: প্রমথ চৌধুরী ভারতচন্দ্র, বই পড়া, সবুজপত্রের মুখপত্র, বঙ্গসহিত্যের নবযুগ	২০
ততুর্থ একক: সাহিত্যের রূপ ও রীতি ক) কাব্য ও নটিক : আখ্যানকাব্য, মহাকাব্য, গীতিকবিতা, সনেট, ট্র্যাজেডি ও করে ঐতিহাসিক নাটক, পৌরাণিক নাটক, সামাজিক নাটক, প্রহসন, রূপক ও সাংক নাটক, একাঙ্ক নাটক।	২০ মডি, কতিক

খ) উপন্যাস ও ছোটগল্পের সংজ্ঞা ও পার্থক্য, উপন্যাসের শেণীবিভাগ (সামাজিক, ঐতিহাসিক, মনস্তাত্ত্বিক, চেতনাপ্রবাহ মূলক), ছোটগল্পের শ্রেণীবিভাগ (সাংকেতিক, অতিপ্রাকৃত,

মনস্তাত্ত্বিক, হাস্যরসাত্মক)।



(A Central University)
Suryamaninagar-799022

Syllabus

For

Elective English Semester: I - V

Year 2014

# TRIPURA UNIVERSITY ENGLISH ELECTIVE SYLLABUS

## Semester V

					M	RKS
SEM	PAPER	UNIT		CONTENT	End Sem.	Internal
		1		Shakespeare-As You Like It	20	20
V	G-5	1	British Drama	Shakespeare-2017-101	20	
		11	British Poetry	Shakespeare- Let me not Milton- On His Blindness, John Donne- The Good Morrow, Andrew Marvell- To His Coy		
		m	British Poetry	Mistress. Matthew Amold- Dover Beach, Robert Browning- Perphysia's Lover, Wilfred Owen- Strange Meeting, T.S.Eliot-The Love Song of J.	20	
		IV	Substance and	Alfred Prafrock.  Substance and Critical Appreciation	20	20
		1.3	Critical Appreciation			

Recommended reading – Unit I- Shakespeare-As You Like II, Unit II & III- Pulgrave's Golden Treasury.

- QUESTION PATTERN: i) Internal Assessment; 20 marks (8+8+4=20)

  a) Sessional Examination I (Written)-40% of the marks allotted for Internal assessment i.e. 40% of 20 = 8 marks.

  b) Sessional Examination I (Written)-40% of the marks allotted for Internal assessment i.e. 40% of 20 = 8 marks.

  c) Seminar/ Group Discussion- 20% of the marks allotted for Internal Assessment i.e. 20% of 20 = 4 marks.

  ii) End Sem. exams: 80 marks (8x10) 40 marks of MCQ type (40 questions with 4 alternatives) 40 marks of Brond/ Descriptive types.



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**Syllabus** 

Of

Kokborok (General)

Semester IV & V

## 5<sup>th</sup> Semester Full Marks: 100 Paper – 5

## Kokborok Poetry II

## Unit-I

- (i) Sejama Kwrwi by Gupi Bollap Koloi
- (ii) Holong Koksao Bolong Bisingo by Chandra Kanta Murasing
- (iii) Khapang Rutugo Tabuk Rangchakni Satung by Nanda Kumar Debbarma

## Unit-II

- (i) Chumui Kolopjak Salo by Bodhrai Debbarma
- (ii) Tabukbo Korojak by Utpal Debbarma
- (iii) Ang Bwrwi Wngmabai by Sefali Debbarma

## Unit-III

- (i) Chwng Rojong by Narendra Debbarma
- (ii) Blai Kwkhwrang by Gitya Kumar Reang
- (iii) Khapango Ehu Ehu Khorang by Sachlang Tripura

## Unit-IV

- (i) Hamya Jora by Suranjan Kundu Chaudhury
- (ii) Hayungni Thani by Sabita Debbarma
- (iii) Twimani Swraimung by Laxmidhan Murasing

## References

- 1. Chaudhury, Suranjan Kundu. Ed. 2014. Surang. Agartala: Jora publication.
- 2. Debbarma, Binoy. Compiled. 2009. An Anthology of Kokborok Poems. Khumulwng: Language Wing.
- 3. Debbarma, Bodhrai. 2002. *Sal Hapna Swkang*. Agartala: Hachukni Khorang Publishers.
- 4. Debbarma, Nanda Kumar 1984. Simalung Sakao Holongni Khum. Agartala: Kokborok Sahitya Sabha.
- 5. Debbarma, Shyamlal. 2015. Kokborok Sahitya O Sanskriti. Agartala: Tripura Bani Prakashani.
- 6. Debbarma, Utpal. 2006. Risi. Agartala: Kokborok Sahitya Sabha.
- 7. Dev Varma, Naresh Ch. 2010. Kokborok Bhasa o Sahiter Kromobikas. Agartala: Nabachandana Prakasani.
- 8. Koloi, Gupi Ballab. 2006. Koklop Laikwrang. Agartala: Joyram Prakashani.
- 9. Murasing, Chandra Kanta. 1995. *Holong Kok Sao Bolong Bisingo*. Agartala: Kokborok Sahitya Sanskriti Samsad.



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Syllabus

OF

Philosophy (Major & General)

Semester - IV to VI

## Semester - V (Paper-V)

Contemporary Indian Philosophy (Full Marks: 100)

Unit - 1 : Swami Vivekananda (Karma Yoga) Karma in its affect on character, Each is great in his own place, the Secret of work. What is duty?

Unit - II ; Swāmi Vivekānanda (Jnana Yoga) The Real Nature of Man, The Way to the Realization of a Universal Religion. The Ideal of Universal Religion

Unit - III: Dr. B.R. Ambedkar Social Justice, Anihilation of Caste

Unit - IV: Dr. B.R. Ambedkar Gandhian Ambedkar, Untouchables

## Suggested Readings:

- Karma Yogo: Swāmi Vivekānanda
- Jňána Yogo : Swámi Vivekánanda
- 3. On India and Her Problems and The Complete Works of Swami Vivekananda
- 4. Samaj Samkar Samparke Dr. Ambedkarer Chinta Dhara by Ranjit Kumar Sikdar
- 5. Jat Byavasthar Uched (Translated by Ranjit Kumar Sikdar)
- 6. The Untouchables: Dr. B.R. Ambedkar
- 7. Annihilation of Caste: B.R. Ambedkar
- 8. Dr. B.R. Ambedkar: A Study in Just Society: James Massey

aransa, m

- 9. Socio-Political Philosophy of Dr. B.R. Ambedkar: P.V. Rathnam
- 10. Gandhi O Ambedkarer Tulanamulak Aluchana by Renuka Biswas



(A Central University)
Suryamaninagar-799022

**Syllabus** 

OF

Public Administration Semester - V

# Compulsory Paper for U. G. Course Public Administration (For 5<sup>th</sup> Semester)

## Unit I

- 1. Meaning, nature and scope of Public Administration.
- 2. Significance of Public Administration: Theoretical and Practical.
- 3. New Public Administration, Comparative Public Administration.
- 4. Development Administration.

## Unit II

- 1. Theories of Administration: Scientific Management Theory, Classical Theory of Management, Human Relations Theory.
- 2. Principles of formal Organization: Hierarchy, Span of Control, Unity of Command, Centralization and Decentralization, Staff, Line and Auxiliary
- 3. Management: Its meaning, nature, types and values: Distinguish between Management and Administration.

## Unit III

- 1. Bureaucracy: Max Weber and Marx.
- 2. Public Administration in the age of globalisation.
  - 3. Budget making process in India.
  - 4. Lokpal and Lok Ayukta.

## Unit IV

- 1. District Administration, Block Administration.
- Constitutional body under 73<sup>rd</sup> and 74<sup>th</sup> constitutional amendment of the Indian Constitution.
- 3. Planning and Development: Rural and Urban.

# Selected Readings (Public Administration)

- Bhagwan, Vishnoo & Bhusahan, Vidya.; (ed.) Public Administration, S. Chand & Co.LTD. New Delhi, 2012 (Reprint).
- Jha, S. N and Mathur, P. C; (ed.) Decentralization and Local Politics, Sage Publications, New Delhi, 1999.
- 3. Sengupta, Bhabani.; India: Problems of Governance, Konark Publishers, New Delhi. 1996.
- 4. Mukherjee, Amitava.; (ed.) Decentralization: Panchayats in the Ninetees, Vikas,
  New Delhi, 1994.
- Munshi, Surendra & Abraham, Biju Paul; (ed.) Good Governance, Democratic Societies and Globalization, Sage Publications, New Delhi, 2004.
- 6. Mishra, S.N.; Politics and leadership in municipal Government, Inter-India Publications, Delhi, 1979.
- 7. Datta, Prabhat; Urban Governance and Development, Dasupta & Co. PVT. LTD., Kolkata, 2010.
- 8. Sengupta, Keya, (ed.) Human Development: Multidimensional Approach to Human well-Being, Concept Publishing Company (P) LTD., New Delhi, 2010.
- 9. Polowers, Androw.; (ed.) Plunning for Sustainable Environment, Earthscan, London, 1993.
- 10. Ghai, K.K., Public Administration, Kalyani publishers, New Delhi, 2011.



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**Syllabus** 

**OF** 

History (Major & General)

Semester - IV to VI

#### HISTORY MARKON

#### FIFTH SELIESTER

## PAPER-VI

## MODERN EUROPE AND THE WORLD: C. 1807, A.D., 1935, A.T.

## UNIT-1:

- 1. Napoleon Bonaparte: Rise, Reforms, downfall and assessment.
- 2. Politics of Conservatism : Congress of Vienna, Concert of Europe . Metternich
- 3. The July Revolution of 1830: causes and results: The February Revolution of 1848: causes and results
- 4. France under Third Republic: work of Reconstruction and challenges: the Commune of 1871.

## UNIT-2:

- 1. Nationalism in Europe: Unification of Italy- Mazzini, Garibaldi and Cavour: Unification of Germany-Role of Bismarck.
- 2. The Eastern Question: background; the Crimean War, the Berlin Congress; Balkan Wars.
- 3. Russia: Modernisation under Alexander II and his criticism; the Russian Revolution of 1917: Background and Impact.
- 4. American Civil War: causes, impact; Role of Abraham Lincoln

## UNIT-3:

- 1. First World War: background, impact; Versailles Settlement- assessment
- 2. Post War Crisis I- Economic Depression of 1929: causes and impact; Rise of totalitarian regimes in Germany, Italy and Japan
- 3. Post war crisis II- League of Nations: Formation and Performance.
- 4. Origins of Second World war

## UNIT-4:

- 1. Industrialisation in Europe: Differences between England and the Continent.
- 2. Utopian and Marxian Socialism.
- 3. Chartist and Luddite Movements in England
- 4. Rise of new Imperialism: causes; scramble and partition of Africa

## Recommended Readings: (Paper – Vit Major Course)

- 1. David Thomson: Europe Since Napoleon ( Penguin), Bengail Translation everibles
- 2. E. Lipson: Europe in the 19# and 20" Centuries ( Allied Publishers)
- 3. A.J.P. Taylor: The Struggle for Mastery in Europe (OUP)
- 4. A.J. P. Taylor: Origins of the Second World War
- 5. Georges Lefebvre : The Coming of the French Revolution (Routledge India)
- 6. E.H. Carr: International Relations between the Two World wars, 1919-1939 ( Paigrave)
- 7. David S. Mason: A Concise History of Modern Europe ( Orient Blackswan )
- 8. L. Mukherjee: A Study of modern Europe and the World (J.N. Ghosh and Sons)
- 9. Ranjan Chakraborty: A History of the Modern World, An Outline ( Primus Books)
- 10. B.V. Rao : History of Modern Europe, 1789-2010 (Sterling)
- 11. James Joll: Europe Since 1870 (Penguin)
- 12. C.J. Hayes: Modern Europe to 1870 ( Surject Publications)
- 13. C.J. Hayes: Modern Europe since 1870 (Surject Publications)
- •14. Henry Bamford Parkes: A History of United States of America (Khosla Publishing House)
- 15. Provatanshu Maiti: Europer Itihaser Ruparekha (1789-1950), (Sridhar)
- 16. Subodh Kumar Mukhopadhyay: Adhunik Europe: Farashi Biplab Theke Dwitiya Biswajuddha ( Mitram )
- 17. Chitra Adhikari : Adhunik Europe, Binyas o Bibartan ( Progressivo)
- 18. Atul Chandra Roy: Adhunik Europer Itihas, 1789-1939 ( Moulik Library)
- 19. Jiban Mukhopadhyay: Adhunik Europe ( Sridhar)
- 20. Samar Kumar Mallik : Europe Biplaber Kal ( West Bengal Publishers)
- 21. Samar Kumar Mallik: Nabarupe Europe (West Bengal Publishers)



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Suryamaninagar-799022

**Syllabus** 

OF

Political Science (Major & General) Semester – V &VI

## BA Major/ Honours

## Semester- V: Comparative Government and Politics (Paper- VI)

## Unit-1

- What is Comparative politics? Distinction between Comparative Government and Comparative Politics.
- · Scope, Purpose and Methods of Comparison.
- Nature of Liberal and Authoritarian Political Systems, Parliamentary Sovereignty (U.K.), Separation of Powers, Checks and Balances, Democratic centralism and Methods of Direct Democracy.

## Unit-2

- Federal and Unitary systems: Federalism in USA and Switzerland, nature of unitarism in U.K. and People's Republic in China.
- Parliamentary and Presidential Systems-Comparative study of British and American practicing, unique position of People's Republic in China.
- · Parliamentary Democracy-U.K. and Switzerland.

## Unit-3

- Political Parties: features and role of Party system in U.K. and U.S.A. and PRC.
- · Interest Groups: Their role and Performance in U.K. and U.S.A.
- · Rights and Duties of U.K., U.S.A. and P.R.C.- a comparative study.
  - Judiciary in U.K., U.S.A. and P.R.C (with special reference to Procuratorial Organ).

## Unit-4

## Executive and Legislature

- U K Prime Minister vs. U S President.
- · U K Cabinet vs. US Cabinet.
- · PRC State Council vs. U K Council of Ministers.
- · Swiss Federal Assembly vs. UK Parliament.
- UK Speaker vs. US Speaker.

## Suggested Readings:

- Almond, G. et.al, Comparative Politics Today: A World View, Pearson Education, New Delhi, 2009.
- King, A., The New American Political System, AEI Press, Michigan 1990.
- Lijphart, A. (ed)., Parliamentary Versus Presidential Government: <u>Oxford Readings in</u> Politics and Government, Oxford University Press, United Kingdom, 1992.
- Drogus, Carol Ann & Orvis, Stephen, Introducing Comparatives Politics, Sage Publications, 2011.
- Roberts, William et. Al., Principles of Comparative Politics, Sage Publications, 2012.
- Ghai, K.K., Major Governments, Kalyani Publishers, New Delhi, 2011.
- Finer, H., Theory and Practice of Modern Government, H. Holt, 1949.
- Roberts, G. K., An Introduction to Comparative Politics, Arnold, London, 1986.



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Suryamaninagar-799022

**Syllabus** 

OF

Education (General & Major)

Semester - V & VI

## Paper - H6 (Major)

## **EDUCATIONAL TECHNOLOGY & MANAGEMENT**

Full Marks: 100 (80+20)

## Unit-I

- Educational Technology: Concept, nature, scope, need and limitations.
- Communication: Meaning and nature, types, process, barriers and significance of Communication.
- Communication in teaching-learning situation.
- Mass media approach in educational technology.

## Unit-II

- System approach: Concept and characteristics of system approach. Components of instructional system; uses and limitation of system approach.
- Programmed Learning: Concept, nature and scope of programmed learning; Principles of programming.
- Computer in education.

## Unit-III

- Educational Management; Meaning, nature and scope.
- Role of Educational Manager.
- Need of Educational Management in Modern Education.

## **Unit-IV**

- Educational Planning: Meaning, scope, needs and significance.
- Educational Planning: Types, Steps & Strategies.
- Manpower Planning: Meaning, nature, scope; Characteristics.
- Steps and Strategies in Manpower Planning.

## Book Recommended:

1.Dube, S.R. : Educational Management. 2.Prof, Shri Prakash : Educational planning.

3.Das, B.C : Educational Technology.

4. Bhattacharjee, B.B.: Educational Organization.



# ত্রিপুরা বিশ্ববিদ্যালয়

স্নাতক বাংলা সাধারণ ও সাম্মানিক পাঠক্রম সেমেস্টার

ত্রিবার্ষিক ডিগ্রী কোর্স

সেমেস্টার: চতুর্থ, পঞ্চম ও ষষ্ঠ (সাম্মানিক)

চতুর্থ ও পঞ্চম (সাধারণ)

## পঞ্চম সেমেস্টার

## ষষ্ঠ পত্ৰ কথাসাহিত্য

প্রথম একক: কপালকুভলা: বঙ্কিমচন্দ্র চট্টোপাধ্যায়	20
দিতীয় একক: পথের পাঁচালী: বিভৃতিভূষণ বন্দ্যোপাধ্যায়	20
তৃতীয় একক: অরণ্যের অধিকার: মহাশ্বেতা দেবী	20
চতুর্থ একক: একালের ছোটগল্প সঞ্চয়ন (নির্বাচিত ছোটগল্প): কলিকাতা বিশ্ববিদ্যালয় প্রকাশিত লম্বকর্ণ (রাজশেখর বসু), পয়োমুখম্ (জগদীশচন্দ্র গুপ্ত), তেলেনাপোতা আবিদ্ধার (প্রেমেন্দ্র মিত্র), ফসিল (সুবোধ ঘোষ), নিষাদ (বিমল কর)	২০



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**Syllabus** 

**OF** 

History (Major & General)

Semester - IV to VI

## HISTORY INCLION

#### SIXTH SEMESTER

## PAPER-VII

## HUTORY OF NORTH-EAST INDIA. VELOCIES, P. D.

#### UNIT-1: NORTH-EAST INDIA-1

- 1. First Anglo- Burmese war and the treaty of Yandaboo: Annexation of Upper and Lower Assam: Decline of Ahom kingdom-causes.
- 2. British annexation of Cachar, Jaintia, Khasi, Naga and Lushai Hilis.
- 3. British relation with Manipur till 1891
- 4. Economic Changes under British rule: Tea Plantation, Coal and Petroleum mining and Railways.

## UNIT-2: NORTH-EAST INDIA-II

- 1. Spread of western education and cultural awakening in Assam-press. literature and organisations.
- 2. Revolt of 1857 and Assam; National Movement and Assam: Role of Assam Association.
- 3. Non-Cooperation, Civil Disobedience and Quit India Movements in Assam.
  - 4. Cabinet Mission and Independence; Integration of Manipur and Khasi States into the Indian Union.

## UNIT-3: TRIPURA-I

- 1. Princely Tripura: social, political and economic conditions before the accession of Birchandra Manikya.
- 2. British relation with Chakla Roshanabad and Hill Tripura; appointment of Political Agent.
- 3. Resistance Movements in the 19<sup>th</sup> century- Tipra (1850), Kuki (1860-61), Jamatia (1863).
- 4. Revolt of 1857 and Tripura.

## UNIT-4: TRIPURA-II

- Era of modernisation and reformative measures Birchandra Manikya to Bir Bikram Kishore Manikya.
- 2. Social and political movements in Tripura (1935-1949):, Janamangal Samiti, Reang uprising, Janashiksha movement, Prajamandal Samiti, Gana Mukti Parishad
- 3. Rabindranath Tagore and Tripura; Contribution of Princely Court towards development of Bengali language and literature.
- 1. World war I & II and Tripura; integration of Tripura to Indian Union

## Recommended Readings: (Paper –VII: Major Course)

- 1. Edward Gait: A History of Assam ( Eastern Book House)
- 2. Priyam Goswami : A History of Assam( Orient Blackswan )
- 3. H.K. Barpujari: Assam in the Days of the Comapany ( NEHU)
- 4. H.K. Barpujari : Political History of Assam Vol-I ( Assam Publication Board)
- 5. A.C. Bhuyan: Political History of Assam, Vols II and III (Assam Publication Board)
- 6. R. M. Lahiri: Annexation of Assam (Firma KLM)
- 7. Amalendu Guha : Planter Raj to Swaraj ( Tulika)
- 8. Jyotirmoy Roy: A History of Manipur ( Firma KLM)
- 9. David Sylemlieh : British Adminisaration in Meghalaya (Heritage)
- 10. Piketo Sema: British Policy and Administrration in Naagaland (Scholar)
- 11. C. Nunthra: Mizoram: Society and Polity (Indus)
- 12. N.R. Roychudhury: Tripura Through the Ages (Sterling)
- 13. H.K. Sur: British Relations with the State of Tripura (Naba Chandana)
- 14. Banikantha Bhattacharjee: Tripura Administration ( Mittal)
- 15. Dipak Kumar Choudhury: Political Agents and native Raj ( Mittal)
- 16. Ranjit Kumar De : Scio-political Movement in India: A Historical Study of Tripura ( Mittal )
- 17. Mahadev Chakravarti : Assamer Itihas ( Progressive)
- 18. Kailash Chandra Singha: Rajmala ( Akshar)
- 19. Nalini Ranjan Choudhury: Manikya Sasanadhin Tripurar Itihas ( Jyan Bichitra)
- 20. Dipak Choudhury: Political Agent O Desiya Rajya ( Progressive)
- 21. Dipak Choudhury: Tripurar Arthanaitik Itihas ( Jyan Bichitra)



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**Syllabus** 

OF

Political Science (Major & General) Semester – V &VI

## BA Major/ Honours

## Semester- VI: International Relations (Paper- VII)

## Unit-I

- Nature and Scope of International Relations- Whether a separate branch of academic discipline?
- Units of Internationals Society- The State and the Non-State Units- their role in International politics- crisis in Territorial State.
- Concept of National Power- Elements of National Power- Struggle for power-Balance of power.

## Unit-II

- Definition of Foreign Policy- Various factors in shaping the Foreign Policy.
- National interest- role of National interest in the formulation of foreign policy of a country.
- Instruments and techniques of state interaction- a) Propaganda, b) Diplomacy.

## Unit- III

- · Post-Cold War Politics, Imperialism, Neo-colonialism.
- · Globalization- Its meaning and implications.
- Emergence of the Third World- Problems of the Third World Countries.
- Non-Aligned Movement.
- Human Rights- Universal Declaration.

## Unit- IV

- Purposes and Principles of the UNO, UN charter, Principal Organs of the UNO, specialized agencies- A critical evaluation of their role.
- Peace keeping role of the UN- Cuba, Afghanistan, Iraq and Korea.
- · Regional Organizations- NATO, OPEC, ASEAN, SAARC.

## Suggested Readings:-

- Frankel, Joseph, *International Relations in a Changing World*, Oxford University Press, Michigan, 1988.
- Calvocoressi, Peter, World Politics since 1945, Longman Publications Group, New Delhi, 2009.

- Palmer, N.D. and H.C. Perkins, *International Relations: The World Community in Transition*, Houghton Mifflin Publishers, Michigan, 1957.
- Organsky, A.F.K., World Politics, Knopf, California, 1968.
- Friedmann, W. G., An Introduction to World Politics, Macmillan, New York, 1968.
- Goodrich, L. M., *The UN in a Changing World*, Manchester University Press, Manchester, 1969.
- Worsly, Peter, Third World. University of Chicago Press, Chicago, 1977.
- Ghai, K. K., International Relations, Kalyani Publishers, New Delhi, 2011.
- Mukherjee, Shakti and Indrani Mukherjee, International Relations and Organisations, World Press, Kolkata, 2011.
- Robert Jackson, Introduction to International Relations: Theories and Approaches, Oxford University Press, United Kingdom, 2010.
- A.J. Bellamy (ed.), *International Society and its Critics*, Oxford University Press. United Kingdom, 2005.
- Tin Dunne et.al., *International Relations Theories: Discipline and Diversity*, Oxford University Press, United Kingdom, 2013.
- Eric B. Shiraev, Vladislav M. Zubak, International Relations, Oxford University Press, New York, 2013.
- Nicolas, H.G., The United Nations as a Political System, Oxford University Press, Oxford, 1959.



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**Syllabus** 

OF

Education (General & Major)

Semester - V & VI

## **EDUCATION**

## Syllabus for Semester - VI

## **B.A HONOURS**

Paper: H7 (Major)

## Basics of Educational Research and Statistics

Full Marks: 100 (80+20)

## **Objectives**

On completion of this course the students shall be able to:

- Describe the nature, purpose, scope of research in education.
- · Identify types of research in education.
- Explain the characteristics of different types of Research.
- Select and explain an appropriate method for a research study.
- Select appropriate tools and techniques for the collection of data.
- Understand and apply various methods of sampling.

## Course Content

## Unit-I: Concept and Types of Research

- Meaning, nature and scope of Educational Research.
- Types of Research: Fundamental, Applied and Action research; Qualitative and Quantitative Research.
- · Research- Problems, Objectives and Hypotheses.
- Review of Related Literature and Studies: Needs and Sources.

## Unit-II Major Approaches of Research

- Historical.
- Descriptive.
- Experimental.
- Survey.

## Unit-III: Basic Statistics and their uses

- Central tendency and Dispersion.
- Graphical representation of data

Correlation and its uses (Product moment and Rank Difference).

## Unit-IV: Inferential data Analysis.

- Normal probability curve.
- Standard Scores.
- CR-test (t-test).
- Chi square test.

## SUGGESTED READINGS

1. Best, J.W & Kahn, J.V Delhi

: Research in Education, (6th Edition) New

2. Buch, M.B CASE, M S.University, 1974

Prentice Hall, 1989 : A Survey of Research in Education, Baroda,

3. Fox, D.J. York, Holt : The Research Process in Education, New

4. Garrett H.E Bombay.

Rhinehart and Winston, Inc 1969. : Statistics in Psychology and Education,

5. Good, Barr &Scates Work

Vikils, Feiffer & Semen's Ltd, 1988 : Methodology of Educational Research, New

6. Guildford, J.P & Fruchter, B

Appleton Crofts, 1962 : Fundamental Statistics in Psychology &

7. Kerlinger F.N Surject

Education,

New York, McGraw Hill, 1974

8. Koul, L Delhi

: Foundation of Behaviour Research, Delhi,

9. Kurtz, A.K. & Mayo, S.T

Vikash Publications, 1998

Publications, 1978

: Statistical Methods in Education and

10. Scigal, Sydne, Y. Science,

Psychology,

New Delhi, Narosa Publishing House, 1980 : Non-parametric Statistics for Behavioural

: Methodology of Educational Research, New

11. Singh, Arun Kumar

New Delhi, McGraw Hill, 1978

: Text, Measurement and Research Methods in Behavioural Sciences, New Delhi, McGraw Hill,

1986

12. Sukia S.P. & Other

: Elements of Educational Research, (3rd Edition).

Bombay, Allied Publishers, 1974

13. Tuckman, B.W : Analyzing and Designing Educational Research, New

York, Harcourt Brace Jovanovich, Inc, 1978

14. Tuckman, B.W : Conducting Educational Research (2<sup>nd</sup> Edition),

New

e e

York, Harcourt Brace Javanovich, Inc., 1979

15. Van Dalen, D.B. & Meyer, W.J : Understanding Educational Research, New York,

McGraw Hill C, 1979.



# ত্রিপুরা বিশ্ববিদ্যালয়

স্নাতক বাংলা সাধারণ ও সাম্মানিক পাঠক্রম সেমেস্টার

ত্রিবার্ষিক ডিগ্রী কোর্স

সেমেস্টার: চতুর্থ, পঞ্চম ও ষষ্ঠ (সাম্মানিক)

চতুর্থ ও পঞ্চম (সাধারণ)

## ষষ্ঠ সেমেস্টার

## সপ্তম পত্ৰ সমালোচনা সাহিত্য

প্রথম এককঃ সাহিত্য	: রবীন্দ্রনাথ ঠাকুর	20
নিৰ্বাচিত প্ৰব	ন্ধঃ সাহিত্যের তাৎপর্য	40
	সাহিত্যের সামগ্রী	
	সাহিত্যের বিচারক	
	সৌন্দৰ্যবোধ	
দ্বিতীয় একক: প্রাচীন	সাহিত্যঃ রবীন্দ্রনাথ ঠাকুর	10
নিৰ্বাচিত প্ৰবন্ধ: রামায়ণ		20
	মেঘদূত	
	শকুস্তলা	
	কাব্যের উপেক্ষিতা	
তৃতীয় একক: কাব্যঙ্জি	ন্জাসা (সমগ্র): অতুল চন্দ্র গুপ্ত	২০
চতুর্থ একক: একালের নির্বাচিত	ব সমালোচনা সঞ্চয়ন: কলিকাতা বিশ্ববিদ্যালয় প্রকাশিত ত প্রবন্ধ:	20
34837	বর্তমান সাহিত্যের মূলকথাঃ ধূর্জটি প্রসাদ মুখোপাধ্যায়	
	আধুনিক সাহিত্য: গোপাল হালদার	
	রবীন্দ্রনাথ ও উত্তর সাধক: বুদ্ধদেব বসু	
	সাহিত্যের স্বরূপ: শশিভূষণ দাশগুপ্ত	



(A Central University)
Suryamaninagar-799022

**Syllabus** 

**OF** 

History (Major & General)

Semester - IV to VI

## PMST02374421374

## SELTH SEMESTED

## 3-345-71

## HISTORY OF CHINA AND JAPAN, 1839 A.D. 1646 A.D.

## UNIT-II CHINA-I

- i. European expansion and opening of China: tribute system. Cunton trade. Oplum trade and Wars, unequal treaties.
- 2. Response of the Chinese I: Taiping Rebellion, Self-Strengthening Movement.
- 3. Response of the Chinese II: Hundred Days' Reform, Boxer Rebellion
- 4. Revolution of 1911: causes and results, role of Sun Yat Sen.

## UNIT-2: CHINA-II

- 1. May Fourth Movement: causes and significance
- 2. Kuomintang and the 1st United Front.
- 3. Chinese Communist party: origin & growth; Role of Mao Tse Tung; 2<sup>nd</sup> United Front and Civil War.
- 4. Chinese Revolution of 1949- causes and significance

## UNIT-3: JAPAN-1

- 1. Tokugawa Shogunate-causes of decline
- 2. The Perry Mission and Opening of Japan
- 3. Meiji Restoration; popular and democratic movements-Satsuma rebellion; Meiji constitution of 1889
- 4. Modernisation of Japan under Meijis: Education, society and economy.

## UNIT-4; JAPAN-II

- Sino-Japanese War (1894), Anglo-Japanese Alliance (1902), Russo-Japanese War (1904-05)
- 2. Rise of Japanese militarism-causes; crisis of democratic system- growth of Fascist ideas
- 3. Manchurian crisis-causes, international repercussion.
- 4. Japan and Second World War.

## Recommended Readings: (Paper –VIII: Major Course)

- 1. H. M. Vinacke: History of far East in Modern Times ( kalyani)
- 2. Archana Tewari : The History of China and Japan ( Pearson India)
- 3. James McClain: Japan: A Modern History ( WW Norton & Co.)
- 4. Amit Bhattacharyya: Transformation of Japan ( Setu) Bengali Translation available
- 5. Amit Bhattacharyya: Transformation of China (Setu) Bengali Translation available
- 6. J.K. Fairbank and M. Goldman: China; A New History ( Prentice Hall India)
- 7. Immanuel Hsu: The Rise of Modern China (OUP)
- 8. Siddharta Guha Roy: Adhunik Purba Asia, Chin o Japaner Itihas ( Progressive)
- 9. Subodh Kumar Mukhopadhyay : Adhunik Chin O Japaner Itihas ( Progressive)



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**Syllabus** 

OF

Political Science (Major & General) Semester – V &VI

#### BA Major/ Honours

#### Semester- VI: Political Sociology (Paper- VIII)

#### Unit-I

- · Political Sociology: Meaning, Nature and Scope.
- · Social bases of politics: Inter-relation of society, State and Politics.
- Social Stratification and politics: Caste, Class and Elites.

#### Unit-II

- Power and Authority: Concept of Power, nature and types of Authority, Authority and Legitimacy.
- · Religion, Society and Politics: Religion in society.
- · Political Culture and Political Socialization: Nature, types and agencies.

#### Unit-III

- · Political Participation: Concept and types.
- · Electoral Behaviour: Importance and determinants with special reference to India.
- Political Communication: Concepts and structures.
- · Gender and Politics: Basic issues.

#### Unit- IV

- · Military and Politics: Condition and mode of intervention.
- · Types of states: Autocracy, Dictatorship, Democracy.
- · Political Development and Social Change- Role of Tradition and Modernity.

#### Suggested Readings

- · Bottomore, Tom, Political Sociology, Pluto Press, London, 1993.
- Mukhopadhay, Amal Kr., Political Sociology, K.P Bagchi and Company, Culcutta, 1977.
- Chatterjee, Rakhahari (ed), Religion, Politics and Communism, South Asian Pub, New Delhi, 1994.
- Bendix, R., State and Society, Little, Brown and Company, Boston, 1968.

- Goulbourne, H., Politics and State in the Third World, Palgrave Macmillan, London, 1979.
- Evans, M. (ed), The Women Question, Sage Publications, 1994.
- Almond, G. A. & S. Verba, The Civic Culture, Sage Publications, 1989.
- Pye, Lucian, Aspects of Political Development, Little, Brown and Company, Boston, 1966.
- Weiner, Myron, Political Scarcity, University of Chicago Press, Chicago, 1962.
- Lefevre, H., The Sociology of Marx, Columbia University Press, New York, 1982.
- Duverger, M., Political Parties, Wiley Publishers, Hoboken, 1963.
- Wiseman, H.V., Political System: Some Sociological Approaches, Routledge and Kegan Paul, 1971.
- Dasgupta, Samir (Ed), Political Sociology, Pearson Education India, 2011.
- Kumar, Anand, Readings in Indian Sociology, Vol-VIII Political Sociology of India, SAGE, 2013.
- Jayapalan, N., *Political Sociology*, Atlantic Publishers & Distributors (P) Limited, New Delhi, 2000.
- Chakraborty, Satyabrata, Political Sociology, Macmillan India Limited, 2005.



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**Syllabus** 

OF

Education (General & Major)

Semester - V & VI

2014

#### B.A HONOURS PAPER – H8 (Major)

#### **EDUCATIONAL THEORIES AND IDEAS OF GREAT EDUCATORS**

Full Marks: 100(80+20)

#### UNIT-I

- Raja Rammohan Roy (1772-1883)
- Iswar Chandra Vidyasagar (1820-1891)
- Swami Vivekananda (1863-1902)

#### UNIT -II

- Rabindranath Tagore (1861-1941
- Mahatma Gandhi (1869-1948)
- Sri Aurobindo (1872-1950)

#### UNIT -III

- Jean Jacques Rousseau (1712-1778)
- Johann Heinrich Pestalotzzi (1748-1827)
- F.W. August Froebel (1782-1852)

#### UNIT -IV

- Herbert Spencer (1820-1903)
- John Dewey (1859-1952)
- Madam Maria Montessori (1870-1952)

#### BOOKS RECOMMENDED

Mukherjee,K.K : Some Great Educators of the world, Das Gupta & Co.pvt. Ltd, Calcuta

• Purkait, B.K. : Great Educators, New Central Book Agency, London

Guha, Bibhuranjan : Shikshay Pathikrit (Bengali), Sobha Publisher,
 Kolkata.

• Prof.B.C Rai : Theory of Education, Prakasan Kendra, Lakhnow.

Vidya Ratna Taneja : Educational Thought and practice, Sterling Publishers Pvt.Ltd.



# ত্রিপুরা বিশ্ববিদ্যালয়

স্নাতক বাংলা সাধারণ ও সাম্মানিক পাঠক্রম সেমেস্টার

ত্রিবার্ষিক ডিগ্রী কোর্স

সেমেস্টার: চতুর্থ, পঞ্চম ও ষষ্ঠ (সাম্মানিক)

চতুর্থ ও পঞ্চম (সাধারণ)

2038

### ষষ্ঠ সেমেস্টার

### অষ্টম পত্র রবীন্দ্র সাহিত্য

প্রথম এব	<u> কে: বলাকা: রবীন্দ্রনাথ ঠাকুর</u>		20
1	ওরে নবীন ওরে আমার	(১ নং)	
	তোমার শঙ্থ ধূলার	(৪ নং)	
	তুমি কি কেবলি	(৬ নং)	
	একথা জানিতে ভুমি	(৭ নং)	
	হে বিরাট নদী	(৮ নং)	
	আমি যে বেসেছি ভাল	(३२ न१)	
	সন্ধ্যারাগে ঝিলিমিলি	(৩৬ নং)	
	পূর ২০০ কি শুনিস	(৩৭ নং)	
দিতীর একক: গল্পগুচ্ছ: রবীন্দ্রনাথ ঠাকুর পোষ্টমাস্টার			20
	একরাত্রি		
	জীবিত ও মৃত		
	অতিথি		
	হৈমন্তী		
	অপরিচিতা		
	<u> त्रविवाद</u>		
তৃতীয় এককঃ বিসর্জনঃ রবীন্দ্রনাথ ঠাকুর			20
চতুর্থ একক: ঘরে বাইরে: রবীন্দ্রনাথ ঠাকুর			20



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Syllabus on Soft Study Course

**HUMAN RIGHTS AND GENDER STUDIES** 

#### Semester VI

#### Soft Study Course

#### Human Rights and Gender Studies

#### Unit I

- 1. Meaning and Concept of Human Rights
- 2. Classification of Rights: Natural, Moral and Legal Rights,
- 3. Universal Declaration of Human Rights: An Overview
- 4. Humanitarian Law

#### Unit II

- 1. Human Rights Movement in India
- Role of National Human Rights Commission, State Human Rights Commission, Judiciary, NGO, Media
- 3. Human Rights of Vulnerable Groups: Children, Women, Refugees, Internally Displaced Population
- 4. Emerging Trends of Human Rights

#### Unit III

- 1. Meaning and Concept of Gender Studies
- 2. Theoretical Approaches: Liberal, Marxist, and Radical
- 3. Struggles and Movements for Gender Rights
- 4. Gender and Law, Legal Rights of Women

#### Unit IV

- 1. Gender and Society Religion, Caste and Ethnicity
- 2. Gender and the Nation: Representation in the decision making process
- 3. Gender and Economy Land rights and work place
- 4. Contemporary Issues- Women in conflict situation, Dowry problem, Female Feticide and infanticide, Domestic violence

#### References:

Jaswal, P.S. and Nishtha Jaiswal. 2010. Human Rights and the Law. New Delhi: A.P.H. Publishing Corporation.

Lauterpacht. 1968. International Law and Human Rights. Continent: Show String Pr Inc.

Agarwal, H.O, Human Rights: Central Law Publications, Allahabad

Chandra, U., Human Rights: Allahabad Law Agency Publications

Yasin, Adil-UI & Archana Upadhyay (ed)) Human Rights, Akansha Publishing House, New Delhi,2004

Bhasin, Kamala. (2000). Understanding Gender. New Delhi: Kalifor Women.

Geetha, V. (2000). Theorising Feminism Gender. Kolkata: Bhatkal & Sen.

Lips, Hilary M. (2014). Gender: The Basics. New York: Routledge.

Menon, Nivedita. (2012). Seeing Like A Feminist. New Delhi: Penguin Books.

Yadav, C.P. (ed.) (2007) Encycopedia of Women's Problems and their remedies. New Delhi: Anmol Publications.



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Syllabus on Soft Study Course

**SOCIETY & TECHNOLOGY** 

# Syllabus for "Society & Technology"

### Unit 1- History, Theory, Research Methods:

History of Computers and Theoretical Perspectives of Computing & Technology Research

Research Methodology Used by Social Researchers of Computing & Technology

### Unit 2— Technology and Ethics:

Ethical Theories and Ethical Analysis

Ethical Analysis Continued

## Unit 3—Social Issues Caused by the Rise of Technology-I

Issue 1: Computers, Equity, Education, and the Digital Divide

Issue 2: Technology in Medicine

Issue 3: ICT, the Government, and the Military

Issue 4: Technology and Work/Business

Issue 5: Privacy and Civil Liberties

## Unit 4-Social Issues Caused by the Rise of Technology-II

Issue 6: Computer Crime and Security

Issue 7: Intellectual Property and Responsible Computing

Issue 9 "Responsible Computing"

The Future: Putting it all together

#### **TextBook**

- Technology and Society
   Building our Sociotechnical Future
   Deborah G. Johnson and Jameson M. Wetmore, MIT Press
- 2. Society and Technological Change by Rudi Volti
- 3. Technology and Society: Issue for the 21st Century and Beyond, 3rd Edition by Linda S. Hjorth (Author), Barbara A. Eichler (Author), Ahmed S. Khan (Author), John A. Morello (Author)

#### Reference:

1. Information Technology and Society by SAGE Publications



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Syllabus on Soft Study Course

INDIAN CONSTITUTION AND PLANNING

2014

#### Semester VI

#### SOFT STUDY COURSE

#### INDIAN CONSTITUTION AND PLANNING

Unit-1

History of Constitutional development in India

The Preamble and its significance

Fundamental Rights: Nature and Significance

Directive Principles of State Policy: Classification, Nature and Significance

Fundamental Duties and its significance

Unit-II

The Union Executive: President and Prime Minister

The Union Legislature: Composition and Function, Role of the Speaker

The Judiciary: Supreme Court; High Court: Composition, Function and Role

Amendment procedure of the Indian Constitution

Local self government in Tripura

Unit - III

Planning: Definition, Types, Aims and Needs of Planning

NITI AYOG: Composition and Functions

Characteristics of Five year Plans in India

Unit - IV

Development Planning: Concept, Problems and Prospects

Participatory Development: Concept and Significance

Different agencies of Planning: State government, District and local bodies

#### References:

Subhas C. Kashyap, Our Constitution An Introduction to India's Constitution and Constitutional Law

Johari, J.C., Indian Government and Politics, Vishal Publications, New Delhi, 1976

Ghai, K.K., Indian Government and Politics, Kalyani Publishers, New Delhi, 2011

Datta, Prabhat & Sen, Payel, Good Governance and Development: Contexts and Concerns, Progressive Publishers, Kolkata, 2009

Das, Nityananda, Grassroot Democracy and Panchayati Raj in Tripura, Progressive Publishers, Kolkata, 2012

Jhingan, M.L., The Economics of Development and Planning, Vrinda Publications, New Delhi, 2015

Planning Commission, Functions and Structure of Planning Commission in India, Available at http://planningcommission.nic.in/rti/doc\_rti/func.pdf

Sumitra, GCW , Analysis of Five Year Plan in India , International Journal of Management and Social Sciences Research (IJMSSR) ISSN: 2319-4421 Volume 4, No. 7, July 2015

Bhalla, Surjit, India: Democracy, Growth and Development 1951—2012, Available at <a href="http://democracy.cde.org.za/wp-content/uploads/2014/05/democracy-works-india-conference-paper-democracy-growth-and-development-1951-2012-by-surjit-s-bhalla-pdf-.pdf">http://democracy.cde.org.za/wp-content/uploads/2014/05/democracy-works-india-conference-paper-democracy-growth-and-development-1951-2012-by-surjit-s-bhalla-pdf-.pdf</a>

Ray, Amit, *The Enigma of Indian Model of Development*, Discussion papers in Economics, Jawaharlal Nehru University. Available at <a href="http://www.jnu.ac.in/SIS/CITD/DiscussionPapers/DP01">http://www.jnu.ac.in/SIS/CITD/DiscussionPapers/DP01</a> 2015.pdf