

**Four Year Under Graduate Programme (FYUGP)**

**As per provisions of NEP-2020**

**Vinoba Bhave University Hazaribag**



## **Multidisciplinary Courses (MDC)**

To be implemented from the Academic Year **2022-23**

(From session 2022-26)

## Members of Board of Courses and Studies (BOCS)

1. Dean, Faculty of Humanities, V.B.U., Hazaribag - Chairman
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Ranchi University, Ranchi -External Expert
3. Dean, Faculty of Science, V.B.U., Hazaribag - Member
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Anthropology, V.B.U., Hazaribag - Member
12. Dr. Navin Chandra, Assistant Prof., University Dept. of Physics,  
V.B.U., Hazaribag - Member
13. Dr. Avinash Kumar, Assistant Prof., University Dept. of Botany,  
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14. Dr. Sunit Kumar Srivastava, Assistant Professor, Dept. of  
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16. Dr. Santosh Kumar Singh, Assistant Professor, Dept. of MCA,  
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17. Ms. Jaya Sinha, Assistant Professor, Dept. of CND,  
V.B.U. Hazaribag - Member

## Introduction:

Students of all the streams will have to select three different subjects of their choice of 3 credits each from a pool of courses known as Multidisciplinary Course (MDC) which will be studied one each in Semesters I, II and III. The MDC selected by a student should be different from Major and Minor subjects opted by him.

## List of Multidisciplinary Courses

Ser. No.	List of Multidisciplinary Courses which can be opted one each in Semesters I, II and III	No. of Credits
1.	Botany	3
2.	Chemistry	3
3.	Geology	3
4.	Mathematics	3
5.	Physics	3
6.	Zoology	3
7.	Hindi	3
8.	English	3
9.	Urdu	3
10.	Sanskrit	3
11.	Persian	3
12.	TRL: Tribal Developments in India	3
13.	TRL: Tribal Movements in India	3
14.	TRL: Tribes and Forests	3
15.	Philosophy	3
16.	Anthropology	3
17.	Economics	3
18.	Geography	3

19.	Home Science	3
20.	History	3
21.	Political Science	3
22.	Sociology	3
23.	Labour and Social Welfare	3
24.	Psychology	3
25.	Commerce-Income Tax	3
26.	Commerce-E-Commerce	3
27.	Commerce- Goods and Services Tax	3
28.	Performing Arts: Light Vocal	3
29.	Performing Arts: Hindustani Classical (Vocal)	3
30.	Performing Arts: Dance	3

## 1. Multidisciplinary Botany:

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be two group of questions. Group A will contain three questions in which all are to be answered. Question No.1 will be very short answer type (not MCQ) consisting of five questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive type (Long answer type) seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of group B.*

### **Course Objectives:**

On completion of this course, the students will be able to understand:

To gain knowledge of diversity, life forms and processes, morphology, physiology, environmental issues, plant utilities, applications, conservation and importance of microorganisms.

**Course Learning Outcomes:**

On successful completion of this course the student should know:

Students would understand the plant cell structures and organelles functions, plant diversity, economic importance of microbes, reproduction in flowering plants, nutrition in plants, environmental issues, waste management, plant utilities, application and their conservation.

**1. The Fundamental Unit of Life:**

- a) Cell: Discovery, Definition, Types- prokaryotes and eukaryotes
- b) Cell Organelles: Mitochondria and Plastid
- c) Genetic materials: Comparative studies between DNA and RNA.

**(6 Lecturers)**

**2. Diversity in Plant Kingdom:**

- a) General features of Algae
- b) Fungi
- c) Bryophyta
- d) Pteridophyta
- e) Gymnosperm and
- f) Angiosperm

**(5 Lecturers)**

**3. Economic Importance of Microorganisms:**

Economic importance of bacteria and Fungus.

**(2 Lecturers)**

**4. Reproduction in Flowering Plants:**

- a) Flower: Morphology, structure and functions
- b) Pollination: types and agents
- c) Fertilization: formation of seed and fruit
- d) Germination of seeds: monocotyledon and dicotyledon seeds
- e) Structure of seed and fruit

**(4Lecturers)**

**5. Plant Physiology: (05 lectures)**

- a) Plant water relationship: Diffusion, osmosis, water potential, active and passive water absorption
- b) Photosynthesis: Elementary idea of photosynthesis.
- c) Respiration: Elementary idea of respiration.
- d) Mode of nutrition: Autotrophic and Heterotrophic, Special Mode of nutrition.

**(5 Lecturers)**

**6. Environment and pollution Management:**

- a) Ecosystem: Definition, Natural and Artificial, Structural and functional components of ecosystem.
- b) Biotic Interaction: Competition & Predation, Commensalism, Parasitism, Mutualism, Amensalism
- c) Environmental Issues: Global warming, green house effect, Ozone depletion

- d) Pollution: Air, Water, Land, Radioactive, Thermal and Noise and their control measures
- e) Waste Management: sewage water treatment, biomass production
- f) Environmental Impact Assessment (EIA)

**(10 Lecturers)**

**7. Biodiversity and its Conservation:**

- a) Biodiversity: Definition, level and threats
- b) Biodiversity Conservation: Methods of conservation (in-situ and ex-situ conservation), Laws of biodiversity conservation.

**(5 Lecturers)**

**8. Economic Botany and applications of Biology:**

- a) Food yielding plants: rice, wheat, red lentils and pigeon pea
- b) Fibre yielding plants: cotton and jute
- c) Timber yielding plants: teak and shisham
- d) Medicinal plants: neem and tulsi
- e) Pesticides and biological pest control
- f) Biofertilizers
- g) Transgenic plants/crops
- h) Genetically modified foods
- i) Introduction and Contribution of famous scientist- i. Charles Robert Darwin ii. Gregor Johann Mendel. iii. James Watson and Francis Crick, iv. Dr. M.S. Swaminathan
- j) Recent development in sustainable agricultural practices
- k) Brief idea of plant tissue culture

**(8 Lecturers)**

**Suggested Readings:**

1. NCERT Social Science Textbook for Class 7- Our Environment
2. NCERT Science Textbook for Class 7
3. NCERT Science Textbook for Class 8
4. NCERT Science Textbook for Class 9
5. NCERT Science Textbook for Class 10
6. NCERT Biology for Class 11
7. NCERT Biology for Class 12
8. GRB Objective Botany- G.R. Bathla Publications
9. A text book of Botany- Singh, Pandey and Jain
10. Economic Botany- Singh, Pandey and Jain
11. Biology Lab Manual 11
12. Biology Lab Manual 12.

## 2. Multidisciplinary Chemistry: Introductory Chemistry

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of **group B**.*

### **Course Objectives:**

On completion of this course, the students will be able to understand

1. Atomic theory and its evolution.
2. Learning scientific theory of atoms.
3. Elements in periodic table; physical and chemical characteristics, periodicity.
4. To predict the atomic structure, chemical bonding, and molecular geometry based on accepted models.
5. To understand atomic theory of matter, composition of atom.
6. Identity of given element, relative size, charges of proton, neutron and electrons, and their assembly to form different atoms.
7. Defining isotopes, isobars and isotones.
8. Physical and chemical characteristics of elements in various groups and periods.
9. Nature of bonding various molecule /ions.
10. Behaviour of gases.
11. Solutions, their strength and colligative properties.
12. Fundamentals of organic chemistry.

### **Course Content:**

#### **1. Atomic structure:**

Bohr's atomic theory, Calculation of radius of atom and calculation of energy of electron in hydrogen-like atoms, Electromagnetic radiation and electromagnetic spectrum, hydrogen spectrum and its origin, Limitations of Bohr's atomic theory, de-Broglie theory, Heisenberg's uncertainty principle, quantum numbers, Aufbau principle, Hund's rule, Pauli's exclusion principle, electronic configuration of atoms and ions.

(8 Lectures)

## 2. Periodicity:

Modern periodic law and modern periodic table, Classification of elements into blocks, atomic radius, Ionisation energy, Electron affinity, Electronegativity and their variation in the periodic table, Diagonal relationship, Inert pair effect.

(6 Lectures)

## 3. Chemical bonding:

General idea about chemical bonds and their types- ionic bond, covalent bond and coordinate bond, Valence bond theory of covalent bond, Explanation of shapes of molecules/ions VSPER theory and hybridisation, Covalent character in ionic bond, Ionic character in covalent bond, Intermolecular forces.

(6 Lectures)

## 4. Gaseous state:

Ideal gas and ideal gas equation, Kinetic theory of gases, Real gases and their deviation from ideal gas behaviour, van der Waals equation and its derivation, Significance and units of terms involved in van der Waals equation.

(6 Lectures)

## 5. Solutions:

Solutions and their classifications, Concentration of solution and various terms used to express the strength of solution, Calculations related to strength of solution, Colligative properties of solution and related numerical problems.

(6 Lectures)

## 6. Introduction to organic chemistry:

Organic compounds and their classification, Functional group, Homologous series, Types of carbon chains, carbon atoms & hydrogen atoms, IUPAC nomenclature of organic compounds, Hybridisation and shapes of organic molecules, General idea about structural isomerism and stereoisomerism in organic compounds, Aromaticity and its implications.

(8 Lectures)

## 7. Organic reaction mechanism:

Fission of covalent bonds, Electrophiles and nucleophiles, Electronic displacements in organic molecules, Resonance, Organic reaction intermediates- carbocation, carbanion & free radicals, Types of organic reactions.

(5 Lectures)

### Suggested Readings:

1. Kumar Indrajit, Undergraduate Introductory Chemistry, Pragati Prakashan Meerut, 2023.
2. Lee, J. D. *Concise Inorganic Chemistry*, Wiley, 5<sup>th</sup> Ed<sup>n</sup>.
3. Atkins, P. W. and De Paula, J. *Physical Chemistry*, Tenth Edition, Oxford University Press, 2014.
4. R. N. Morrison & R. N. Boyd, *Organic Chemistry*, 6th Edn., Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).
5. S. H. Pine, *Organic Chemistry*, Fifth Edition, McGraw Hill, (2007)
6. F. A. Carey, *Organic Chemistry*, Seventh Edition, Tata McGraw Hill (2008).
7. J. Clayden, N. Greeves, S. Warren, *Organic Chemistry*, 2nd Ed., (2012), Oxford University Press.

### 3. Multidisciplinary Geology:

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

#### ***Instruction to question Setter:***

There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.

**Note:** There may be subdivisions in each question of **group B**.

#### **Course Objectives:**

1. Understanding the geological processes.
2. Knowing about interior, age, origin and other dynamic activities of Earth.
3. Know about mineral, rocks, fossil and extraction of valuables.

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

The course deals with knowledge-based papers in Mineralogy, Petrology, Stratigraphy, Palaeontology, Mineral deposits etc. to understand about dynamic Earth, resources and rock formations through ages.

##### **1. Physical Geology:**

The nature and scope of geology; Origin of the Earth; Age of the Earth; An elementary idea of seismic waves and interior of the Earth; Geological work of river and Wind.

**(5 Lectures)**

##### **2. Crystallography:**

Elementary ideas about crystal structure; Crystal: faces, edges, solid angles and interfacial angles; Crystallographic axes and axial angles; Elements of Crystal Symmetry. Parameter, indices and symbol. Laws of crystallography; Isometric System.

**(4 Lectures)**

**3. Optical Mineralogy:**

Nature of light; Polarization of light; Isotropic and anisotropic substances (minerals); Phenomenon of Double refraction; Nicol prism – its construction; Construction and function of petrological microscope.

**(4 Lectures)**

**4. Mineralogy:**

Mineral - definition; Physical properties of minerals; Structure and classification of silicates; Chemical composition and diagnostic physical properties of the following rock forming minerals - quartz, orthoclase, microcline, kyanite, calcite, gypsum.

**(3 Lectures)**

**5. Structural Geology:**

Understanding dip and strike. Construction and uses of Clinometer and Brunton compass; Elementary idea and nomenclature of Folds, Faults, Unconformity.

**(5 Lectures)**

**6. Stratigraphy:**

Stratigraphy: Definition; Principles of stratigraphy and stratigraphic correlation; Geological time scale; Stratigraphic approaches to study the Precambrian rocks of India with special reference to classification, lithological characteristics and economic significance of Precambrian of Singhbhum and Gondwana Supergroup.

**(5 Lectures)**

**7. Paleontology:**

Paleontology: Definition and its scope; Fossils definition, their mode of preservation and uses; Morphology and geological history of the following: Brachiopoda and Trilobita.

**(5 Lectures)**

**8. Petrology:**

Igneous Rocks - Definition of igneous rocks; Forms of igneous bodies; Brief petrographic description of common igneous rocks such as – granite, gabbro, dolerite, basalt, rhyolite. Sedimentary rocks – texture and structure; Brief Petrographic descriptions of common sedimentary rocks such as – conglomerate, sandstone, limestone. Metamorphic rocks – definition, types and its agents; Textures of metamorphic rocks; Brief Petrographic descriptions of common metamorphic rocks – slate, schist, gneiss, marble and quartzite.

**(8 Lectures)**

**9. Economic Geology:**

Definition of ore, ore minerals, gangue minerals, Processes of formation of mineral deposits – magmatic concentration and placer deposits; Mode of occurrence and distribution of metallic and non-metallic mineral deposits –

Iron, Copper, Coal deposits of Jharkhand; Physical properties of chalcopyrite, pyrite, galena and hematite.

**(6 Lectures)**

**Suggested Readings:**

1. Mukherjee, P.K. (2013). A Textbook of Geology, World Press Pvt. Ltd.
2. Singh, Parbin (2013). Engineering and General Geology, S.K. Kataria & Sons.
3. Rutleys Elements of Mineralogy, 1991, Publisher: Cbs Publishers & Distributors Pages: 482 ISBN10: 8123909160
4. Read, H.H. (1968): Rutley's Element of Mineralogy (Rev. Ed.), Thomas Murby and Co.
5. Billings, M.P. (1972): Structural Geology, Prentice Hall.
6. Kumar, R. (1985): Historical Geology and Stratigraphy of India, Wiley Eastern Ltd.
7. Shrock, R.R. and Twenhoffel, W.H. (1952): Principles of Invertebrate Paleontology, CBS Publ.
8. Woods, H. (1985): Palaeontology Invertebrate, CBS Publ.
9. Jain, P.C. and Anantharaman, M.S. (1983): Palaeontology: Evolution and Animal Distribution, Vishal Publ.
10. Ehlers, E.G. & Blatt, H (1982): Igneous, Sedimentary and Metamorphic Petrology, CBS Publ.
11. Tyrrell, G.W. (2019). Principles of Petrology: An Introduction to the Science of Rocks 2<sup>nd</sup> Edition.
12. Jense, M.L., Bateman, and A.M. (1981): Economic Mineral Deposits, John Wiley and Sons.
13. Sharma, N.L. and Ram, K.V.S. (1972): Introduction to India's Economic Minerals, Dhanbad Publ.
14. Prasad, U. (2019). Economic Geology: Economic Mineral Deposits. CBS 2<sup>nd</sup> edition.

## 4. Multidisciplinary Mathematics: Graph Theory

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.

**Note:** There may be subdivisions in each question of **group B**.

### **Course Objectives:**

This course will enable the students to:

1. Understand the notion of graph and related terminology.
2. Know about connectivity complete, bi-partite graph.
3. Understand Eulerian and Hamiltonian graphs.
4. Concept of trees in a graph with their properties.

### **UNIT I**

Definition, examples and basic properties of graphs, Walk, path and cycle in a graph, Null graph, connected graph, simple graph, complete graphs, bi-partite graph, regular graph, directed graphs, isomorphism of graphs, Adjacency, degree of vertices, the eight circles problem, the four cubes problem, handshaking theorem, components of a graph, length of cycle, even cycle and odd cycle, cycles in a bi-partite graph, bounds of edges in a simple graph.

**(20 Lectures)**  
**(3 Questions)**

### **UNIT II**

Konigsberg bridges problem, Eulerian circuits, Eulerian graph, semi-Eulerian graph, Fleury's algorithm, Hamiltonian cycles, weighted graph, the shortest path problem, the Chinese postman problem, The travelling salesman problem.

**(12 Lectures)**  
**(2 Questions)**

### UNIT III

Tree and their properties, spanning tree, cut set of a graph, counting trees, Cayley theorem, the minimum connector problem, enumeration of chemical molecules, Searching trees, Planar graph, plane drawing of a graph, plane graph, homeomorphic graphs, Euler's formula.

(13 Lectures)  
(2 Questions)

#### Suggested Readings:

- [1] Introduction to graph theory, R. J. Wilson, John Wiley & Sons, Inc. 605 Third Ave. New York, NY, United States, 1986.
- [2] B.A. Davey and H.A. Priestley, *Introduction to Lattices and Order*, Cambridge University Press, Cambridge, 1990.
- [3] Edgar G. Goodaire and Michael M. Parmenter, *Discrete Mathematics with Graph Theory*, 2nd Edition, Pearson Education (Singapore) P. Ltd., Indian Reprint 2003.
- [4] Rudolf Lidl and Gunter Pilz, *Applied Abstract Algebra*, 2nd Ed., Undergraduate Texts in Mathematics, Springer (SIE), Indian reprint, 2004.

## 5. Multidisciplinary Physics:

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

#### ***Instruction to question Setter:***

*There will be two group of questions. Group A will contain three questions in which all are to be answered. Question No.1 will be very short answer type (not MCQ) consisting of five questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive type (Long answer type) seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of group B.*

#### **Course Objectives:**

On successful completion of this course the student should:

1. Learn and revise the basics of mathematics and calculus needed in smooth understanding of elementary physics.
2. Understand the principles of elasticity
3. Describe special relativistic effects and their effects on the mass and energy of a moving object.
4. Appreciate the nuances of Special Theory of Relativity (STR)
5. Explain and differentiate the vector (electric fields, Coulomb's law) and scalar (electric potential, electric potential energy) formalisms of electrostatics.
6. Know Gauss's law of electrostatics and its uses.
7. Understand magnetism and magnetic field.
8. Describe how magnetism is produced and list examples where its effects are observed.
9. Apply basic knowledge of principles and theories about the behaviour of light.
10. Understand the principle of superposition of waves, so thus describe the formation of standing waves.
11. Explain several phenomena we observe in everyday life that can be explained as wave phenomena.
12. Use the principles of wave motion and superposition to explain the Physics of polarization and interference.

**Skills to be learned:**

1. Training in Mathematical physics will prepare the student to formulate and solve various problems in physics.
2. This course will help in understanding basic concepts of electricity and magnetism and their applications.
3. Basic course in electrostatics will equip the student with prerequisites to understand electrodynamic phenomena.
4. Student shall develop an understanding of various aspects of harmonic oscillations and waves, Various types of mechanical waves and their superposition.
5. This course in basics of optics will enable the student to understand various optical phenomena, principles, workings and applications optical instruments.
6. About inertial and non-inertial systems and special theory of relativity.

### Course content:

#### 1. **Mathematical Physics and Mechanics:**

Scalars and vectors, dot and cross product of two vectors, Elasticity, stress, strain, elastic constants, relation between elastic constants, Cantilever, Expression for depression.

**(8 Lectures)**

#### 2. **Electricity and Magnetism:**

Electric field and potential, electric field intensity, electric flux, Gauss's law and its integral and differential forms, Laplace and Poisson equation, magnetic force, Lorentz force, Biot-Savart law, Magnetic field due to a long straight conductor, Magnetic induction.

**(8 Lectures)**

#### 3. **Waves and Optics:**

Wave motion, type of wave motion. Equation of plane- progressive wave, Differential equation of wave motion and its solution (no derivation of solution), Idea of Free vibration, damped oscillation, forced oscillation and resonance, Interference of light, Condition for interference of light, Idea of Polarisation, Plane, circularly and elliptically polarised light.

**(15 Lectures)**

#### 4. **Modern Physics:**

Black body radiation. Photo electric effect. Wave-particle duality, de-Broglie wave length, Radioactivity: law of radioactive decay, mean life and half-life.

**(7 Lectures)**

#### 5. **Relativity:**

Fundamental postulates of special theory of relativity, Lorentz transformation. Length contraction, Time dilation, Einstein mass-energy relation.

**(7 Lectures)**

### **Suggested Readings:**

1. Mathematical Physics - H K Das
2. Mechanics, Berkeley Physics, vol.1, C. Kittel, W. Knight, et.al. 2007, Tata McGraw-Hill.
3. Mechanics, D.S. Mathur, S. Chand and Company Limited, 2000
4. University Physics. F.W Sears, M.W Zemansky, H.D Young 13/e, 1986, Addison Wesley
5. Physics for Scientists and Engineers with Modern Phys., J.W. Jewett, R.A. Serway, 2010, Cengage Learning
6. Electricity, Magnetism & Electromagnetic Theory, S. Mahajan and Choudhury, 2012, Tata McGraw
7. Electricity and Magnetism, P. K. Chakraborty, New Age International Pvt. Ltd.
8. Electricity and Magnetism, Edward M. Purcell, 1986 McGraw-Hill Education
9. Introduction to Electrodynamics, D.J. Griffiths, 3rd Edn., 1998, Benjamin Cummings.
10. Electromagnetic Theory, Chopra & Agarwal, Kedarnath Ramnath & Co.

11. Waves: Berkeley Physics Course, vol. 3, Francis Crawford, 2007, Tata McGraw-Hill.
12. The Physics of Vibrations and Waves, H. J. Pain, 2013, John Wiley and Sons.
13. The Physics of Waves and Oscillations, N.K. Bajaj, 1998, Tata McGraw Hill.
14. Fundamentals of Optics, F.A. Jenkins and H.E. White, 1981, McGraw-Hill
15. Optics, Ajoy Ghatak, 2008, Tata McGraw Hill
16. Fundamental of Optics, A. Kumar, H.R. Gulati and D.R. Khanna, 2011, R. Chand Publications.
17. Introduction to Special Relativity, R. Resnick, 2005, John Wiley and Sons.

## 6. Multidisciplinary Zoology: Knowledge and Entrepreneurship in Zoology

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be two group of questions. Group A will contain three questions in which all are to be answered. Question No.1 will be very short answer type (not MCQ) consisting of five questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive type (Long answer type) seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of group B.*

### **Unit 1: Environmental waste impact and management:**

- a) Definition, Sources and Types of wastes: Industrial wastes, Agricultural wastes, Medical wastes, Hazardous (electronic wastes).
- b) General Impact of wastes on Environment and Human health.
- c) Waste Management and Environmental sustainability.
- d) Environmental Protection Act (1986), Environmental Impact Assessment (EIA).

### **Unit 2: Wildlife resources and Conservation:**

- a) Definition, value and importance of wildlife.
- b) Wildlife resources in India.
- c) Wildlife conservation: objectives, strategies and issues.
- d) Restoration of degraded habitats.
- e) Wildlife Protected Areas: National Parks, Sanctuaries, Biosphere reserves, Tiger reserves, Biodiversity Hot-spots, Wildlife corridors, Project Tiger, Project Elephant, Project Crocodile

- f) Wildlife census methods- Pug mark analysis, fecal sample analysis, Hair sample, GIS.

**Unit 3: Common Pest, damage, and their control**

- a) Common pest of paddy, vegetables, sugarcane and stored grain pests.
- b) Integrated Pest Management (IPM) (Physical, Chemical and Biological)

**Unit 4: Economic Zoology:**

- a) Apiculture- Species of Honey bee in India, Life history, Bee Keeping and Bee products
- b) Sericulture- Types of Silk, Silkworm and host plant, Life cycle of silk moth, Processing of Silk from Cocoon, Economic importance of Silk
- c) Lac culture- Different type of Lac insect, life history, cultivation of lac insect and host plant
- d) Aquaculture- culture of freshwater prawn and marine prawn, preparation of prawn farming, preservation and processing of prawn, pearl culture protocol, integrated fish culture, fish by-products.

**Unit 5: Human Physiology and Health:**

- a) Elementary idea of Digestive system, Excretory System and Respiratory System.
- b) Important endocrine glands of human: location, hormones and their functions.
- c) Common diseases (causes, symptoms and prevention) - Malaria, Diarrhea, Typhoid, Covid-19.
- d) Rabies, HIV(AIDS), Tuberculosis, Kala azar, Filaria, Polio, Diabetes.

**Unit 6: Reproductive health and Sex education:**

- a) Elementary idea of Male and Female reproductive system.
- b) Contraceptives and birth control barriers, male and female infertility, surrogacy, IVF, GIFT, ZIFT
- c) Sexually transmitted diseases- Syphilis, Gonorrhoea, Trichomoniasis

**Suggested Readings:**

1. Ecology Environment and Resources Conservation: J.S. Singh, S.P. Singh and S. R. Gupta, Anamaya Publishers, New Delhi
2. Ecology Concept and application: Manual C Molles Jr, Mc Graw Hill
3. G. S. Shukla, V. B Upadhyay: Economic Zoology.
4. C. C. Chatterjee Medical physiology
5. Guyton– A book on medical physiology (Current edition)
6. Textbook in Fisheries- S.S. Khann

## 7. Multidisciplinary Hindi: हिन्दी-पत्रकारिता

क्रेडिट – 03 कुल अंक– 75

(बाह्य – 75)

1. प्रश्न पत्र की अवधि तीन घंटे की होगी।
2. प्रश्न पत्र के दो खंड होंगे – क्रमशः लघूत्तरीय, वस्तुनिष्ठ एवं दीर्घउत्तरीय प्रकार के होंगे।
3. वस्तुनिष्ठ प्रश्नों से जुड़ा खंड 'क' अनिवार्य होगा।
4. दिये गये खंड क से दो लघूत्तरीय प्रश्नों के उत्तर अपेक्षित हैं।
5. दिये गये खंड 'ख' में छह में से चार प्रश्नों के उत्तर अपेक्षित हैं।

खंड 'क' अनिवार्य (वस्तुनिष्ठ) –	05 X 01 =	05 अंक
खंड 'क' (लघूत्तरीय) –	02 X 05 =	10 अंक
खंड 'ख' –	04 X 15 =	60 अंक
		<hr/>
		75 अंक

अन्तः अनुशासनिक / अन्तः विषयक पाठ्यक्रम (MDC) 01 : हिंदी पत्रकारिता

कोड – MDC-1

अंक – 75

क्रेडिट – 03

समय – 03 घंटे

पाठ्यक्रम के इस भाग के अधिगम (व्यावहारिक) परिणाम निम्नवत होंगे –

- छात्र प्रजातंत्र के चतुर्थ स्तंभ से जुड़कर समाज-राष्ट्र की मुख्यधारा से जुड़ सकेंगे।
- राष्ट्र-समाज हित में प्रहरी की तरह सकारात्मक क्षमता का प्रयोग करेंगे।
- समाज की दशा एवं दिशा को नवीन आयाम प्रदान करेंगे।

निर्धारित पाठ्यक्रम –

इकाई – 1

हिंदी पत्रकारिता परिभाषा-प्रकार एवं उद्भव विकास  
झारखंड की हिंदी पत्रकारिता का उद्भव विकास

(15 घंटे)

इकाई – 2

समाचार संचयन, समाचार संपादन, समाचार लेखन,  
फीचर लेखन, शीर्षक चयन

इकाई – 3 समाचार वाचन,  
समाचार संयोजन

(15 घंटे)

(15 घंटे)

### सहायक ग्रंथ –

- विज्ञापन माध्यम एवं प्रचार – डॉ० विजय कुलश्रेष्ठ/प्रतुलअथड्या
- जनसंचार माध्यम : विविध आयाम – बृज मोहन गुप्त
- जनमाध्यम : संप्रेषण और विकास – देवेन्द्र इस्सर
- हिंदी पत्रकारिता : कल आज और कल – सं० सुरेश गौतम
- मीडिया की भाषा – डॉ० वसुधा गाडगिल
- टेलीविजन की दुनिया – प्रभु झिंगरन
- पत्र संपादन कला – नन्द किशोर त्रिखा
- बाखबर बेखबर– संदर्भ झारखण्ड की पत्रकारिता :- डॉ० मिथिलेश

## 8. Multidisciplinary English: Acquaintance with English Literature

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### **Instruction to question Setter:**

There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.

**Note:** There may be subdivisions in each question of **group B**.

### **Course Objectives:**

1. An acquaintance with some of the canonical works of English Literature.
2. Develop an understanding of the relationship between literature and culture.
3. Understand and appreciate the fact that Literature is a representation of the society and culture to which it belongs.
4. To appreciate the universality of the canonical works of literature.

**Unit I : Introduction to Literature and the major genres and types of English Literature.**

**(11 Lectures)**

**Unit II: Poetry**

1. *Lotus*- Toru Dutt
2. *Life* –Sri Aurobindo
3. *Where the Mind is without Fear* – Rabindranath Tagore

**(11 Lectures)**

**Unit III: Drama**

1. *Nagamandala* – Girish Karnad
2. *Pygmalion* – G. B. Shaw

**(11 Lectures)**

**Unit IV: Novel**

*The Alchemist* – Paulo Coelho

**(12 Lectures)**

**Suggested Readings:**

1. Iyengar, K.R.S. *Indian Writing in English*. NewDelhi: Sterling Publications Private Limited, 2019
2. Naik, M.K. *A History of Indian English Literature*. New Delhi: Sahitya Akademi, 2009
3. Abrams, M.H. *A Glossary of Literary Terms*. New Delhi: Cengage India Private Limited, 2015.

## 9. Multidisciplinary Urdu:

60

وہی ہے۔ اور اسے پوری پوری جاننا چاہئے۔  
 کی تعلیمی پالیسی 2020 کے مطابق درج ذیل کتاب

VBU, NEP-2020 FYUGP URDU SYLLABUS

SEM -1-2-3 in any one	PAPER: MDC- URDU
CREDIT-3 (Credits: Theory-3) 45Hours	TOTAL MARKS -75
Marks: 75 (ESE: 3Hrs)	Pass Marks: Th ( ESE) = 30
Title: Urdu Prose, Poetry and Composition	عنوان: اردو نثر، شاعری اور ناطقہ

**Instruction to Question Setter for**

**End Semester Examination (ESE 75 marks):**

There will be two groups of questions. Group A is compulsory which will contain three question. Question No.1 will be very short answer type consisting of five questions of 1 mark each. Question No. 2&3 will be short answer type of 5 marks. Four questions will be asked out of which any two to be answered. Group B will contain descriptive type six questions of 15 marks each, out of which any four to be answered.

**Note:** There may be subdivisions in the questions of group B

### Unit-1

نثر کی تعریف اور اہم نثری متن کا مطالعہ:

- الف: سر سید احمد خان۔ (1) گلزارِ اہوراہا۔ (2) امید کی خوشی (3) اپنی مدد آپ  
 ب: میرا سن۔ (1) قلم۔ ہاشم آباد بخت۔ (2) سیر پہلے درویش کی۔ (3) سیر دوسرے درویش کی  
 ج: پریم چند۔ (1) عید گاہ۔ (2) کلن۔ (3) ہنسے عمر کی بیٹی

### Unit-2

شعری تعریف، قلم اور نثر کی شناخت اور اہم شعری متن کا مطالعہ

- الف: نظیر اکبر آبادی۔ (1) آؤی نامہ۔ (2) منگلی (3) ہولی  
 ب: مرزا غالب۔ (1) کول نالاس تجھے ہوا کیا ہے (2) ہر ایک بات پہ کہتے ہوں کہ تو کیا ہے (3) کہتے تھے ہماری قسمت کہ وہاں یہ ہو گا۔  
 ج: اختر شیرانی۔ (1) اے عشق کہیں لے تل (2) اور لیں سے آنے والے ہاں (3) جہاں نہ سنا رہتی تھی۔

### Unit-3

الف: مشہور نوٹس

ب: غلو نوٹس

ج: درخواست نوٹس

مکان کیب۔

د: یاد دہا۔ میرا سن

نثر پر کچھ کے منتخب افسانے۔ شمس مثنیٰ

سو منٹا کن سر سید۔

۳۔ نظیر کی شاعری میں قوی تکنیکی کے عناصر۔ سید نال نظر

۵۔ دین ان غالب۔

۶۔ اختر شیرانی کی کہروانی شاعری۔ ڈاکٹر عبیر خاتون

۷۔ غر زنگرش۔ سپیڈ انڈسٹریا

۸۔ مردودا بیٹے۔ عبیر الدین مدنی

Handwritten signatures and notes:

Maya  
 Sund's  
 H. K. K. K.  
 04.09.23



संस्कृत साहित्य की तीनों ही विधाओं गद्य, पद्य एवं नाटकों को पढ़ने का तात्पर्य संस्कृत वाङ्मय के माध्यम से अपने गौरवशाली सांस्कृतिक अतीत से परिचित होना है।

**भारतीय दर्शन**—संपूर्ण संसार में बौद्धिक दर्शन की ऐसी कोई भी ऊँचाई नहीं है, जहाँ तक भारतीय दार्शनिक विचारधारा की पहुँच नहीं है, चाहे वह बौद्धों का विलक्षण मनोवैज्ञानिक विश्लेषण हो या शंकर का विस्मय विमुग्धकारी दर्शन। पाठ्यक्रम के इकाई—3 में सभी प्रमुख भारतीय दर्शनों की सामान्य जानकारी प्रदान करने का प्रयास किया गया है, जिससे इस विषय से सर्वथा अनभिज्ञ विद्यार्थीगणों को कुछ ज्ञान प्राप्त हो सके।

### **अध्ययन अधिगम परिणाम(LOCF):**

**इकाई 1**—वैदिक साहित्य के सामान्य परिचय से विद्यार्थीगण इस तथ्य से अवगत होते हैं कि वैदिक शिक्षा मनुष्य के चरित्र निर्माण, व्यक्तित्व का विकास, कार्यक्षमता में वृद्धि के लिए ही उपयोगी नहीं है, बल्कि भारतीय संस्कृति के संरक्षण के प्रति भी व्यक्ति की जागरूकता में वृद्धि होती है।

**इकाई 2**—संस्कृत साहित्य की तीन सर्वप्रमुख विधाओं पद्य, गद्य एवं नाटक में आदिकवि वाल्मीकि, वेदव्यास, कालिदास, माघ, भारवि, श्रीहर्ष, भवभूति, बाणभट्ट की प्रज्ञा की उर्वरता से रचित संस्कृत साहित्य वस्तुतः प्राचीन भारत के आध्यात्मिक, नैतिक, सामाजिक, व्यावहारिक एवं राजनीतिक जीवन का ज्वलन्त चित्रण है, इसलिए इन काव्यों के अध्ययन के जरिए छात्र-छात्राओं में प्रतिभा, महत्वपूर्ण चिंतन, मनन, रचनात्मकता और विचार का प्रसार होता है।

**इकाई 3**—प्रमुख भारतीय दर्शनों का अनुशीलन करके छात्रगण समझ पाते हैं सभी दर्शन एक ही उद्देश्य से अर्थात् दुख की चरम निवृत्ति या परमानंद की प्राप्ति के लिए ही प्रवृत्त होते हैं। जीवन तथा दर्शन इन दोनों का चरम लक्ष्य एक ही है। उस परम तत्त्व की प्राप्ति के लिए 'दर्शन' सैद्धांतिक तथा 'जीवन' व्यावहारिक रूप है।

वैदिक साहित्य, संस्कृत साहित्य एवं प्रमुख भारतीय दर्शनों का सामान्य ज्ञान प्राप्त करने से विद्यार्थियों में स्नातक उपरान्त होनेवाली प्रतियोगिता परीक्षाओं में संस्कृत के इन विषयों से संबंधित प्रश्नों को हल करने में सहायता मिलती है।

## प्रथम/द्वितीय/तृतीय समसत्र MDC संस्कृत और सामान्य ज्ञान

Credit 3—{15x3=45 घंटे }

पूर्णांक — {मुख्य परीक्षा अंक 75}

उत्तीर्णांक — 30

अवधि — 3 घंटे

इकाई 1:

( 12L+2 T)

- वैदिक साहित्य का सामान्य ज्ञान

संहिताओं (ऋग्वेद, यजुर्वेद, सामवेद, अथर्ववेद), ब्राह्मण, आरण्यक, उपनिषद एवं वेदाङ्ग का सामान्य परिचय

इकाई 2 :

( 12L+2 T)

- संस्कृत साहित्य का सामान्य ज्ञान  
महाकाव्य, गद्य, पद्य, नाटक का सामान्य परिचय

इकाई 3:

(15L+2 T)

- प्रमुख भारतीय दर्शनों का सामान्य ज्ञान  
चार्वाक, बौद्ध, जैन, न्याय, वैशेषिक, वेदान्त, योग

अनुषंसित पुस्तकें:—

- वैदिक साहित्य एवं संस्कृति— डा. कपिलदेव द्विवेदी
- वैदिक साहित्य और संस्कृति— वाचस्पति गैरोला
- वैदिक साहित्य का इतिहास— श्री गजाननशास्त्री मुसलगाँवकर
- वैदिक इन्डेक्स— मैकडोनेल और कीथ (रामकुमार राय)
- संस्कृत साहित्य का इतिहास — आचार्य बलदेव उपाध्याय
- संस्कृत साहित्य का इतिहास— विन्टरनिट्स कृत अनुवादक एवं परिवर्धक सुभद्र झा
- संस्कृत साहित्य का समीक्षात्मक इतिहास— आचार्य कपिलदेव द्विवेदी
- संस्कृत साहित्य का इतिहास — डा. ए. बी. कीथ
- संस्कृत साहित्य का इतिहास — श्री चारुचन्द्र शास्त्री
- संस्कृत साहित्य का इतिहास — वाचस्पति गैरोला
- भारतीय दर्शन— चटर्जी एवं दत्त
- भारतीय दर्शन का सर्वेक्षण— प्रो. संगमलाल पांडेय
- भारतीय दर्शन — उमेश मिश्र
- भारतीय दर्शन की रूपरेखा —प्रो. हरेन्द्र प्रसाद सिन्हा
- भारतीय दर्शन— डा. राधाकृष्ण

प्रश्न संबंधी आवश्यक निर्देश:—

मुख्य परीक्षा हेतु निर्देश:-	(उत्तीर्णांक-30)	पूर्णांक-75
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‘ए’ : ग्रुप ‘ए’ में तीन प्रश्न होंगे और तीनों प्रश्न अनिवार्य होंगे। (5 x 3 =15)

- प्रथम प्रश्न में सम्पूर्ण पाठ्यक्रम पर आधारित पाँच अतिलघूत्तरीय वस्तुनिष्ठ प्रश्न होंगे। (1 ग 5 त्र 5)
- द्वितीय प्रश्न में इकाई- 1 एवं 2 से दो लघूत्तरीय प्रश्नों के उत्तर देय होंगे।  
कुल चार प्रश्न पूछे जाएँगे। (2.5 x 2 = 5)
- तृतीय प्रश्न में इकाई-3 से दो लघूत्तरीय प्रश्नों के उत्तर देय होंगे।  
कुल चार प्रश्न पूछे जाएँगे। (2ण5 ग 2 त्र 5)

ग्रुप ‘बी’ : ग्रुप ‘बी’ में सम्पूर्ण पाठ्यक्रम पर आधारित कुल छः प्रश्न पूछे जाएँगे, जिनमें किन्हीं चार प्रश्नों के उत्तर देय होंगे। (15x 4 = 60)

- चतुर्थ प्रश्न में सम्पूर्ण पाठ्यक्रम पर आधारित 6 महत्वपूर्ण टिप्पणियाँ पूछी जाएँगी, जिनमें से तीन टिप्पणियाँ अपेक्षित होंगी।

15

- पंचम प्रश्न में सम्पूर्ण पाठ्यक्रम पर आधारित तीन लघूत्तरीय प्रश्नों के उत्तर देय होंगे।  
कुल छः प्रश्न पूछे जाएँगे। 15
- षष्ठ प्रश्न में इकाई-1 पर आधारित एक दीर्घ-उत्तरीय प्रश्न पूछा जाएगा। 15
- सप्तम प्रश्न में इकाई-2 पर आधारित एक दीर्घ-उत्तरीय प्रश्न पूछा जाएगा। 15
- अष्टम प्रश्न में इकाई-3 पर आधारित एक दीर्घ-उत्तरीय प्रश्न पूछा जाएगा। 15
- नवम प्रश्न में इकाई-3 पर आधारित एक दीर्घ-उत्तरीय प्रश्न पूछा जाएगा। 15

15 साप्ताहिक (45 घंटे की संभावित) अध्यापन योजना:

प्रथम सप्ताह	इकाई- 1	षष्ठ सप्ताह	इकाई- 2	एकादश सप्ताह	इकाई- 3
द्वितीय सप्ताह	इकाई- 1	सप्तम सप्ताह	इकाई- 2	द्वादश सप्ताह	इकाई- 3
तृतीय सप्ताह	इकाई- 1	अष्टम सप्ताह	इकाई- 2	त्रयोदश सप्ताह	इकाई- 3
चतुर्थ सप्ताह	इकाई- 1	नवम सप्ताह	इकाई- 2	चतुर्दश सप्ताह	इकाई- 3
पंचम सप्ताह	इकाई- 1	दशम सप्ताह	इकाई- 2	पंचदश सप्ताह	इकाई- 3

विशेष:-विषय अध्यापन के क्रम में शिक्षक द्वारा आवश्यकतानुसार इस संभावित कार्ययोजना में परिवर्तन संभव है।

## 11. Multidisciplinary Persian: Persian Grammar & Composition

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### Instruction to question Setter:

There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1

mark each. **Question No.2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive type (Long answer type) seven questions of fifteen marks each, out of which any four are to be answered.**

**Note:** There may be subdivisions in each question of **group B.**

**1. Unit -1: Basic Persian Grammar:**

Ism, Zameer, Siffat, Masder, Numbers, Wahid-Jama, Ezafa (Genitive), Anwae-Jumle, Haroofe-Ezafa (Preposition), Haroofe Rabt (Conjunction), Tense, etc.)

**(15 Lectures)**

**2. Unit -2: i. The following Hekayate Saadi from the book "Gulistan e Saadi" ....(Chapter-1)**

- a) Yaki az Maluke Khorasan Mahmood Sabuk tageen ra Bekhab deed...(Chapter-1:-Dar Seerat Badshahan)
- b) Malik Zadeh ra Shunidam ke...(Chapter-1)
- c) Yaki ra az Muluk Ajam Hekayat Kunand ke Daste Tatawul...(Chapter-1)
- d) Padshahi ba Ghulam Ajmi der Kashti Nashishteh bood...(Chapter-1)
- e) Do Amirzadeh Dar Misr Budan Yaki Elm Aamokht...

**ii. Literary Personalities: Ek Mutaleh**

- a) Saadi Shirazi
- b) Ameer Khusrow
- c) Umar Khaiyam

**(15 Lectures)**

**3. Unit-3: a) Qatate Bargozide:**

- (i) Arzish Arzoo (Iqbal)
- (ii) Baade Bahari (Ghalib)

**b) Intekhab Az Manzoomate Jadeed (Farsi Shakreen):**

- (i) Namah be Madar (Md Hussain Ali)
- (ii) Hasrat wa Hesadat (Pazman Bakhteyari)

**(15 Lectures)**

**Suggested Readings:**

- 1. Gulistan e Saadi (Chapter-1) : Saadi Shirazi
- 2. Darse Farsi : Taqipur Nam Daryan
- 3. Elementry Persian Grammar : Dr. Rajender
- 4. Farsi Shakreen : Dr. Md Siddique
- 5. Moqalate farsi : Dr. Manzar Imam
- 6. Tarikhe Adbiyat e Iran : Raza Zadeh Shafaque

**12. Multidisciplinary TRL: Tribal Development in India**

Semester : I/II/III  
No. of Credits : 3 (Theory: 03, Practical: 00)  
Total Marks : 75

No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

***Instruction to question Setter:***

*There will be two group of questions. Group A will contain three questions in which all are to be answered. Question No.1 will be very short answer type (not MCQ) consisting of five questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive type (Long answer type) seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of group B.*

**Course Objectives:**

The course will seek:

1. To study tribal characteristics and relate them with their situation in India
2. To understand the major problems of tribes in India
3. To study the history of tribal development in India: the pre-independence and post-independence period
4. To learn the approaches to tribal development
5. To know the various tribal development programmes and welfare scheme
6. To expose the students with the problems faced by Tribes

**Course Learning Outcomes:**

At the end of the course students will be able to:

1. Understand definition and concept of the term tribes
2. Learns the different characteristic features of tribal community
3. Understand the developmental measures (Educational, Economic, Social Political etc.) taken by the government of India to uplift the tribes

**Course Content:**

1. An Introduction to Tribes:
    - a) The Characteristics of Tribes
    - b) The Tribal Situation in India
    - c) The Tribal Problems
- (7 Lectures)**
2. The Tribal Development Programmes and Welfare Schemes:
    - a) History: Pre-independence approach; Post-independence approach
    - b) An Approach to Tribal Development:
      - i. The I Five Year Plan (1951-56)
      - ii. The II Five Year Plan (1956-61)

- iii. The III Five Year Plan (1961-66)
- iv. The IV Five Year Plan (1969-74)
- v. The V Five Year Plan (1974-79)
- vi. The Sixth Five Year Plan (1980-85)

(Likewise, all the Period of Five-Year Plans including the most recent regarding the developments of tribes be studied.)

**c) The Governmental Ministries and Departments for Tribal Welfare:**

- i. The Protective measures and the Promotional measures
- ii. The 6th Schedule of the Constitution
- iii. The Article 332 of the Constitution of India
- iv. The Ministry of Tribal Affairs

**d) The Major Schemes and Plans of Change:**

- i. Conservation-cum-Development (CCD) Plans
- ii. Central Sector Schemes (CSS)
- iii. Centrally Sponsored Plan Scheme
- iv. The National Scheduled Tribes Finance and Development Corporation (NSTFDC)
- v. Block Grants

**(38 Lectures)**

**Suggestive Readings:**

1. Kunhaman, M., "Tribal Development in India. Retrospect and Prospect", Budgeting for whom, update quarterly, No. 1, April-June 1997.
2. Kulkarni, P.D., "Tribal Welfare Some Problems of Implementation", 122, Bhopal, 1964.
3. Mehta, P.C., "Tribal Development in 20th Century", Siva Publishers, Udaipur, 2000.
4. First Five-Year Plan, Planning Commission of India, New Delhi, 636-640, 1951-1956.

**13. Multidisciplinary TRL: Tribal Movements in India**

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

**Instruction to question Setter:**

There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain

**descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.

**Note:** There may be subdivisions in each question of **group B**.

### **Course Objectives:**

The course will seek to achieve the following objectives:

1. To expose students to the different tribes of India
2. To develop an understanding of the history of tribal Movements
3. To develop an understanding of various causes of tribal Movements
4. To understand the outcome of tribal Movements

### **Course Learning Outcomes:**

At the end of the course students will be able to:

1. understand definition and concept of the term Movement
2. learns the specific causes of the important movements and uprising
3. develop appreciation for the struggle of tribes for their rights and identity

### **Course content:**

1. Meaning and concept of movement; History of tribal movements in India; Tribal movements before and after independence; History of tribal movements in Jharkhand; Causes of tribal movements in Jharkhand

**(15 Lectures)**

2. **Important Tribal Movements in India**

- a) Pahariyas' Rebellion (1778)
- b) Chuar Uprising (1766)
- c) Kol Mutiny (1831)
- d) Ho and Munda Uprisings (1820-1837)
- e) The Santhal Rebellion (1855-56)
- f) Khond Uprisings (1837-1856)
- g) Koya Revolts (1860 to 1920)
- h) Bhil Revolts (1818 – 1831 and 1913)
- i) Koli Risings (1829, 1839, and 1844–1848)
- j) Ramosi Risings (1822 – 1829)
- k) Khasi Uprising (1830)

**(30 Lectures)**

### **Suggested Readings:**

1. Dhanagare, D.N, (1994). *Peasant Movements in India 1920-1950*, p.57, Oxford University Press, New Delhi.
2. Gough, K. (1974) "Indian Peasant Uprising", *Economic and Political Weekly*, Vol. 32, No. 34.

3. Henningham, S (1982). *Peasant Movements in Colonial India: North Bihar. 1917-1942*, Canberra
4. Mahapatra. L.K. (1972) 'Social Movements Among Tribes in India', in *Tribal Movements in India*, Vol. 2, edited by K. S. Singh. New Delhi: Manohar, pp. 399- 409.
5. Mathur, L.P. (1988). *Resistance Movement of Tribals of India*. Himanshu, Udaipur

## 14. Multidisciplinary TRL: Tribes and Forest

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be two group of questions. Group A will contain three questions in which all are to be answered. Question No.1 will be very short answer type (not MCQ) consisting of five questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive type (Long answer type) seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of group B.*

### **Course Objectives:**

The course will seek to achieve the following objectives:

1. To explain the importance of forest in the lives of tribes of India
2. To expound the deep relationship between forest and tribes
3. To expose the students to forest as primary source of livelihood of tribes

### **Course Learning Outcomes:**

After reading this Unit, you will be able to:

1. examine the relation between forests and the tribes;
2. explain about the forest laws of India; and
3. discuss how tribes use the forest products for their livelihood.

### **Unit I**

- a) Relationship between forest and tribes

- b) Forest management in India
  - i. Forest Rights of Tribals
  - ii. Forest Laws of India
  - iii. Forest Rights Acts of India
  - iv. Forest Laws and their Impact on Tribes

## Unit II

1. Forest as Source of Livelihood
2. Forest as a Source of economic Activity
3. Forest as Source of Food and Shelter
4. Source of Raw Material for Handicrafts
5. Source of Material Equipment
6. Source of Indigenous Medicines
7. Source of Entertainment

### Suggestive Readings:

1. Bhullar, L. (2008). *The Indian Forest Rights Act 2006: A Critical Appraisal*. 4/1 Law, Environment and Development Journal.
2. Choudari, B. (2007). *Forest and Tribals: A History Review of Forest Policy*, in Chittarajan Kumar Paty, (ed.) Forest Government and Tribe (New Delhi: concept publishing company) 1- 17.
3. Forest Act Rights (India)-Wikipedia, the free encyclopaedia.
4. K.S. Singh. (ed). Economics of the tribes and their transformation. New Delhi: Concept Publishing Company. 1982.
5. Mann, R.S. Nature-man-spirit complex in tribal India. Delhi: Concept Publishing Company. 1981.
6. Patnaik, S (September, 2007). *PESA, the Forest Rights Act, and Tribal Rights in India*. Paper presented at International Conference on Poverty Reduction and Forests, Bangkok. Retrieved from doi: <http://www.mtnforum.org/sites/default/files/publication/files/4946.pdf>
7. Shah, G. (1977) *Protest Movements in Two Indian States: A Study of the Gujarat and Bihar Movements*. Delhi: Ajanta Publications.

## 15. Multidisciplinary Philosophy:

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### Instruction to question Setter:

There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.

**Note:** There may be subdivisions in each question of **group B**.

### **Course Objectives:**

This paper is of multidisciplinary nature, and thus its main objective is to introduce students beyond disciplinary boundaries with nature, concepts, methods, applications of logic and logical thinking in problem-solving in real life situations.

### **Course Learning Outcomes:**

The main expected outcome of studying this Paper is that the students belonging to different disciplinary domains will be able to understand major concepts, rules and methods of logical reasoning and critical thinking. This outcome would not be confined to theoretical contexts, instead it is basically set to be applied in problem-solving in real life situations.

### **Course Content:**

#### **1. Logic:**

Nature and Definition, Induction and Deduction, Arguments- Nature and Structure, Truth and Validity

**(07 Lectures)**

#### **2. Propositions:**

Nature and Structure, Kinds of Propositions- According to Quality and Quantity, Distribution of Terms, Opposition of Propositions- Contradictory, Contrary, Subcontrary, Subaltern, Square of Opposition.

**(08 Lectures)**

#### **3. Syllogism:**

Categorical Syllogism, Mood and Figures, Rules and Fallacies.

**(15 Lectures)**

#### **4. Symbolic Logic:**

Truth-function, Conjunction, Disjunction, Implication, Negation, Truth tables.

**(8 Lectures)**

#### **5. Induction:**

Nature of Scientific Induction, Problem of Induction, Analogy, Hypothesis- Characteristics, Conditions and Kinds.

**(7 Lectures)**

### **Suggested Readings:**

1. Copi, Irving M., Carl Cohen, and Kenneth McMahon. *"Introduction to Logic."* Routledge, 2017.
2. Kuhn, Thomas S. *"The Structure of Scientific Revolutions."* University of Chicago Press, 1962.
3. Matilal, Bimal Krishna. *"Logic, Language, and Reality: An Introduction to Indian Philosophical Studies."* Motilal Banarsidass, 1985
4. Popper, Karl R. *"The Logic of Scientific Discovery."* Routledge, 2002.
5. Quine, W.V. *"Methods of Logic"*. Harvard University Press, 1982
6. Verma, Ashok Kumar. *"Sara Nigman Tarkashastra"*. Motilal Banarsidas, 1996
7. Verma, Ashok Kumar *"Sara IAgman Tarkashastra"*. Motilal Banarsidas, 1996

## 16. Multidisciplinary Anthropology:

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be two group of questions. Group A will contain three questions in which all are to be answered. Question No.1 will be very short answer type (not MCQ) consisting of five questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive type (Long answer type) seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of group B.*

### **Course Objectives:**

The learning outcome of this paper are:-

1. The students will learn about Anthropology, its meaning, scope, relation with other discipline and its main branches.
2. They will able to understand the basic concepts of Anthropology.
3. They will understand Anthropology in context of India.
4. They will learn about Prehistoric culture of India.
5. The students will also learn about Human evolution.

## **Course Content:**

### **Unit-I**

Meaning and scope of Anthropology, its relation with Sociology, Psychology, History, Economics, Political science, Zoology, Geology and Medical science.

Main Branches of Anthropology.

**(9 Lectures)**

### **Unit-II**

Basic Concepts: society, group, Institution, Community, culture, Civilization, Band, Tribe, Chiefdom. Great tradition and little tradition, sacred complex, Dominant caste, Tribe-caste continuum, Nature-Man-Spirit complex.

**(9 Lectures)**

### **Unit-III**

Indian social system: Varna, Ashram, Joint family system, caste system, Jajmani system, Purusharth and Sanskar.

**(9 Lectures)**

### **Unit-IV**

Prehistoric culture in India- Paleolithic, Mesolithic and Neolithic culture in India.  
Indus valley civilization.

**(9 Lectures)**

### **Unit- V**

Man's place in animal Kingdom

Theories of organic evolution: - Lamarckism, Darwinism, Synthetic theory of Evolution.

**(9 Lectures)**

## **17. Multidisciplinary Economics:**

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of **group B**.*

### **Module-1: Introduction**

- 1.1: Nature and Scope of Economics: Micro and Macro Economics; Positive and Normative Economics.
- 1.2: Utility Analysis: Total and marginal Utility, Law of Diminishing Utility, Principle of Equi-Marginal Utility.
- 1.3: Theory of Demand: Demand Function, Law of Demand, Why Demand Curve Slopes Downwards, Elasticity of Demand.

**(5 Lectures)**

### **Module-2: Theory of Production**

- 2.1: Factors of Production, Production Function, Total, Average and Marginal Product, Isoquant
- 2.2: Law of Variable Proportions Returns to Scale, Economies of Scale.
- 2.3: Concepts of Costs and Revenue Average, Marginal cost and Revenue, short run and long run cost curve.
- 2.4: Firm and Industry and Equilibrium of a Firm.
- 2.5: Market Forms: Perfect Competition & Monopoly.

**(10 Lectures)**

### **Module-3: MONEY and BANKING**

- 3.1: Money, Meaning and Function, Demand for and Supply of Money, Quantity Theory of Money (Fisherian Version).
- 3.2: Objectives, Functions and Limitations of Commercial Bank, Credit Creation, Central Bank and its Function, RBI and Methods of Credit Control.
- 3.3: Meaning and Scope of Public Finance; Private and Public Finance, Sources of Public Revenue, Tax, (Direct and Indirect Taxes), Meaning of Goods and Services Tax (GST).
- 3.4: Public Debt and its Repayment, Public Expenditure, Effects of Public Expenditure.
- 3.5: Public Budget; the Indian Situation, Requisites of a Good Budget, Significance of Budget.

**(10 Lectures)**

### **Module -4: Indian Economy & and Planning in India**

- 4.1: Basic Features of Indian Economy, Natural Resources: Land, Water and Forest Resources.
- 4.2: Broad Demographic Features of India, Demographic Transition in India, National Population Policy.
- 4.3: Objectives of Planning in India, Democratic Socialism in India, Mixed Economy and Economic Planning.
- 4.4: Development Strategy in India, Liberalization, Privatization, Globalization (LPG) Model of Development.
- 4.5: Industrial Policy and Indian Planning, Industrial Policy (1991), MSME

**(10 Lectures)**

## **Module-5 Agriculture Sector in India**

5.1: Agriculture in Indian Economy, Progress of Agriculture under the Five Year Plans, Present Status of Indian Agriculture

5.2: Green Revolution, New Thrust Areas in Agriculture (White Revolution & Horticulture Sector)

5.3: The Concept of Poverty, Poverty and Planning Process in India.

5.4: Nature of Unemployment in India, Various Schemes to Reduce Unemployment and under employment.

5.5: International Economics: Definition, Nature and Importance, Role of Foreign Trade

**(10 Lectures)**

### **Suggested Readings:**

1. Ahluwalia, I. J. and M.D. Little (Eds.) (1999), Indian's Economic Reforms and Development (Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.
2. Bardhan, P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi,
3. Bawa, R.S. and P.S. Raikhy (Ed.) (1997), Structural Changes in India Economy, Guru Nanak Dev University Press, Amritsar.
4. Brahmananda, PR and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, Delhi
5. Chakravarty, S. (1987), Development Planning: The Indian Experience, Oxford University Press, New Delhi
6. Jean Dreze and Amartya Sen, Jean Dreze and Amartya Sen, 2013. *An Uncertain Glory: India and its Contradictions*, Princeton University Press.
7. S.K. Mishra and V.K. Puri : Indian Economy ( Hindi and English Edition)
8. Datt & Sundharam: Indian Economy (Hindi & English Edition)
9. Pulapre Balakrishnan, 2007, The Recovery of India: Economic Growth in the Nehru Era, *Economic and Political Weekly*, November.
10. M.L. Jhingan: *Monetary Economics* (Hindi & English Edition)
11. D.M. Mithani Money, Banking International trade and Public Finance. (Hindi & English Edition)
12. Sen S.N. Central banking in underdeveloped money market.
13. Dommic Salvatore: International Economics.
14. H. L. Ahuja: Microeconomic Theory (Hindi & English Edition )
15. M. L. Jhingan Economic Growth and Planning (Hindi & English Edition)
16. H. L. Ahuja: Macroeconomic Theory (Hindi & English Edition)

## 18. Multidisciplinary Geography

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of **group B**.*

### **Course Objectives:**

1. To study the interaction among man-environment relationship in earth space.
2. To understand the physical aspects of earth surface.
3. To study the human and economic aspects of geography.

### **Learning outcomes: -**

On successful completion of this course, the student will be able to understand Geography as a discipline and Bio-physical and socio-economic processes of a particular area on Earth surface.

**Unit - I** Nature of geography; Origin of the earth- Big bang theory; Earth's material- Rocks; Landforms- Continent & Ocean, Mountain, plateau, Plain, Lake; Earthquake; Volcano; Composition and structure of atmosphere; Cyclone's Impact and mitigation; Monsoon winds; Tides; Ecology & Environment; Environmental degradation; Biodiversity

**(15 Lectures)**

**Unit - II** - Earth and its life; Evolution of Man; Physiography and Edaphic features of India and Jharkhand; Population distribution of the world and India; Migration; Resource- Types, Utilization and Conservation; Agriculture types – World and India; Industry – Iron and Steel, Cotton Textile; Food Processing; Problems of rural and urban settlements; Tourist place of India and Jharkhand.

**(15 Lectures)**

**Unit - III** - Man- environment relationship; Importance and types of Map, scale and diagrams; Important latitudes and longitudes; Methods of finding places and distance between places on the map; Modern Techniques in Geography: Remote Sensing, GIS, GPS; Careers in Geography.

**(15 Lectures)**

**Suggested Books:**

1. **Introduction to Geography-15e (2020)**, McGraw Hill- By Getis, Mark D. Blelland, Victoria Getis
2. **Physical Geography (2020)**, Pravalika Publications, Allahabad- By Savindra Arthar Singh
3. **Climatology (2021)**, Sarda Pustak Bhawan, Allahabad- By D.S. Lal
4. **Human Geography (2021)** Rawat Publication, Jawahar Nagar Jaipur - By Majid Husain
5. **Geographical Thought and Methodology (2017)**, Rastogi Publication Meerut- By S.D. Kaushik & D.S. Rawat

## **19. Multidisciplinary Home Science**

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

***Instruction to question Setter:***

*There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of **group B**.*

**Course Objectives:**

This course is designed

1. To expose the students to the basic Principles Home Science.
2. To introduce the first course.

## **Course Learning Outcomes:**

On completion of this course, the students will be able to understand

1. Students have an ability to understanding Human development, Food & Nutrition and Textile and Clothing
2. Understanding the need and importance of studying human growth and development across the life span.
3. Understanding and identify the biological and environmental factors affecting human development.
4. Understanding the basic concept of food and Nutrition role of various nutrient, nutritional deficiency diseases.
5. To develop and understanding about concept & scope of textile and clothing.
6. Understanding the importance, classification and properties of fibre.

## **Unit-1**

### **Introduction to Human Development**

History and Interdisciplinary nature of Human development, Concept and need to study of Human development, Concept of Growth and Development, Stages and principles of Growth and Development, Determinants of Development - heredity and environment, Importance and scope of Human development.

## **Unit-2**

### **Introduction to Interior Decoration**

Interior Decoration Art and Designs Principle of Arts and Design, Colours wheel, Role of colour in home decoration furnishing Materials.

## **Unit-3**

### **Food and Nutrition**

Food-Meaning, Classification and Function, Food Groups, Nutrition-Concept of nutrition, Nutrient-Macro and Micro nutrient, sources, deficiency diseases

## **Unit-4**

### **Textile and Clothing**

Introduction to clothing and textile, It's importance in day to day life, Scope, Classification of textile fiber on the basis of their sources, Primary and secondary properties of fibre.

## **Suggested Readings:**

1. Alexander T. Paul road and Berrard human: Development psychology. D. Van Nosth and Co, New York, 1980.

2. Antony, M.J. (1985), Women's Right: Dialogue, New Delhi
3. Desai. N. & Patel, V. India Women: Change and Challenges in the International Decade: Popular Prakashan Bombay
4. Garg, Grace, J... Human Development, Prevtice HaH inc. N. Jersey.
5. K, Robert: Human Development A life span Prospective, allyn Baleen Inc. Boston.
6. Kerwis, MD.: The Psychology of Human aging theory Research of Practice, Allyen & Bacon Inc. Bosteen.
7. Neeta Agarwal. Dr.A.K.Kamma Tripathi, Manav Vikas, Agarwal Publicaion (Hindi version).
8. Patni Manju & Sharma, Lalita; Grah Praband star Publicaion Agra
9. R.Bhatia& C Arora(1999): Introduction to Clothing & Textile, printed by Macho primtery Raopura, Baroda.
10. R.Mudambi, Food Science New age International Limited publication.
11. Stewart, A.C & Frideman S.: Child Development infancy through Adolescence- Wiley International ed.1987.
12. Singh Brinda Aahar Vigyan Panchsheel prakasan, Jaipur.
13. SriLaxmi B. Nutrition Science, new age international, Limited publication. 14) Vikery, FE: Creative Programming for older Adults, Association Press, Chicago.
14. Verma, pramila: Vastra Vigyan Avam paridhan-Madhya Pradesh Hindi Granth Acodemy, Bhopal.
15. Verma, Preety & Dr. D.N. Srivastava, Bal Manovigyan Avam Vikas (Hindi version).

## 20. Multidisciplinary History: History of India's Freedom Struggle

### भारत के स्वतंत्रता संग्राम का इतिहास

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

#### **Instruction to question Setter:**

There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.

**Note:** There may be subdivisions in each question of **group B**.

## **Course Content:**

1. Revolt of 1857: causes, nature and effects  
1857 का विद्रोह :कारण ,प्रकृति एवं प्रभाव
2. Indian National Congress: Formation, Moderates and Extremists  
भारतीय राष्ट्रीय कांग्रेस का गठन ,नरमपंथी एवं गरमपंथी
3. Gandhian movements and Indian independence: Non-Cooperation movement, Civil Disobedience movement and Quit India Movement  
गाँधीवादी आन्दोलन और भारतीय स्वतंत्रता : असहयोग आन्दोलन,सविनय अवज्ञा आन्दोलन और भारत छोड़ो आन्दोलन
4. Revolutionaries and Revolutionary movements (1905-1942) Gadar, HSRA, IRA, V.D. Savarkar, Bhagat Singh, Khudiram Bose, Udham Singh, Aurobindo Ghosh.  
क्रांतिकारी तथा क्रांतिकारी आन्दोलन (1905-1942) ,गदर ,एच० एस० आर० ए० ,आई० आर० ए० ,वी० डी० सावरकर ,भगत सिंह ,खुदीराम बोस ,उधम सिंह ,औरोबिन्दो घोष
5. Independence and Partition (1942-47) : Jinnah and Demand for Pakistan, I.N.A & Subhash Chandra Bose  
स्वतंत्रता और विभाजन (1942-47) : जिन्ना और पाकिस्तान की माँग ,आई० एन० ए० एवं सुभाष चन्द्र बोस

## **Suggested Readings**

1. Bipan Chandra, Amlesh Tripathi, Barun De – Freedom Struggle (N.B.T)
2. Bipan Chandra – Modern India
3. Bipan Chandra ,Mridula Mukharji et al – India’s Struggle for Independence
4. Sumit Sarkar – Modern India
5. B.L. Grover – A New Look At Modern Indian History
6. V.D. Mahajan – Modern Indian History
7. बिपन चन्द्र – आधुनिक भारत
8. सुमित सरकार – आधुनिक भारत
9. बी० एल० ग़ोवर ,अलका मेहता एवं यशपाल : आधुनिक भारत का इतिहास : एक नवीन मूल्यांकन
10. पी० के० प्रधान – ब्रिटिश ताजकालीन भारत का इतिहास (1857-1947)
11. रामलखन शुक्ल – आधुनिक भारत का इतिहास
12. बिपन चन्द्र – स्वतंत्रता संग्राम) एन० बी० टी० (

## 21. Multidisciplinary Political Science: UN and Human Rights

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be two group of questions. Group A will contain three questions in which all are to be answered. Question No.1 will be very short answer type (not MCQ) consisting of five questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive type (Long answer type) seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of group B.*

### **Course Objectives:**

The purpose of the course is to familiarize the students with the concepts of Human Rights and its university. The students must to understand why Human Rights are necessary and how these rights ensure the full and proper development of Human Beings and of the development of humanity in each Human Being. The students will be introduced with the role of United Nations in developing the entire subject of Human Rights.

### **Learning Outcomes:**

1. Students will be able to understand the terms and terminologies used to Human Rights.
2. They will come to know the importance of the United Nations in developing Human Rights by formulating Human Rights Laws from time to time.
3. They will come to know the provisions related of United Nations.

### **Course Content:**

1. Concept of Human Rights: Meaning, definition
2. Classification of Human Rights (with examples)
  - a. Based on Nature of Rights
  - b. Based on period of origin
  - c. Positive and Negative HR
  - d. Individual & Collective HR

**(6 Lecturers)**

- (6 Lectures)**
3. Universal Declaration of human rights, 1948 (with special reference to lack of amendment provisions & Internationalization of Rights)
 

**(7 Lecturers)**
  4. UN Declaration of Rights of Indigenous Peoples, 2007
 

**(8 Lecturers)**
  5. United National Human Rights Commission (UNHCR): A brief overview.
 

**(6 Lecturers)**
  6. National Human Rights Commission (NHRC) of India.
 

**(6 Lecturers)**
  7. Challenges to Human Rights:
    - a. Violations and
    - b. Abuses

**(6 Lecturers)**

**Suggested Readings:**

1. The United Nations and Human Rights: A Guide for a New Era, Julie Mertus, 2010.
2. The Effectiveness of the UN Human Rights System, Surya P. Subedi, Routledge, 2019.
3. The United Nations and Human Rights: A Critical Appraisal, Frederic M. & Philip Alston, Oxford University Press, 2020.
4. Website of United Nations: [www.un.org](http://www.un.org)
5. The Human Rights Council: A critique and Early Assessment, Rosa Freedman, 2013.
6. Non-Governmental Organizations and the United Nations Human Rights System, Fiona McGaughey, Routledge, 2001.
7. Handbook of Indigenous People's Rights, Edited by Corinne Lennox & Damien Shirt, Routledge, 2016.
8. Peacebuilding and the rights of the Indigenous Peoples: Experiences and Strategies for the 21<sup>st</sup> Century, Edited by Heather Devere, Kelli Te Maiharoa, John P. Synott, Springer, 2017 ([link.springer.com](http://link.springer.com)).
9. National Human Rights Commission of India, Arun Ray, Kharma Publishers, 2004.
10. NHRC an Assessment, Pinki Gautam, Gyan Books, 2015.
11. Protection of Human Rights and National Human Rights Commission: Reflections, N. K. Padha, Gyan Publishing House, 2017.

## 22. Multidisciplinary Sociology:

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of **group B**.*

### **Course Content:**

#### **Unit: I**

1. Definition, Nature and Scope of Sociology, Relationship with Other Social Science, Important in Modern World.

**(15 Literature)**

#### **Unit: II**

1. Social Groups, Definition, Characteristic and Types.
2. Family- Definition, Characteristic, Types, Recent Changes.
3. Culture- meaning, Characteristics, types, Cultural lag, Culture and personality, Culture and civilization.
4. Social stratification meaning basic types, important, caste and class.

**(15 Literature)**

#### **Unit: III**

1. Social change: definition, Characteristics, Theories of social changes.
2. Social control: definition, Characteristics, important, means and agencies, mechanism of social control, norms and values.
3. Socialization: Definition, types, factors.

**(15 Literature)**

### Suggested Readings:

1. समाजशास्त्र का परिचय- प्रो० एम० एल० गुप्ता एवं साहित्यभवन पब्लिकेशन्स. आगरा डॉ० डी०डी० शर्मा ।
2. समाजशास्त्र परिचय- डॉ० रवीन्द्रनाथ मुखर्जी, एस०ओ०पी०डी० पब्लिकेशन्स, डॉ० भरत अग्रवाल ।
3. समाजशास्त्र – डॉ० जी० के० अग्रवाल, साहित्यभवन पब्लिकेशन्स ।

## 23. Multidisciplinary Labour and Social Welfare:

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of **group B**.*

### **Course Objectives:**

The Program is designed with the objectives to develop highly adapt professional, capable of working in diverse sectors, continuously striving for excellence in performance, propagating thought leadership and contributing to the welfare of the society at large.

The Curriculum of the continuously evolving full time program rests on two pillars: One, providing a strong analytical foundation in key functional areas especially in managing human resources in companies and NGO's and the other enabling a high degree of academic flexibility, thereby allowing students to customize their experiences.

The programme nurtures and develops base for human resource manager, labour officers, HR Professionals with personalised care and attention, in small workgroups and teams and in a practical, application-oriented environment. Every year aspirants avail the opportunity of realizing their dreams through this program.

### **Course Learning Outcomes:**

1. To Enable Students to understand Labour Legislation available for Labours to protect their rights and for their welfare.
2. Students will be able to understand the working theories related to Labour laws in India and how it serves for welfare to workers.
3. Able to understand the function and process of making legislation.
4. Able to know the importance of Labour legislation in the context of Labour justice.
5. To understand provisions of various Labour legislations in India.
6. Able to promote knowledge in understanding the cause and effect of discrimination and oppression.
7. Able to prepare modules and strategies for advocacy to bring sustainable change.

### **Course Content:**

#### **Module 1: Labour legislations**

- a) Principal of Modern Legislation, Criticism.
- b) Meaning, Social and Labour Legislation.
- c) Nature of Early Labour Legislation.
- d) Kinds of Labour Legislation.

**(15 Lectures)**

#### **Module2: History of Modern Labour Legislation:**

- a) Position before 1919.
- b) Position from 1919 till the Attainment of Independence
- c) National Commission on Labour 2002.
- d) History of Labour Legislation.
- e) Provision of Indian Constitution relating to Labour.
- f) Growth of Labour Legislation in Indian after Independence.

**(10 Lectures)**

#### **Module 3: Labour Administration:**

- a) Labour Administration of Central Government.
- b) Labour Administration in Jharkhand.
- c) Role of ILO in the field of Labour Administration.
- d) Pandit Dindayal Upadhyaya Shramev Jayate Karyakram.
- e) Second National Commission on Labour 2002 relation to Labour administration.

**(10 Lectures)**

#### **Module 4: International Labour Organization:**

- a) Objective &Principal of ILO.
- b) Structure of ILO.
- c) Main function and activities of ILO.
- d) Convention and Recommendation of ILO.
- e) Influence of the ILO on Indian Labour Legislation

**Suggested Readings:**

Sl. No.	Author	Title of Book	Publisher
1	पी०आर०एन०सिन्हा एवं इन्दुबाला	श्रम एवं समाज –कल्याण	Bharti Bhavan Publication
2	डॉ चतुर्भुज मामोरिया	सेविवर्ग प्रबन्ध एवं औद्योगिक सम्बन्ध	साहित्य भवन पब्लिकेशन-आगरा
3	डॉ गणेश कुमार झा	Labour Law, Industrial Relation and Social Welfare	Notion Press
4	Tom Burdon, Charlie Cooper, Steph Petrie	Modernising Social Policy: Unravelling New Labour's Welfare Reforms	Routledge Publication
5	Donald R. Stabile	Work and Welfare: The Social Costs of Labor in the History of Economic Thought (Contributions in Economics and Economic History)	Praeger Publishers Inc
6	Taxmann's	New Labour & Industrial Laws with Draft Rules – Complete coverage of the new Codes plus draft Rules	Taxmann Publications Pvt. Ltd.
7	S.G. Deogaonkar	Women and Children Welfare	Ishika Publishing House
8	Ashwin N.Karia	The Law relating to Welfare and Protection of Women and Children – 2023	C.Jamnadas & Co.
9	Sandhya Upadhyay	Women Child Welfare and Media	Sarup Book
10	Ashok Kumar	Developing Women and Children in India	South Asia Books

**24. Multidisciplinary Psychology: Health Psychology**

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

**Instruction to question Setter:**

There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.

**Note:** There may be subdivisions in each question of **group B**.

## **Course Objectives:**

1. Gaining knowledge of health Psychology.
2. Developing adequate knowledge about the promotion of healthy behaviour.
3. Acquiring knowledge about stress its cause and management.
4. Enabling students to maintain good health.

### **Unit I: Introduction to health Psychology:**

- a) Definition.
- b) Goal of health Psychology.
- c) Need of health Psychology.
- d) Mind – body relationship.

**(12 lectures)**

### **Unit II: Maintaining health:**

- a) Biological model
- b) Psychological model.
- c) Socio – culture model.
- d) Spiritual model.

**(9 lectures)**

### **Unit III: Mental health:**

- a) Definition and characteristic.
- b) Component of mental health.
- c) Factors influencing mental health.
- d) Technique of promoting mental health.

**(12 lectures)**

### **Unit IV: Psychological linkage to ill health:**

- a) Heart disease.
- b) Diabetes.
- c) AIDS.
- d) COVID – 19.

**(12 lectures)**

### **Suggested Readings:**

1. Aboud, F.E. (1998). Health Psychology in Global Perspectives. Thousand oaks, C.A: Sage.
2. Anastasi, A. (1968). Psychological Testing. New York: Mc Millan.
3. Brannan, L and feist, J. (1996). Health Psychology: An Introduction to Behaviour and Health. Pacific Groove: Books Cole.
4. Broome, A. K. and Llewelyn, S. (1995). Health Psychology. London: Champan an Hall.
5. Camic, P and Knights (Eds.) (1998) Clinical Hand Book of Health Psychology. Scattle: Hogiefe and Huber.
6. Chopra, C. and Payne, R. (Eds.) (1991). Personality and Stress: Individual Difference in Stress Process. Chichester: Wiley.
7. Ciminevo, et, al. (1986). Handbook of Behaviour Assessment. New York: Willy.
8. Cronbach, L.J. (1970). Essentials of Psychological Testing. New York: Harper and Row.

9. Freeman, F.S. (1962). Theories and Practice of Psychological Testing. New York: Holt, Rinehart and Winston (India edition)
10. Friedman, G. (Ed.) (1999). Psychology: Perspectives on stress and health. New Delhi: Concept.
11. Md. Suleman (2010). Manovigyanik Proyog avm parikhshan Patna: Motilal Banarsidas. (In Hindi)
12. Pestonjeer, D. M. (1991). Stress and Coping: The Indian Experience. New Delhi: Sage.
13. Razaque, S. et al (2010). New Horizon in Stress Management. New Delhi: Ayushman Publication House.
14. Sarafino, EP. (1994). Health Psychology: Bio- psycho- social Interaction. New York: Wiley.
15. Singh A.K. (2006). Advanced Psychological Experiments and testing. Patna: Bharti Bhawan. (In Hindi).
16. Speiberger, C.D. and Sison, I.g. (eds.) (1996). Stress and Emotions, Anxiety. Anger and Curiosity, Vol. 16, Washington, D.C.: Taylor and Frances.
17. Taylor, S. E. (1986). Health psychology. New Delhi: McGraw Hill Education Private Limited.
18. Tunks, E. and Bellismo, A. (1991). Behavioural Medicine: Concept and Procedures, Pergamon Press: USA
19. Weinman, J Johnston, M and Molloy, G. (2006). Health Psychology, Vol 1 to Vol 4,. Sage publications: Great Britain.

## 25. Multidisciplinary Commerce: Income Tax

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of **group B**.*

### **Course Objectives:**

The course aims to provide knowledge of the various provisions of income-tax law in India and enable the learners to apply such provisions to compute total income and tax liability of individuals and HUFs. It also aims to enable learners to understand the provisions

relating to filing of return of income.

**Learning Outcomes:** After the completion of the course, the learners will be able to:

1. Comprehend the concepts of taxation, including assessment year, previous year, assesses, person, income, total income, agricultural income and determine the residential status of persons;
2. Compute income under different heads, applying the charging provisions, deeming provisions, exemptions and deductions;
3. Apply the clubbing provisions and provisions relating to set-off and carry forward of losses to determine the gross total income;
4. Calculate the tax liability of an individual and HUF as well as deductions from gross total income and determine the total income of an individual and HUF.

**Course Content:**

**1. Basic Concepts:**

- a) Tax: concept, types – direct and indirect; canons of taxation; Direct Tax: Need, features and basis of charges. Income Tax (as per Income Tax Act 1961 and amendments): Basic Concepts;
- b) Residential status;
- c) Scope of Total Income, Heads of Income; Income which do not form a part of Total Income;
- d) Agriculture Income and its taxability.

**(6 Lectures)**

**2. Income from Salary and House Property:**

- a) Meaning of salary, Basis of charge, conditions of chargeability, Allowances, Perquisites, Deductions and exemptions, Computation of taxable Income from Salary.
- b) Income from house property Basis of charge, Determinants of Annual Value, Deductions and exemptions, computation of taxable income House Property.

**(10 Lectures)**

**3. Profits and Gains from Business or Profession, Capital Gains, and Income from Other Sources**

- a) Meaning of business income, methods of accounting, Deductions and Disallowances under the Act, Computation of presumptive income under Income-tax Act, Computation of taxable income from Business and profession.
- b) Meaning of Capital Asset, Basis of Charge, Exemptions related to capital gains; Meaning of Transfer, Computation of taxable capital Gain.
- c) Income from Other Sources Basis of charge - Dividend, Interest on securities, winning from lotteries, Crossword puzzles, Horse races, Card games etc., Permissible deductions, impermissible deductions.

**(10 Lectures)**

#### **4. Computation of Total Income and Tax Liability of individual and HUF**

- a) Income of other persons included in assessee's total income, Aggregation of income and set-off and carry forward of losses;
- b) Deductions from gross total income; Rebates and reliefs;
- c) Computation of total income and tax liability of individuals and HUF.

**(10 Lectures)**

#### **5. Preparation of return of income:**

- a) Filing of returns: manually and online filing of return of income and TDS.
- b) Provision and procedure of compulsory online filing of returns for specified assessee.

**(9 Lectures)**

**Practical Exercises:** The learners are required to:

1. Identify five individuals above the age of 18 years without PAN Card. Educate them about the relevance of getting a PAN card issued from IT Department of India and help them fill the online application form for generating their PAN Card. Also, educate them about the significance of filing return and help them fill the same online. Prepare and present a report of the key learnings from the exercise;
2. File Income-tax return of individuals and HUF;
3. Compute income under different heads, total income, and tax liability of an individual and HUF.
4. Apply for TAN for a firm and file its TDS return.
5. Visit the website of income tax department, Govt. of India and fill the various online ITR forms with hypothetical data.

#### **Suggested Readings:**

- 1 Ahuja, G., & Gupta, R(Latest edition). Simplified Approach to Income Tax. New Delhi: Flair Publications Pvt.Ltd.
- 2 Singhanian, V. K., & Singhanian, M. (Latest edition). Student's Guide to Income Tax including GST Problems & Solutions. New Delhi: Taxmann Publications Pvt. Ltd.
3. Study Material of ICAI Intermediate Paper 4A: Income-tax Law.
- 4 Direct taxes Law & Practices- SBPD Publication, Agra.  
Mehrotra H.C. Direct Taxes –Sahitya Bhawan, Agra.

## 26. Multidisciplinary Commerce: E- Commerce

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of **group B**.*

### **Course Objectives:**

The course aims to enable students to know the mechanism for conducting business through electronic means.

### **Learning Outcomes:**

After completion of the course, learners will be able to:

1. Explain the concept of E-business and its various aspects;
2. Acquire skills of designing a website for e-business;
3. Explain about e-commerce activities and its applications;
4. Comprehend about various payment gateway options;
5. Assess the security issues and measures of e-business.

### **Course Contents:**

#### **1. Introduction:**

- a) Overview of E-Business; Origin and need of E-Business; Factors affecting E-Business, Major requirements in E-Business;
- b) Emerging trends and technologies in E-Business, E-Business models, E-Market and its types, E- Government services, Management challenges and opportunities, Impact of E-Commerce on Business.
- c) Enterprise system- Enterprise Resource Planning, Customer Relationship Management, SupplyChain Management.

**(10 Lectures)**

## **2. Website Designing and Publishing:**

- a) Internet Services, elements, URLs and Internet-Protocols (shopping cart, cookies) Internet Service Protocols (ISP), World Wide Web (WWW); Portals – steps in designing and developing E- Commerce website.
- b) Introduction to HTML tags and attributes: Text formatting, fonts, hypertext links, tables, images, lists, forms, cascading style sheets. Online publishing, strategies, and approaches.

**(10 Lectures)**

## **3. E-Commerce Activities and Operations:**

- a) Various E-Commerce activities; various manpower associated with e-commerce activities; Types of E-Commerce Providers and Vendors; Modes of operations associated with E-Commerce; E- Commerce types.
- b) E-commerce business models - key elements of a business model and categories; E-Commerce Systems and Pre-requisites.
- c) E-commerce applications in various industries (banking, insurance, payment of utility bills and others), e-marketing, e-tailing, online services, e-auctions, online portal, online learning, e- publishing and e-entertainment, online shopping.

**(10 Lectures)**

## **4. Payment Gateways:**

- a) Management Electronic payment system, electronic cash, smart cards, risk and electronic payment system, Unified Payment Interface, Mobile wallets; Application and management, Role of National Payments Corporation of India.
- b) Security and Legal Aspects of E-Business E-commerce security – meaning and issues. Security threats in the E-commerce environment security intrusions and breaches, attacking methods like hacking, sniffing, cyber-vandalism etc.; Technology solutions- encryption, security channels of communication, protecting networks, servers and clients. Information Technology Act 2000- provisions related to offences, secure electronic records, digital signatures, penalties and adjudication.

**(15 Lectures)**

**Practical Exercises:** The learners are required to:

1. Design a Web Page in Notepad and HTML;
2. Design a webpage for a hypothetical e-business model;
3. Help others to learn the use of e-wallet, e-payment, digital signatures. Prepare a report on the skills used by you to help them learn;
4. Open internet banking account and operate it.

### **Suggested Readings:**

1. Kumar Vinay, Internet and e-commerce, Prakhar Publishers
2. Shivani Arora, E-Commerce, taxmanns
3. Bajaj, K. K., & Nag, D. (2017). E-Commerce. New Delhi: Tata McGraw Hill Pvt. Ltd.
4. Das, Shiv, E-Commerce, Shiv Das & Sons, Educational Publishers
5. Bhardwaj, Sushil & Kumar Punit, E-Commerce, Kalyani Publication
6. Kumar Amit, T.N. & Suri, R. K., E-Commerce, Dhanpat Rai & Co.
7. Chaffey, D. (2011). E-Business and E-Commerce Management: Strategy, Implementation and Practice. London: Pearson Education.
8. Marilyn, G. M., & Feinman, T. (2000). Electronic Commerce: Security Risk Management and Control. New York: McGraw-Hill Education.

## **27. Multidisciplinary Commerce: Goods and Services Tax (GST)**

Semester	: I/II/III
No. of Credits	: 3 (Theory: 03, Practical: 00)
Total Marks	: 75
No. of Teaching Hours	: 45
SIE	: 00
ESE	: 75 (3 hours)
Pass Marks	: 30

### ***Instruction to question Setter:***

*There will be two group of questions. Group A will contain three questions in which all are to be answered. Question No.1 will be very short answer type (not MCQ) consisting of five questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive type (Long answer type) seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of group B.*

### **Course Objectives:**

The course aims to provide understanding about salient features of GST law and implications of its various provisions for different classes of suppliers. It also aims to provide an understanding of compliances and procedures laid down in GST law.

## **Learning Outcomes:**

After the completion of the course, the learners will be able to:

1. Explain concept, need, and utility of indirect taxes;
2. Understand and analyse the taxable event, i.e., supply under GST;
3. Describe the provisions relating to levy of GST;
4. Identify exemptions for different types of goods and services;
5. Examine implications of input tax credit;
6. Explain the various procedures under GST;
7. Analyse provisions regarding penalties and interest;

## **Course Content:**

### **1. Introduction:**

- a) Concept and features of Indirect Taxes, Difference between Direct and Indirect Taxes,
- b) Concept of GST, Relevant Definitions under GST law, Constitutional aspects of GST,
- c) GST Council: Constitution, Structure and functioning.

**(10 Lectures)**

### **2. Concept of Supply under GST law:**

- a) Concept of supply including composite and mixed supply, Place, Time, and Value of taxable supply, Significance of consideration.
- b) Levy of GST Basis of Charge of GST, Inter-State Supply, Intra-State supply, GST rates notified for supply of various goods and services, Reverse charge mechanism, Composition levy,
- c) Exemptions from GST, Power to grant exemptions, Exempted goods under exemption notifications, exempted services under exemption notifications.

**(10 Lectures)**

### **3. Input Tax Credit under GST law:**

Meaning, Eligibility and Conditions for taking Input Tax Credit, Apportionment of credit and blocked credits, Availability of credit in special circumstances, Taking Input Tax credit in respect of inputs and capital goods sent for job work, Manner of distribution of credit by Input Service Distributor, Manner of recovery of credit distributed in excess.

**(10 Lectures)**

### **4. Registration under GST law**

- a) Threshold Limits for Registration, Persons liable for Registration, Persons not liable for Registration, Compulsory Registration in Certain Cases, Procedure for Registration, Deemed Registration,
- b) Special Provisions relating to Casual Taxable Persons and Non-resident Taxable

persons, Amendment of registration, Cancellation of Registration, Revocation of Cancellation of Registration.

**(15 Lectures)**

**Practical Exercise:** Learners are required to:

1. Fill up online application for registration under GST for hypothetical firm.
2. Fill up online various forms of GST Returns for hypothetical firm.
3. Prepare e-Way bill for hypothetical firm.
4. Practical problems on computation of input tax under reverse charge for hypothetical firm.
5. Practical problems on computation of input tax credit for hypothetical firm.
6. Practical problems on payment of tax and interest, if any, for hypothetical firm.

**Suggested Readings:**

1. Ahuja, G., & Gupta, R. (Latest edition). Direct Taxes Ready Reckoner. New Delhi: Wolters Kluwer India Private Limited.
2. Mehrotra, H.C., & Agarwal, V. P. (Latest edition). Goods and Services Tax GST. Uttar Pradesh: Sahitya Bawan Publications.
3. Singhania, V. K., & Singhania, M. (Latest edition). Students' Guide to Income Tax Including GST. New Delhi: Taxmann Publication.
4. Singhania, V. K., & Singhania, K. (Latest edition). Direct Taxes: Law & Practice. New Delhi: Taxmann Publication.
5. Gupta C. A. & Gupta – Goods and Services Tax – SBPD
6. The ICAI Study Material for Final Course Group-II, Paper-8: Indirect Tax Laws [Module 1, 2, and 3]

**Note:** Latest edition of the books should be used.

## 28. Performing Arts: Light Vocal

No. of Credits	: 3 (Theory: 02, Practical: 01)
Total Marks	: 50 (Theory) + 25 (Practical)
No. of Teaching Hours:	30 (Theory) + 30 (Practical)
SIE	: 00
ESE	: 50 (2 Hours Theory) + 25 (3 Hours Practical)
Pass Marks	: 20 (Theory) + 10 (Practical)

### ***Instruction to question Setter:***

There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.

**Note:** There may be subdivisions in each question of **group B**.

### **Course Content:**

#### **Theory**

**50 Marks**

1. Definitions of
  - a) Sangeet
  - b) Swar
  - c) Tal
  - d) Matra
  - e) Saptak

**(2 Lectures)**
2. Definitions of
  - a) Rag
  - b) Laya
  - c) Vibhag
  - d) Sam
  - e) Khali

**(2 Lectures)**
3. Brief life sketch of
  - a) Begam Akhtar
  - b) Girija Devi
  - c) Shobha Gutru
  - d) Pt. Chhamulal Mishra

**(6 Lectures)**
4. General idea of famous Indian folk singers.

**(8 Lectures)**
5. Basic knowledge of
  - a) Thumri
  - b) Bhajan

- c) Gazal
- d) Folk Song
- e) Religious Song
- f) Community Song
- g) Patriotic Song
- h) National Anthem
- i) National Song

**(12 Lectures)**

**Practical**

**25**

**Marks**

1. Prepare any five Alankars.

**(6 Lectures)**

2. Prepare Prayers / Saraswati Vandana.

**(4 Lectures)**

3. Prepare Song

- a) Jhumar
- b) Chaiti
- c) Holi
- d) Festive Song
- e) Thumri
- f) Bhajan
- g) Gazal

**(12 Lectures)**

4. Thekas of Tal

- a) Dadra
- b) Rupak
- c) Kaharwa
- d) Trital
- e) Jhaptal

**(8 Lectures)**

## 29. Performing Arts: Hindustani Classical (Vocal)

No. of Credits	: 3 (Theory: 02, Practical: 01)
Total Marks	: 50 (Theory) + 25 (Practical)
No. of Teaching Hours:	30 (Theory) + 30 (Practical)
SIE	: 00
ESE	: 50 (2 Hours Theory) + 25 (3 Hours Practical)
Pass Marks	: 20 (Theory) + 10 (Practical)

### ***Instruction to question Setter:***

There will be **two** group of questions. **Group A** will contain three questions in which all are to be answered. **Question No.1** will be **very short answer type (not MCQ)** consisting of five questions of 1 mark each. **Question No.2 & 3** will be **short answer type** of 5 marks each. **Group B** will contain **descriptive type (Long answer type)** seven questions of fifteen marks each, out of which any four are to be answered.

**Note:** There may be subdivisions in each question of **group B**.

### **Course Content:**

#### **Theory** **50**

#### **Marks**

1. Brief history of Indian Music – Ancient Period, Medieval Period and Modern Period. **(6 Lectures)**
2. Complete Knowledge of: Rag Parichaya, Sthayi, Antra, Aroh, Awaroh, Vadi, Samvadi, Pakad, Alap, Jati etc. with examples. **(4 Lectures)**
3. Detailed study of notation system of Pt. Bhat Kande. **(8 Lectures)**
4. Basic knowledge of: Khyal (b) Dhrupad (c) Tarana (d) Dhamar (e) Chaturang and Trivat. **(8 Lectures)**
5. Use of classical music in filmy songs. **(4 Lectures)**

#### **Practical** **25 Marks**

1. Choice Ragas :
  - a) Yaman
  - b) Bhupati
  - c) Kafi
  - d) Bhairav
  - e) Asavari
  - f) Durga
  - g) Desh

h) Malkosh.  
(Prepare Chhota Khyal with Sthayi, Antra and Tan)

(16 Lectures)

2. Basic knowledge of Tal for Dhrupad style:

- a) Trivra (7 matra)
- b) Sool Tal (10 matra)
- c) Chautal (12 matra)
- d) Dhamar (14 matra)

(8 Lectures)

3. Identification and recognition of 10 thaats.

(6 Lectures)

### 30. Performing Arts: Dance

No. of Credits	: 3 (Theory: 02, Practical: 01)
Total Marks	: 50 (Theory) + 25 (Practical)
No. of Teaching Hours:	30 (Theory) + 30 (Practical)
SIE	: 00
ESE	: 50 (2 Hours Theory) + 25 (3 Hours Practical)
Pass Marks	: 20 (Theory) + 10 (Practical)

#### ***Instruction to question Setter:***

*There will be two group of questions. Group A will contain three questions in which all are to be answered. Question No.1 will be very short answer type (not MCQ) consisting of five questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive type (Long answer type) seven questions of fifteen marks each, out of which any four are to be answered.*

**Note:** *There may be subdivisions in each question of group B.*

#### **Course Content:**

#### **Theory**

**50 Marks**

1. General introduction to seven Indian Classical Dance styles :

- a) Kathak
- b) Odissi
- c) Manipuri
- d) KathaKali
- e) Bharat Natyam
- f) Kuchipudi
- g) Mohini Atyam.

- |   |                             |
|---|-----------------------------|
| <p>2. General introduction of Tribal and Folk Dances of India:</p> <ul style="list-style-type: none"> <li>a) Paika Dance (Jharkhand)</li> <li>b) Chhau (Bengal)</li> <li>c) Bihu (Assam)</li> <li>d) Kalbelia (Rajasthan)</li> <li>e) Garava (Gujrat)</li> <li>f) Bhangra &amp; Giddha (Punjab)</li> <li>g) Lavani (Maharashtra)</li> </ul> <p>(Knowledge regarding Costumes, Instruments, Traditional Festival etc.)</p> | <p><b>(9 Lectures)</b></p>  |
| <p>3. Basic knowledge of Dance-Drama tradition.</p>   | <p><b>(8 Lectures)</b></p>  |
| <p>4. Bhav Nrityas:</p> <ul style="list-style-type: none"> <li>a) Makhan Chori</li> <li>b) Draupadi Cheer Haran</li> <li>c) Gaj Grah Yudh</li> </ul>  | <p><b>(3 Lectures)</b></p>  |
|   | <p><b>(10 Lectures)</b></p> |

**Practical**

**25**

**Marks**

- |  |                             |
|--|-----------------------------|
| <p>1. Learning and practice of any Classical Dance of India.</p> | <p><b>(14 Lectures)</b></p> |
| <p>2. Performance of any two Folk or Tribal Dances.</p>          | <p><b>(10 Lectures)</b></p> |
| <p>3. Presentation of any Bhav-Nritya.</p>                       | <p><b>(6 Lectures)</b></p>  |