TRIPURA UNIVERSITY SEMESTER - I Zoology (Major) Paper - I

Revise d.

Full Marks - 100 (80+20)

Unit I: Invertebrata - 1 (Protozoa to Annelida)

Periods -- 15

 Protozoa: a) Locomotion - Amoeboid (Amoeba), Ciliary (Paramoecium) and Flagellar (Euglena), b) Morphology and Reproduction in Paramoecium.

Porifera: Histology of body wall; Spicules, its kinds & formation, and Canal System of

Sycon.

Cnidaria: Polymorphism in Siphonophora; structure and function of nematocyst

 Helminthes: a) Excretory System of Helminthes; b) General Organization and Life cycle of Ascaris lumbricoides: Pseodocoelom -its origin and structure in Ascaris

Annelida: a) Coelom: Origin, Types and Function: b) Metamerism: Nature. Origin and Significance, c) Hirudinaria - Morphology; Digestive and Excretory Systems, medicinal importance

Unit II: Invertebrata - 2 (Arthropoda to Protochordata)

Periods -15

Arthropoda: Periplaneta - Morphology. Digestive. Respiratory.\Circulatory and Reproductive Systems.

Mollusca: Pila - Morphology, Digestive. Respiratory and Nervous Systems, mantle

cavity, torsion in development

Echinoderm: a) Asterias External Morphology and Water Vascular System. b) Larvae and their evolutionary significance.

Notochord: Its origin, structure and significance

Hemichordata: Balanoglossus - Structural organisation and evolutionary position.

Protochordata: a) Ascidia - Life history and evolutionary significance of Ascidian tadpole, b) Branchiostoma - Structural organisation: Pharyngeal structure and Ciliary mode of feeding; Nephridia and its role in excretion.

Unit III: Vertebrata (Cyclostomata to Mammalia)

Periods -15

 Cyclostomata: a) Comparative study of Petromyzon and Myxine: b) Amocoetes larva and evolutionary significance; Importance of cartilaginous structure and lack of air bladder in cyclstome fishes

Pisces: a) Difference between Osteichthyes and Chondrichthyes: b) Scales. Fins and tails in Fishes; c) Accessory Respiratory organs in Amphipnus, Anabas, Clarius, Heteropneustes and Ophicphalus, d) Dipnoi - General featuers and geographic distribution.; importance of air bladder in bony fishes

Amphibia: Concept of Heterochrony, Paedomorphosis. Progenesis and Neoteny (with examples of some Salamanders, eg. Ambystomu, Necturus & Triturus).

· Reptilia: a) Difference between Poisonous and Non-poison us Snakes: b) Poison Apparatus and Biting Mechanism of snakes.

Aves & Mammalia: a) Basic difference in the pattern of Air-flow and Respiratory structures; b) Heart and Aortic Arches, mentioning advanced features over Reptilian Condition; c) Structure and Function of Ruminant stomach.

- Taxonomy: Principles, importance in understanding biodiversity
- Definitions & Concepts: a) Classification, Phenon, Taxon, Category with examples; b) Binomial & Trinomial Classifications with examples: c) Important Rules of Zoological Nomenclature.
- Zoological Classification: Kinds and Components of Classification. Linnean Hierarchy.
- Species Concept Biological and Evolutionary concepts.
- General Characteristics and Classification up to Sub Class: a) Invertebrates (up to Sub Class): Porifera, Cnidaria and Annelida: b) Vertebrates (up to Order): Amphibia. Reptilia and Mammalia.

Note: Internal Assessment of 20 marks based on the above syllabus.

TRIPURA UNIVERSITY SEMESTER - I Zoology (General)

Paper - I

Full Marks - 100 (80 ± 20)

lnit I : Invertebrata – 1

Periods - 15

- Paramoecium: Structure, Food and feeding, Locomotor organelle and Reproduction.
- Sycon: Histology of body wall with special reference to Canal System and Spicules. Feeding and Intracellular digestion.
- Obelia: Organisation and Life History with special reference to Metagenesis.
- Fasciola: Morphology and Life Cycle of F. hepatica.

Unit II: Invertebrata - 2

Periods - 15

- Digestive System: a) Structure and Function of Digestive System in Metaphire (Pheretima):
 - b) Structure and Function of Digestive System in Pilu.
- Respiratory System: a) Structure and function of Trachea in Cockroach: b) Structure and function of Ctenidium and Pulmonary Sac in Pilu.
- Circulatory System: a) Open type system in Cockroach; b) Closed type system in Earthworm.
- Excretory System: Structure and function of Nephridia in Earthworm.
- Nervous System: a) plan in Invertebrates: b) Nervous System in Pila.

Unit III: Chordata -1 (Protochordates to Pisces)

Periods - 15

- Branchiostomata: General Organisation, Structure of Pharynx and Nephridia. Mechanism of feeding and excretion.
- · Ascidia: Structure of Pharynx and mechanism to feeding: life history with special reference to retrogressive metamorphosis, Evolutionary significance of Ascidian Tadpole.
- Petromyzon: a) Difference with Myxine. b) Respiratory system, c) Ammocoetes larva and its significance.
- Lates: Digestive, Respiratory and Circulatory systems; gas exchange between gills and blood

Unit IV: Chordata - 2 (Amphibia to Mammalia)

Periods - 15

- Digestive System: Functional anatomy of stomach in Columba and Bos.
- Respiratory System: Structure of Lungs in Columba.: gas exchange between alveoli and capillaries.
- · Circulatory System: a) Anatomy of Heart in Cavia. b) Aortic Arches in Vertebrates (Reptiles. Birds and Mammals).
- Nervous System: a) Structure of Brain in Bufo. b) Cranial Nerves Origin. distribution and function, c) Difference between Sympathetic and Para-Sympathetic No
- Exoskeletal System: Exoskeleton in Columba.

Note: Internal Assessment of 20 marks based on the above syllabus.



(A Central University)
Suryamaninagar-799022

Syllabus

For

Semester - II

Zoology (Major & General)

Year 2014

Department of Zoology Tripura University (A Central University) B. Sc Zoology (Honours) Proposed Syllabus (Under semester system) 2014

Year	Semester	Paper	Content	Marks
1 st Year	Semester I	Paper -1	U-I. Non Chordates I (Without Coelom) U-II. Non Chordates II (With Coelom) U-III. Chordates (Protochordates to mammals) U-IV. Taxonomy and Classification	100
	Semester II	Paper- 2A	U-I. Cell Biology, Histology and Developmental Biology U-II. Applied Zoology	60
		Paper - 2B	Practical based on theory of Paper II-A	40
2 nd Year	Semester -	Paper- 3A	U-I. Genetics U-II. Ecology	60
		Paper- 3B	Practical based on theory of Paper -III-A	40
	Semester-IV	Paper – 4A	U-I. Microbiology, Parasitology & Immunology U-II. Tools and Techniques in Biology	60
		Paper 4B	Practical Based on Theory of Paper -IV-A	40
3 rd Year	Semester- V	Paper- 5A	U-I. Adaptation, Zoogeography and Ethology U-II. Comparative Animal Physiology U-III. Biodiversity and Conservation U-IV. Biostatistics	100
		Paper- 5B	Practical Based on Theory of Paper-V-A	100
	Semester-VI	Paper – 6A	U-I. Evolutionary Biology U-II. Biochemistry U-III. Endocrinology and Reproductive Biology U-IV. Molecular Biology and Genetic Engineering	100
		Paper –	Practical based on Theory of Paper VI-A	100

6B

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Semester - II

Paper 2A

Unit -I: Cell Biology, Histology and Developmental Biology

- Concept of Prokaryotic & Eukaryotic cells.
- Ultrastructure and functions of plasma membrane, mitochondria, Golgi complex, Endoplasmic Reticulum, ribosome, centrioles & lysosomes.
- Chromatin: Organization of euchromatin & heterochromatin; Chromosome: Morphology, primary & secondary constrictions, satellite bodies; classification on the basis of position of centromere, Polytene chromosome & Lampbrush chromosome.
- Nucleosome model of chromosome ultrastructure.
- Cell cycle: Phases & regulation, Mitosis, Meiosis, Synaptonemal complex.
- Cancer: Characteristics of cancer cells, classification according to tissue types; common carcinogens.
- Outline classification of animal tissue & their distribution, histology of skeletal muscle.
- Histology & functions of skin, liver, kidney & spleen in mammals.
- Gametogenesis, ultrastructure of sperm and ovum
- Physicochemical events in fertilization
- Eggs types, cleavage and fate maps
- Gastrulation in chick upto formation of three germinal layers
- Extraembryonic membrane in chick- formation and function
- Placenta: types, formation (rabbit) and function

Unit-II: Applied Zoology

- Pisciculture: Indian major carps, Exotic carps, composite fish culture- Principles & methods: Advantages & Disadvantages, Common fish diseases and their control.
- Prawn culture: Indian prawns of commercial value- Penaeid & Non-Penaeid group; Fresh & Brackish water Prawn culture.
- Poultry: Types of breeds, rearing and deep litter system- Advantages and disadvantages: Poultry Diseases & their control.
- Apiculture: Species of honey bee in India, social organization and life history of Apis indica, Modern methods of Apiculture, Bee products and their uses
- Sericulture: Species of Silkworm, Host plants and silk varieties in India, Life history and rearing
 of Mulberry silkworm, harvesting and processing of cocoon, reeling and extraction of silk;
 diseases of Bombyx mori and control measures
- Vermiculture: a) vermicomposting species [Perionyx excavatus (Indian), Eudrilus eugeniae
 (South Affrican), Eisenia fetida & Eisenia andrei (Europian)] and their selective features, b)
 Principle, methods and importance of vermicomposting
- Pollinators and Pest: a) Types of pollinators and pollination, importance of pollinators b)Definition of term pest, types of pest, importance of pest control, biological control of pest, pesticides and their hazards, integrated pest management, c) pest complexes of paddy, stored grains and brinjal; biology nature of damage and control of Scirpophaga incertulus, Scitophilus oryzae and Leucinodes orbonalis.

SYLLABUS OF ZOOLOGY, 2014 2nd Semester

PAPER - II B

MAJOR

Total Marks = 50

1. Identification with reasons (Any 4)

4x4 = 16

Group –A: Amoeba, Sycon, Oblelia, Taenia, Ascaris, Leech, Perionyx excavatus (dung earthworm), Horse shoe crab, Macrobrachium rosenbergii, Pila, Starfish Group – B: Branchiostoma, Ascidia, Petromyzon, Scoliodon, Sea Horse, Icthyophis, Axolotl Iarva, Naja, Pigeon, Chiroptera.

- A. Identification of Mammalian T.S. of: Skin, Spleen, small intestine, Liver, Pancreas, Kidney, Thyroid, Testes, Ovary (any one)
 B. Chick Embryo: 24 hrs, 48 hrs, 72 hrs (any one)
 C. Preparation and staining of skeletal muscle, Squamus epithelium & blood film (Human)
- 3. Preparation of onion root tips for chromosomal study, Preparation of buffer and determination of pH; Identification of Stages of Mitosis.
- 4. Submission of field report on the basis of Farm/field visit.

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5. Submission of laboratory Note Book & Viva Voce

4+4=8

Department of Zoology Tripura University (A Central University) B.Sc. Zoology (Elective) Proposed Syllabus (Under Semester System)

Year	Semester	Paper	Content	Marks
1 st Year	Semester I	Paper -1	U-I. Non Chordates I (Without Coelom) U-II. Non Chordates II (With Coelom) U-III. Chordates I (Protochordates to fish) U-IV. Chordates II (Amphibia to mammals)	100
	Semester II	Paper- 2A	U-I. Cell Biology, Histology and Developmental Biology U-II. Biochemistry, Animal Physiology and Endocrinology	50
•		Paper – 2B	Practical based on theory of Paper II-A	50
2 nd	Semester -	Paper- 3A	U-I. Taxonomy & Classification, Evolution & Adaptation U-II. Ecology, Ethology, Zoogeography and Biodiversity	50
		Paper- 3B	Practical based on theory of Paper -III-A	50
Year	Semester-IV	Paper – 4A	U-I. Applied Zoology U-II. Genetics and Molecular Biology	50
		Paper - 4B	Practical Based on Theory of Paper -IV-A	50
3 rd Yea		Paper- 5A	U-I. Parasitology and Medical Entomology U-II. Microbiology and immunology	50
	Semester- V	Paper- 5B	Practical Based on Theory of Paper-V-A	50
	Semester-VI		Project in Zoology	100
		Paper	 i. Project Preparation (literature review, field work/lab work) - 50 ii. Presentation - 25 iii. Viva - 25 	

Semester - II

Paper -2-A

Unit -I: Cell Biology, Histology and Developmental Biology

- Ultra-structure and function of different cell organelles-Plasma membrane, Golgi complex, Mitochondria& Endoplasmic Reticulum.
- Ultra-structure of Chromosome with special reference to Nucleosome model.
- Cell cycle, Mitotic & Meiotic Cell Divisions.
- Outline classification, distribution and functions of Animal tissues.
- Histology and Functions of Skin, Liver, Pancreas, Thyroid, Testis and Ovary in mammals.
- Gametogenesis, Ultra structure of sperm and ovum in mammals.
- Physico-chemical events in fertilization. Egg Types, Cleavage and Blastulation in Amphibians. Role of Yolk in Cleavage.
- Fate Map and Gastrulation in frog
- Extra-embryonic Membrane: Formation and Function in Chick Embryo.
- Placenta: Types, Formation (Rabbit) and Function

Unit-II: Biochemistry, Animal Physiology and Endocrinology

- Classification, structure and function of carbohydrates
- Classification, structure and function of Protein
- Classification, structure and function of lipids
- Structure and function of Nucleic acid
- Concept of pH and buffer and their biological significance
- Enzymes General properties, coenzymes, isoenzymes, allosteric enzymes, Mechanism of enzyme action, Factors affecting enzyme reaction
- Heterotrophic Nutrition; Intracellular digestion in Protozoa, Extracellular digestion in general, Cellular digestion in Termite, Cattle and Horse
- Exchange of Gases: Respiratory pigments and their advantages, Oxygen and Carbon dioxide transport.
- Excretion and Osmo-regulation: Urine formation in mammals; Nitrogen excretion in Ammonotelic, Ureotelic and Uricotelic animals, Osmo-regulation in Fresh Water and Marine Vertebrates
- Physiology of Nerve Impulse conduction, Synaptic Transmission
- Brief outline of organization and functions of endocrine system in mammals with special reference to: Pituitary, Thyroid and Gonads.
- Reproductive Cycle (estrous cycle) and its hormonal control.

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SYLLABUS OF ZOOLOGY, 2014

2nd Semester

PAPER – II B

MINOR

Total Marks = 50

Identification with reasons (Any five) 4x5 = 20
 Paramoecium, Sycon, Oblelia, Fasciola, Ascaris, Earthworm, Cockroach, Pila, Starfish, Branchiostoma, Ascidia, Petromyzon, Scoliodon, Labeo, Toad, Snake (Naja), Pigeon,

Rat, Chiroptera.
b) Identification of Cell division stages (Mitosis) with reasons. (Any one)

1x4=4

2. a) Identification with characters of mammalian T.S. of Liver , Pancreas, Kidney, Thyroid, Testes, Ovary (any one)

b) Chick Emryo: 24 hrs, 48 hrs & 72 hrs (any one)

3+3=6

3. Biochemistry: Identification of Glucose, Starch & Protein.

Animal Physiology: Staining & Mounting of Human Squamous Epithelial tissue/Blood film.

Preparation of buffer, determination of pH. 5x2 = 10

4. Laboratory Note Book Submission & Viva Voce

5+5=10



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Syllabus OF

Zoology (General & Major)

Semester - III

2014

Tripura University Semester-III ZOOLOGY (GENERAL) Paper - 3A

Full Marks: 50

(40+10)

Unit - I

Taxonomy & Classification, Evolution & Adaptation

Period 20

- 1. Definition, Systematics, Taxonomy, Classification, Phenon. Taxon, Category, Binomial and Trnomial nomenclature
- 2. Taxonomy Hierarrhy
- 3. Biological species concept
- 4. General characteristics and classification
 - (i) Porifera, Cnideria & Annelida up to subclass
 - (ii) Amphibia & Reptilia up to order.
- 5. Darwinism and post Darwinian synthetic theory of evolution
- 6. Selection: stabilizing, directional and disruptive selection with example: evolutionary significance of each kind of selection
- 7. Isolating mechanism and speciation (allopatric, sympatric and parapatric)
- 8. Morphological and physiological adaptation of i. Camel. ii. Whale, and iii. Bat.
- 9. Animal colouration and mimicry

Unit - II

Ecology, Ethology, Zoogeography & Biodiversity

Period - 20

- 1. Ecosystem: Definition, components, energy flow, food chain, food web, ecological pyramids.
- 2. Population ecology: properties and growth form; population regulation
- 3. Community ecology: Species diversity, stratification of forest, trophic structures, habbit and niche concept
- 4. Community succession: characteristics, types and causes of ecological succession
- 5. Social insects (termites and honey bee) and their behavior
- 6. Types of animal distribution: cosmopolitan, discontinuous, endemism. bipolar
- 7. Barriers and their roles in animal distribution
- 8. Zoogeographical realms: geographical range, physical features, faunal characteristics
- 9. Concept of biodiversity, causes of depletion of biodiversity: strategies of biodiversity conservation- exsitu and insitu methods.

Note: Internal assessment of 10 marks based on the above syllabus.

TRIPURA UNIVERSITY SEMESTER - III Zoology (Major) Paper - 3A

Full Marks - 60 (48+12) Periods - 24

Unit I: Genetics .

- DNA as genetic material.
- Concept of Alleles and Multiple Alleles (ABO Blood Group).
- · Linkage -Types & Gene Mapping.
- Crossing over and Recombination Molecular basis and Significance.
- Sex Determination in *Drosophila* (Gynandromorphism, Genic Balance Theory & Dosage Comensation).
- Sex Determination in Human (Role of Y-Chromosome or *Sry* gene, citing examples of Turner's & Klienfelter's Syndromes).
- Mode of Inheritance of Autosomal Chromosome (Albinism & Thalassaemia) and Sex-Linked Chromosome (Colour Blindness and Haemophilia).
- Mutation: Types, Agents, Induction and Detection of mutation (CIB Method).
- Method of detecting Biochemical Mutants; Metabolic Blockage of Arginine pathways in *Neurospora*.
- Human genetic disorders: a) Phenylalanine pathway (Alkaptonuria and Phenylketonuria). b) Tyrosine pathway (Albinism), c) Sickle Cell Anaemia.
- One Gene One Polypeptide Hypothesis present status.

· Unit II: Ecology

Periods - 24

- Basic concept: a) Biotic and Abiotic Factors, b) Energy Flow in Ecosystems (Lindemann Model), implications of thermodynamic laws c) Interspecific Interactions in Ecosystem (Commensalism, Mutualism and Parasitism).
- Population Ecology: a) Attributes of natural Populations b) Population dynamics Growth form and growth equations; c) Demography. life table types and survivorship cuves
- Community Ecology: a) Species Diversity, Relative Abundance and Species Dominance. b) Stratification of Forest. c) Trophic Structure, d) Multidimensional Concept of Ecological Niche, e) Principles of Competitive Exclusion and species co-existence.
- Community Succession: Characteristics, Types and Causes of Ecological Succession a) Autogenic and Allogenic Succession, (b) Primary and Secondary Successions. d) Ecotone features and formation, e) Edge Effect.
- Behavioral Ecology: Migration in birds
- Environmental Pollution: a) Air and Water (Sources and kinds). b) Acid rain. CFC and Ozone Depletion. c) Greenhouse effect and Global warming.) Bio-magnification and Eutrophication Causes and Signicance with examples, e) Human Population Growth and its impact on environment;
- Conservation of threatened wild life: National and International Initiatives i) Indian Wildlife Protection Act 1972. ii) WWF, iii) IUCN, iv) Indian Biodiversity Act 2002.
 - Note: Internal Assessment of 12 marks based on the above syllabus.

Tripura University Semester-III ZOOLOGY (GENERAL)

Paper – 3B Practical

Full Marks 50 (4()+10)

Time: 4 hours

1 Study of biotic community (Soil & Water) and their significance (any two)	3x2=6
2. Determination of Population Density by Quadrate method	6
3. Estimation of Dissolved Oxygen in water and determination of pH	6+2=8
4. Adaptive features of Physallia, Fasciola, Ascaris, Hirudinaria, Octopus, Exocoetus	
Tree frog, Hemidactylus, Chiroptera (any three)	3x2=6
5. Field visit and submission of Field Note Book	6
6. Practical Note Book	4
7. Viva Voce	4

Note: Internal assessment of 10 marks based on the above syllabus.

TRIPURA UNIVERSITY SEMESTER – III Zoology (Major)

Practical - Paper - 3B

Marks 40 (32 + 8)

TIME: 4 Hours

1)	Preparation and identification of Polytene Chromosome of Drosophila		
	Larvae.	(5)	
2)	Pedigree analysis of common human traits	(4)	
3)	Identification of meiotic cell division (any stage)	(2)	
4)	Estimation of population by Capture – Recapture method by	(-)	
	Hypothetical beads population.	(5)	
	Estimation of Dissolved Oxygen	(4)	
6)	Spot Identification and role of biotic community of soil and water:	(,)	
	(Any Two) a)Soil Mite b) Termite c) Collembola d) Ants		
	e) Earthworm f) Daphnia g) Cyclops (3+	3=6	
7)	Laboratory Note Book	(3)	
8)	Viva voce	(3)	
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NOTE: Internal Assessment of 8 Marks based on the above syllabus



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Syllabus

OF

Zoology (General & Major)

Semester - IV

Semester - IV (Honours / Major)

Paper 4A Theory

60(48+12)

Unit I:

Microbiology, Parasitology and Immunology

- 1) General characters and major classification of microbes.
- 2) Microbes in human and animal welfare.
- 3) Common microbial diseases (Cholera and Amoebiosis), their treatment and control.
- 4) Life cycle, pathogenecity, clinical features and control measures of *Plasmodium vivax*, *P. falciparum*, *Wuchereria bancrofti* and *Anchylostoma duodenale*.
- 6) Host-parasitic interaction with reference to helminthes (Taenia sp. and roundworms) diseases.
- 7) Major cells types and organs of immune system; primary and secondary lymphoid organs; types of immune system: Cell mediated immune system & humoral immune system; Concept of antigens and types of antibodies

Unit II: Tools and techniques in Biology

(15 lectures) 12x2 = 24

- 1) Principle and applications of pH meter, ii) colorimeter, and iii) Centrifuges
- 2) Principle and applications of i) Chromatography ii) Electrophoresis
- 3) Principle and application of i) Light microscope (Bright-field and Phase Contrast) and Electron microscope (SEM & TEM)
- 4) Micro-techniques: Fixation, dehydration, embedding, block-making, microtomy, Principle of staining, acid and basic stains, Single & double staining methods

N.B: Internal assessment of 12 marks based upon above syllabus.

Paper 4B Practicals (based on theory paper)

40 (28 + 12)

- 1) Spot identification of parasites: Entamoeba sp., Ascaris sp., Anchylostoma sp., Taenia
- 2) Adaptive features of: Fasciola hepatica, Ascaris lumbricoides, Taenia solium, 3) Gram staining of bacteria
- 4) Collection and preparation of gut parasites of cockroach and fowl
- 5) Double staining method (H-E) of liver, kidney and testis tissues
- 7) Viva voce

N.B: Internal assessment of 12 marks based upon above syllabus.

Semester - IV (Pass / Minor)

Paper 4A Theory

50(40 + 10)

Unit I:

Applied Zoology II

- 1. Sericulture: Species of silk worms, food plants and silk varieties in India; Life history and rearing method of *Bombyx mori*, its diseases and control measures.
- 2. Apiculture: Species of honey bees in India; Life history and rearing methods of Apis indica; Bee products and their uses.
- 3. Vermiculture: Major vermicomposting species in India; Principle, method and importance of vermicomposting.
- 5. Prawn culture: Indian prawns of commercial value Penaeid and non-penaeid groups, Prawn culture and hazards in prawn farming.

Unit II: Genetics and Molecular Biology

- 1. Mendelian principle of segregation and independent assortment
- 2. Linkage, Recombination, Cytoplasmic inheritance
- 3. Concepts of alleles and multiple alleles
- 4. Sex determination in Drosophila and man; Sex chromatin or Barr body and its significance
- 5. Congenital chromosomal abnormalities: Down, Turner and Klinefelter syndrome
- 6. Mode of inheritance of autosomal and sex-linked genes with reference to albinism and colour blindness
- 7. DNA as a genetic material experimental proof
- 8. Replication, Transcription and Translation in prokaryotes

Paper 4B Practical

50(40+10)

A. Applied Zoology

- 1. Sporting and economic importance of the following specimens (Any three)
- Triporhiza sp. Tryporyza sp.
- Sitophilus sp. b.
- Bandicoota sp. c.
- d. Bombyx sp.
- Apis sp. e.
- f. Perionyx sp.
- Macrobrachium sp. g.

B. Genetics

- 2. Preparation and staining of cell division (onion root tip)
- 3. Identification of Mitotic / Meiotic division stages
- 4. Studies of Barr body in man.

C. Viva Voce

D. Lab Note Book



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Syllabus

OF

Zoology (General & Major)

Semester - V

2014

Semester - V (Theory)

Zoology (Major)

Paper: 5A

Total Marks 100 (80+20)

Unit-I: Adaptation, Zoogeography & Ethology

(15 lectures)

- 1. Convergent and divergent adaptation and adaptive radiation in placental mammals with reference to teeth & limbs.
- 2. Morphological, anatomical and physiological adaptations in Pigeon, Camel and Whale.
- 3. Colouration Cryptic & Warning.
- 4. Mimicry Protective, Aggressive and Warning (Batesian and Mullerian).
- 5. Continental Drift theory and Discontinuous distribution of animals.
- 6. Zoogeographical realms (geographical composition, climate and faunal characteristics) i) Ethiopian, ii) Oriental and iii) Australian.
- 7. Basics of animal behaviour; Innate and Learned behaviours (characteristics, differences, classification & examples).
- 8. Communication in animals with reference to pheromone and its role in territory marking, courtship and mating.

Unit-II: Animal Physiology

(15 lectures)

- 1. Physiology of digestion in mammals.
- 2. Transport of O₂ and CO₂ in the blood of mammals, Bohr Effect, Chloride Shift.
- 3. Respiration in i) Lata, ii) Shark, iii) Pigeon and iv) Human
- 4. Excretion: i) Nitrogen excretion in vertebrates (fish, bird, mammal), ii) Hypertonic urine formation in mammals.
- 5. Osmoregulation in fresh water fish and marine fish.
- 6. Generation of action potential and transmission of nerve impulse; mechanism of synaptic transmission.

Unit-III: Biodiversity and Conservation

(15 lectures)

- 1. Concept of Biodiversity; Types: Hierarchical levels (Genetic diversity, Species diversity), Community and Ecosystem diversity (alpha, beta and gamma diversity).
- 2. Biodiversity as a resource; changes/depletion of biodiversity and its causes.
- 3. Hot spots of biodiversity, Strategies for conservation of biodiversity (ex-situ and in-situ methods).
- 4. IUCN threatened categories: Endangered, Critically endangered, Vulnerable and Rare species.
- 5. Wild-life conservation with reference to Tiger and Rhino.
- 6. Protected area, Wildlife protection act, Biosphere reserves, National park and Sanctuaries; CITES.

Unit-IV: Biostatistics

(15 lectures)

- 1. Concept of mean, mode and median; their relationship.
- 2. Elementary concepts of probability and distribution
 - (a) Standard deviation (b) Standard error (c) Variance (d) t-test
 - (e) Simple-correlation coefficient, (f) Chi-square test.
- 3. Representation of statistical data:
 - a) Bar diagram
 - b) Histogram
 - c) Frequency Polygon
 - d)Line graph
 - e) Pie chart

Internal assessment of 20 marks based on the above study material

Semester – V (Practical)

Zoology (Major)

Paper: 5B

Practical paper

100 (80 + 20)

- 1. Morphological, behavioural and other adaptive features Anabas sp., Exocoetus sp., Amphipnous sp. Hyla sp (Tree frog)., Axolotl of Ambystoma sp., Chamaeleo sp., Gekko sp., Naja sp., Columba sp., Psittacula sp. 4x5 = 20(Parrot), Pteropus sp., Bandicoota sp.(any five).
- 2. Studies on Zoogeography: placement of 5 specific/ endemic/ characteristic 5+3=8animals in their respective zoogeographical realm.
- 3. Principle, procedure, display, drawing and labelling (any two of the followings)

7x2 = 14

- a) Studies on human blood group.
- b) Studies on haemin crystals in human
- c) Preparation of human blood film; identification of WBC.
- 4. Problems on Chi-square test and t-test: Principle, calculation, result and 2+10+3=15 inference (any one).
- 5. Observation on water/soil/terrestrial animal biodiversities (local fauna) and submission of field study report. 10
- 6. Laboratory note book.

7. Viva.

B.Sc. Zoology (General)

Semester V

Paper: 5A

50

Unit-I: Parasitology and Medical Entomology

(15 lectures)

- 1. Life cycle, pathogenicity, clinical features and control measures of -
 - (a) Plasmodium vivax
 - (b) Entamoeba histolytica
 - (c) Ascaris lumbricoides
- 2. Parasitic adaptations in helminthes with reference to Ascaris lumbricoides and Taenia solium
- Common insect vectors related to public health: their features and the disease (s) caused by these vectors
 - a) Mosquitoes (Anopheles, Culex, Aedes)
 - b) House fly (Musca sp.)
 - c) Bed bug (Cimex sp.)
 - d) Head louse (Pediculus sp.)

Unit-II: Microbiology and Immunology

(15 lectures)

- 1. Types of Microbes and their important features.
- 2. Disease causing Microbes with reference to Cholera and Tuberculosis, mode of transmission.
- 3. Microbes in human gut and their beneficial role; concept of Probiotics.
- 4. Immune system cells and organs of immune system, types of immune responses.
- 5. Antibodies types and its modal structure; antigen and antibody interaction.

Internal assessment of 10 marks based on the above study material

B.Sc. Zoology (General)

Practical paper

Practical paper

50 (40+10)

Paper: 5B 5x2 = 10(any two) 1. Identification with reasons: a) Entamoeba histolytica b) Giardia intestinalis c) Plasmodium Sp. d) Ascaris lumbricoides e) Culex sp. f) Musca sp g) Cimex sp. 2. Adaptive features in Fasciola sp., Ascaris sp., Taenia sp. (any one). 5 3. Collection and preparation of gut fauna in cultivable fishes and fowl. 3+2+3=84. Submission of life history stages of mosquito in glass bottle & also on 4+3 = 7drawing sheet. 5 5. Lab Note Book. 5 6. Viva.

Internal assessment of 10 marks based on the above study material

Semester - IV (Major / Theory)

Paper 4A Theory

60(48 + 12)

Unit I:

Microbiology, Parasitology and Immunology

(15 lectures)

- 1) Types of Microbes and their important features.
- 2) Microbes in Human welfare and the concept of probiotics.
- 3) Common microbial diseases (Cholera and Amoebiasis) their treatment and control.
- 4) Life cycle, pathogenecity, clinical features and control measures of *Plasmodium vivax*, *Plasmodium falciparum*, *Wuchereria bancrofti*, *Ancylostoma duodenale*.
- 6) Host parasitic interaction with reference to helminthes (*Taenia* sp. and round worm) diseases.
- .7) Immune system major cell types and organs of immune system; types of immune response; antigen antibody reaction; antibody types and its model structure.

Unit II: Tools and techniques in Biology

(15 lectures)

- 1) Principle and application of i) pH meter ii) colorimeter and iii) Centrifuges
- 2) Principle and application of i) Chromatography and ii) Electrophoresis.
- 3) Principle and application of i) Light microscope (Bright-field and phase contrast) and ii) Electron microscope (TEM & SEM).
- 4) Micro-techniques: Fixation, dehydration, embedding, block-making, microtomy, principle of staining, acid and basic stains, single & double staining method.

N.B: Internal assessment of 12 marks based upon above syllabus.

Semester - IV (Major / Practical)

Paper	4B Practical (based on theory paper)	40 (32 + 8)		
1)	Spot identification of parasites: Entamoeba sp, Ascaris sp, Ancyloston			
	Taenia sp. (any one)	3		
2)	2) Adaptive features of: Fasciola hepatica, Ascaris lumbricoides, Taenia			
	solium, Anchylostoma duodenale, Hirudinaria (any one)	4		
. 3)	Gram staining of bacteria	4		
4)	Collection and preparation of gut parasites of cockroach and fowl	(2+3+2)7		
5)	Double staining method (H-E) of liver, kidney and testis tissue	(4+1+2)7		
6)	Lab note book	3		
7)	Viva voce	4		
	a a	Total = 32		

 $\mathbf{N.B:}$ Internal assessment of $\mathbf{8}$ \mathbf{marks} based upon above syllabus.

Semester - IV (General/Theory)

Paper 4A Theory

50(40 + 10)

Unit I: Applied Zoology II

(15 lectures)

- 1. Sericulture: Species of silk worm, food plants and silk varieties in India, Life history and rearing method of Bombyx mori, its diseases and control measures.
- 2. Apiculture: species of honey bees in India; life history and rearing methods of Apis indica; bee products and their uses.
- 3. Vermiculture: Major vermicomposting species in India: Principle, method and
- 4. Prawn culture: Indian prawns of commercial value; Penaeid and non-penaeid group. Prawn culture and demerits in transportation of prawn seeds.

Unit II: Genetics and Molecular Biology

(15 lectures)

- 1. Mendelian principle of segregation and independent assortment.
- 2. Linkage, Recombination, Cytoplasmic inheritance.
- 3. Concepts of alleles and multiple alleles.
- 4. Sex determination in Drosophila and man; Sex chromatin or Barr body and its
- 5. Congenital chromosomal abnormalities: Down, Turner and Klinefelter syndrome.
- 6. Mode of inheritance of autosomal and sex-linked genes with reference to albinism and
- 7. DNA as a genetic material experimental proof.
- 8. Replication, Transcription and Translation in prokaryotes.

N.B: Internal assessment of 10 marks based upon above syllabus.

Semester - IV (General / Practical)

Paper 4B (Practical based on theory paper)	50 (40 + 10)
A. Applied Zoology 1. Spotting and economic importance of the following specimens (Any three) a. Tryporyza sp b. Sitophilus sp c. Bandicoota sp d. Bombyx sp e. Apis sp f. Perionyx sp g. Macrobrachium sp	3x4=12
 B. Genetics 2. Preparation and staining of cell division (onion root tip). 3. Identification of Meiotic division stages (any one) 4. Studies of Barr body in man (preparation and display) C. Viva Voce 	(4+4) = 8 4 $(4+2) = 6$ 5
D. Lab Note Book	Total = 40

N.B: Internal assessment of 10 marks based upon above syllabus.



(A Central University)
Suryamaninagar-799022

Syllabus

OF

Zoology (General & Major)

Semester - VI

SEMESTER - VI
Zoology (Major)
Paper - 6A (Theory)
(Marks - 100, Total Periods - 60)

Total Marks: 100 (80+20)

Unit I: Evolutionary Biology

(15 Lectures)

- 1. Origin of Life: Experimental evidence in favour of Abiotic synthesis of Basic Biomolecules (Urey-Miller Experiment); origin of organized structure of Protocell or Coacervate.
- 2. Basic ideas on Geologic time table with major examples of fauna.
- 3. Neo- Darwinism; Genetic variations and sources of variations in a natural populations.
- 4. Hardy Weinberg Principle and factors influencing changes in the gene frequency (problems excluded).
- 5. Types of Natural selections: Stabilizing, Directional, and Disruptive selections with examples.
- 6. Isolating Mechanisms and importance of Reproductive Isolation.
- 7. Modes of Speciation: Sympatric, Allopatric and Parapatric processes.

Unit II: Biochemistry

(15 Lectures)

- 1. Concept of pH and buffer and their biological applications.
- 2. Structures and functions of carbohydrates, lipids proteins and nucleic acids;
- 3. Enzymes- general properties; definitions and characteristics of coenzymes, isoenzymes and allosteric enzymes with examples;
- 4. Mechanism of enzyme action; factors affecting reaction rates;
- 5. Glycolysis, TCA cycle and ATP generation.

Unit III: Endocrinology and Reproductive biology

(15 Lectures)

- 1. Histological structures and functions of Pituitary, Thyroid, Pancreas, Testes and Ovary;
- 2. Endocrine disorders in human with special reference to pituitary and thyroid glands.
- 3. Types of Hormones: vertebrates and invertebrates with special reference to insects;
- 4. Hormonal control of spermatogenesis and oogenesis;
- 5. Process of ovulation and its hormonal control;
- 6. Reproductive cycles in mammals with special reference to oestrous cycle in rat.

Unit IV: Molecular Biology and Genetic Engineering

(15 Lectures)

- 1. Replication, transcription and translation in prokaryotes;
- 2. Benzer's rII locus, idea of complementation and non-complementation;
- 3. Concept of cistron, recon and muton;
- 4. Genetic regulation in Prokaryotes-Lac Operon;
- 5. Genetic basis of Cancer:
 - a) Proto-oncogenes and viral oncogenes
 - b) Transformation of proto-oncogene to oncogene
 - c) Functional importance of p53 tumour suppressor gene
 - d) Oncogenes in human cancer: Src, ras, ber/abl
- 6. Recombinant DNA technology and its applications:
 - a) Cloning vectors
 - b) Types of endonucleases and their roles
 - c) Construction of chimeric DNA
 - d) Copying mRNA into cDNA clones with desired DNA
 - e) Potential benefits and hazards of genetic engineering.



(A Central University)
Suryamaninagar-799022

Syllabus

OF

Zoology

Major – Semester – VI

Paper – VIB (Practical) (Rectified)

TRIPURA UNIVERSITY SEMESTER - VI

Zoology (Major) Paper – VIB (Practical)

Total Mar	ks: 100 (80+20)
1. Identification of bones (comparative aspects): Skull, limb bones (Hurulna, femur, tibia-fibula) and girdle bones of toad, lizard, pigeon and grone pair of bones representing two different vertebrates).	merus, Radio- ninea pig (any 10 x 1 = 10
2. a) Study of Salivary amylase action.	10x1=10
b) Quantitaive estimation of Glucose (by titrimetric method).	
(any one to be given in the examination)	
3. Identification and charcterization of the histological slides of the following glands of mammal with drawing, labeling & comments:	ng endocrine
i. Pituitary, ii. Thyroid, iii. Adrenal, iv. Pancreas (Islets of Langerhans), v	. Testis &
vi. Ovary. (slides of any two glands to be given in the examination)	$10 \times 2 = 20$
 Determination of genotype frequency and allele frequency with example (given in the examination) 	any one to be 10x1=10
Identification with characters of Human Syndrome/Disorder from the sam karyotype provided:	ple of
i) Klienfelter'sii) Turner'siii) Down'siv) Super female	
(any one to be given in the examination)	10x1=10
6. Submission of Laboratory Note book.	10
7. Viva	10
Internal assessment based on practicals (1 to 5 of the above).	20

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cvbnmq wertyui opasdfg

TRIPURA UNIVERSITY

Department of Business Management

BBA CBCS Syllabus

Session 2020-21

cvbnmq wertyui opasdfg hjklzxc

Table of Contents

BBA (1st Semester)1

BMGT 1	101C	PRINCIPLES AND PRACTICES OF MANAGEMENT	1
BMGT 1	102C	BUSINESS COMMUNICATION	4
BMGT 1	103C	BUSINESS STATISTICS	7
BMGT 1	104C	FINANCIAL ACCOUNTING	7
BMBT 3	105C	MANAGERIAL ECONOMICS	8
		BBA (2 nd Semester)	
BMGT 2	201C	COST ACCOUNTING	9
BMGT 2	202C	QUANTITATIVE TECHNIQUES FOR MANAGEMENT	10
BMGT 2	203C	ORGANISATIONAL BEHAVIOR 1	11
BMGT 2	204C	BUSINESS ENVIRONMENT	12
		COMPULTER SKILL 1 (OUTSIDE DEPARTMENT)	
		BBA (3 rd Semester)	
BMGT 3	301C	ORGANIZATION BEHAVIOR 2	14
BMGT 3	302C	BUSINESS LAW	15
BMGT 3	303C	FINANCIAL MANAGEMENT	16
BMGT 3	304C	MARKETING MANAGEMENT I	17
BMGT 3	305C	HUMAN RESOURCE MANAGEMENT I	18
		BBA (4 th Semester)	
BMGT 4	401C	RESEARCH METHODOLOGY	19
BMGT 4	402C	MARKETING MANAGEMENT II	20
BMGT 4	403C	HUMAN RESOUNCE MANAGEMENT 2	21
BMGT 4	404C	OPERATIONS MANAGEMENT	22
BMGT 40	05C	ENTREPRENEURSHIP DEVELOPMENT AND SMALL BUSINESSFUNDAMENTALS	23
		BBA (5 th Semester) MARKETING MANAGEMENT	
BMGT 5	501C	CONSUMER BEHAVIOR	24
BMGT 5	502C	ADVERTISING AND SALES PROMOTION	26
BMGT 5	503C	RETAIL MANAGEMENT	27
BMGT 5	504C	MARKETING RESEARCH	28
BMGT 5	05C	PROJECT REPORT - I (INTERNAL)	29

A.	FORMAT OF PROJECT REPORT	
B.	INSTRUCTIONS FOR TYPING/ PRINTING	
C.	TITLE OF THE PROJECT REPORT	
D.	WRITING THE SUMMER PROJECT REPORT	
E.	STUDENT DECLARATION	
F.	CERTIFICATE FROM THE INSTITUTE GUIDE	
G.	BIBLIOGRAPHY	
н.	ATTENDANCE SHEET	
	BBA (5 th Semester) FINANCIAL MANAGEMENT	
BMGT 506C	FINANCIAL STATEMENT ANALYSIS 1	38
BMGT 507C	INDIAN FINANCIAL SYSTEM	39
BMGT 508C	BUSINESS TAXATION	40
BMGT 509C	BANKING MANAGEMENT	41
BMGT 510C	PROJECT REPORT - I (INTERNAL)	42
A.	FORMAT OF PROJECT REPORT	
В.	INSTRUCTIONS FOR TYPING/ PRINTING	
C.	TITLE OF THE PROJECT REPORT	
D.	WRITING THE SUMMER PROJECT REPORT	
E.	STUDENT DECLARATION	
F.	CERTIFICATE FROM THE INSTITUTE GUIDE	
G.	BIBLIOGRAPHY	
H.	ATTENDANCE SHEET	
	BBA (5 th Semester) Human Resource Management	
BMGT 511C	HUMAN RESOURCE PLANNING	51
BMGT 512C	HUMAN RESOURCE DEVELOPMENT 1	52
BMGT 513C	WAGE AND SALARY ADMINISTRATION	53
BMGT 513C	LABOUR LAWS 1	54
BMGT 514C	PROJECT REPORT - I (INTERNAL)	55
A.	FORMAT OF PROJECT REPORT	
В.	INSTRUCTIONS FOR TYPING/ PRINTING	
C.	TITLE OF THE PROJECT REPORT	
D.	WRITING THE SUMMER PROJECT REPORT	
E.	STUDENT DECLARATION	

F.		CERTIFICATE FROM THE INSTITUTE GUIDE	
G.		BIBLIOGRAPHY	
H.		ATTENDANCE SHEET	
		BBA (6th Semester) Marketing Management	
BMGT	601C	SERVICES MARKETING	64
BMGT	602C	RURAL MARKETING	65
BMGT	603C	SALES MANAGEMENT AND PERSONAL SELLING	66
BMGT	604C	INTERNATIONAL MARKETING	67
BMGT	605C	PROJECT REPORT - II (EXTERNAL)	68
A.		FORMAT OF PROJECT REPORT	
В.		INSTRUCTIONS FOR TYPING/ PRINTING	
C.		TITLE OF THE PROJECT REPORT	
D.		WRITING THE SUMMER PROJECT REPORT	
E.		STUDENT DECLARATION	
F.		CERTIFICATE FROM THE INSTITUTE GUIDE	
G.		BIBLIOGRAPHY	
H.		ATTENDANCE SHEET	
		BBA (6th Semester) Financial Management	
BMGT	606C	MANAGEMENT ACCONTING	77
BMGT	607C	INSURANCE MANAGEMENT	78
BMGT	608C	INTERNATIONAL BUSINESS FINANCE	79
BMGT	609C	FINANCIAL STATEMENT ANALYSIS II	80
BMGT	610C	PROJECT REPORT - II (EXTERNAL)	81
A.		FORMAT OF PROJECT REPORT	
В.		INSTRUCTIONS FOR TYPING/ PRINTING	
C.		TITLE OF THE PROJECT REPORT	
D.		WRITING THE SUMMER PROJECT REPORT	
E.		STUDENT DECLARATION	
F.		CERTIFICATE FROM THE INSTITUTE GUIDE	
G.		BIBLIOGRAPHY	
H.		ATTENDANCE SHEET	
		BBA (6th Semester) Human Resource Management	
BMGT	611C	INDUSTRIAL RELATIONS	90

BMGT 612C	ORGANISATIONAL DEVELOPMENT	91
BMGT 613C	LABOUR LAWS II	92
BMGT 614C	HUMAN RESOURCE DEVELOPMENT II	93
BMGT 614C	PROJECT REPORT - II (EXTERNAL)	94
A.	FORMAT OF PROJECT REPORT	
В.	INSTRUCTIONS FOR TYPING/ PRINTING	
C.	TITLE OF THE PROJECT REPORT	
D.	WRITING THE SUMMER PROJECT REPORT	
E.	STUDENT DECLARATION	
F.	CERTIFICATE FROM THE INSTITUTE GUIDE	
G.	BIBLIOGRAPHY	
Н.	ATTENDANCE SHEET	

BBA (1st Semester)

BMGT 101C

PRINCIPLES AND PRACTICES OF MANAGEMENT

1. FRAME WORK OF MANAGEMENT:

- A. <u>Nature of management</u>: management & administration, management science or art, management as a profession, applying management theories in practice, effective management and different managerial effectiveness approaches.
- B. <u>Development of management thoughts</u>: early thinking about management, importance to study management theories, evolution of management theory, scientific management school (Frederick W. Tylor, Henry) classical organisation theory school, the behavioural school, relation theories, management science school, the system approach.
- C. <u>Management process & skills</u>: management functions, management roles, levels of management, management skills, and functional areas of management.
- D. <u>Managers & environment</u>: concept of environmental, changing Indian business environment, challenges before Indian managers.
- E. <u>Social & ethical issues in management</u>: social responsibility of managers, social responsibility & business, social responsibility in India, ethical issues in management, values, value system of Indian managers.

2. PLANNING:

- A. <u>Fundamentals of planning</u>: concept, nature, importance, steps, types of planning, barriers in effective planning, planning in Indian organisations.
- B. <u>planning premises & forecasting</u>: concept of planning premises, forecasting, sales & demand forecasting.
- C. <u>Strategic & operational plans</u>: formulation of strategy, strategy implementation, policy procedures, methods, rules, project, budget.
- D. <u>Missions & objectives</u>: formulation of mission statement, hierarchy of objectives, role of objectives, management by objectives, MBO in Indian organizations.
- E. <u>Decision making</u>: types of decisions, decisions making process, individual VS group decision, problem solving, problem solving approaches.

3. ORGANISING:

A. <u>Fundamentals of organising</u>: various organisation theories, steps in organising, factors affecting organisation structures.

- B. <u>Design of organisation structure</u>: formal organisation informal relationship in formal organisation structure, departmentation, span of management & chain of command & decentralisation.
- C. <u>Forms of organisation structure</u>: line organisation structure, line & staff organisation, matrix organisation structure, team based organisation structure (committee organisation).
- D. <u>Delegation of authority</u>: concept of authority, sources of authority, limits of authority, authority & responsibility, delegation of authority.

4. STAFFING:

- A. <u>Fundamentals of staffing</u>: traditional view of staffing, staffing concepts, manpower planning, job analysis, changing human resources management scenario.
- B. <u>Recruitment & selection</u>: job & position descriptions, sources of recruitment, legal considerations in selection process, selection tests, interview.
- C. <u>Training & development</u>: concept of training & development, training programs, management development programmes.
- D. <u>Performance appraisal & compensation</u>: informal appraisals, formal systematic appraisals & promotion.

5. DIRECTING AND CONTROLLING:

- A. <u>Fundamentals of directing</u>: concept of direction, direction & supervision, directing & human factor.
- B. <u>Motivation</u>: concept, theories of motivation, generation gaps & motivational aspects, motivation & small business, motivational applications.
- C. <u>Leadership</u>: defining leadership, traits, behavioural & contingency approach to leadership, leadership styles, situational leaderships, leadership development.
- D. <u>Fundamentals of controlling</u>: concept, steps & types of controlling, design of effective control system, controlling & management by exception.
- E. <u>Operations control techniques</u>: financial control (budgetary control, control through costing, break-even analysis), quality control, inventory control (economic order quality, selective inventory control techniques).
- F. <u>Overall control techniques</u>: management information systems, management audit, management control system an introduction.

	SUGGESTED BOOKS:		
1.	Management- tasks, responsibilities, practices	by C. B. Gupta	TATA McGraw Hill
2.	Management- text & cases	by L.M. Prasad	Sultan Chand
			Publishers
3.	Management- text & cases	by V.S.P. Rao	Himalaya Publication
4.	Management Tasks, Responsibilities &	by Peter F. Drucker	Allied Publishers
	Practises		
5.	Essentials of Management- An Internationals	by Harold Koont, Hein	TATA McGraw Hill
	Perspective	Weihrich	

1. NATURE & PROCESS OF COMMUNICATION:

Defining communication and its nature, Role or purpose of communication, Classification of communication, Process of communication, General problems in communication, Barriers to communication, Conditions for effective communication, Characteristics of successful communication.

2. FUNCTIONAL COMMUNICATION:

- a. Effective listening: Meaning & Concept of listening, Contributors to poor listening, Profile of a good listener, how to increase listening efficiency.
- b. Effective Presentation: Meaning & Importance of presentation, why presentation is a difficult job, steps towards mastering the art of Oral Presentation.
- c. Non-Verbal Communication: Personal Appearance, Posture, Gestures, Facial Expression, Eye-Contact, Space Distancing etc.

3. BUSINESS CORRESPONDENCE I:

- a. Meaning & Need for Business Correspondence, Meaning of Business Letter-Purpose, Qualities, Structure, Layout and form. Types of Business Letter, Concept, Principles and Drafting.
- b. Notice, Agenda & Minutes: Concept & Meaning, Rules, Principles, Drafting of different types of Notice, Agenda & Minutes.

4. BUSINESS CORRESPONDENCE II:

- c. Circulars: Meaning, Principles, difference between Notice and Circular, different purposes of writing Circulars, Drafting of different Circulars.
- d. Report Writing: Definition, Principles, Objectives, Importance, Types, Drafting of Letter Reports.
- e. Press Release: Meaning, Concept & Rules, Drafting Press Release.

5. ENGLISH PROFICIENCY:

- a. English Composition: Editorial Letters/ Paragraph/ Précis Writing.
- b. English Comprehension: Answering short/multiple type questions after perusal of a given passage.
- c. General Grammar: Using of Articles, Prepositions, Verbs etc. (to fill in the blanks), Correction of faulty sentences, Selection of appropriate words or its form, selection of wrong Phrase etc.

SUGGESTED BOOKS:		
1. Business Correspondence & Report Writing	Sharma & Mohan	TATA McGraw Hill
2. Developing Communication Skills	Krishna Mohan &	Mc Millan
	Meera Banerjee	
3. Business Communication Today	Bovee & Hill	Pearson Education
4. Business Communication	C.S.G.	Himalaya Publications
	Krishnamacharyulu &	
	R. Lalitha	

1. STATISTICS: AN OVERVIEW

Reasons for Learning Statistics, Growth and development of statistics, statistics defined, Types of statistical methods, importance and scope of statistics, statistics in business management, limitations of statistics, need for data and sources of data, Classification of data, organizing data using data array, Tabulation of data, graphical representation of data, Types of diagrams,

2. MEASURES OF CENTRAL TENDENCY

Objectives of averaging, Requisites of a measures of a central tendency, Measures of Central Tendency, Mathematical averages, Geometric mean, Harmonic mean, Relationship among AM, GM and HM, Average of position, Partition values-quartiles, deciles and percentiles, Mode, Relationship between mean median and mode, comparison between measures of central tendency

Significance of measuring dispersion, classification of measures of dispersion, distance measures, average deviation measures, Measures of skewness, Kurtosis.

3. FUNDUMENTALS OF PROBABILITY:

Concepts of probability, combinations and permutations, Types of probability, Probability rules, probability under statistical independence, probability under statistical dependence, Point estimates of Probabilities, Bayes' Theorem,

SUGGESTED BOOKS:			
1.	Fundamentals of Business Statistics	J. K Sharma	1 st Edition, 2010,
			Pearson
2.	Statistics for Management	Richard L Levin &	DIII
		David S. Rubin	PHI
3.	Statistical Methods	N. G. Das	M. Das & Co.

- **UNIT 1: Introduction-** Meaning, scope, Merits and limitations of accounting; accounting cycle; double entry book keeping –meaning, merits and demerits, journal, ledger; Distinction between books of original entry and ledger; concept of accounting terminologies Viz. Assets, liabilities, transactions, entity, debtor, and creditor.
- **UNIT 2: Cash book-** Meaning; Problems on Petty cash book; problems on triple column cash book; concept of trade discount and cash discount and their difference.
- **Unit 3: Preparation of Trial Balance-** Concepts, merits and demerits of Trial Balance; errors- disclosed and not-disclosed by trial balance; problems on trial balance.
- **Unit 4: Bank Reconciliation Statement-** Concept; objective and problems on bank reconciliation statement.
- **UNIT 5: Preparation of Final Accounts**-Concept of Final account; preparation of Trading account (concept, objectives and problems), Profit and loss account (concept, objectives and problems), Balance Sheet(concept, objectives and problems); Differentiation between trading and Profit & Loss a/c.

Suggested Books:

- 1. Financial Accounting by Hanif & Mukherjee, Tata McGraw Hill.
- 2. Financial Accounting for Manager by A.K. Bhattacharya, PHI.
- 3. Financial Accounting for Manager by A. Gupta, PHI.
- 4. Financial Accounting by P.C. Tulsian, Pearson Higher Education.

1. BASIC CONCEPTS AND ISSUES IN ECONOMIC THEORY:

Central problems of an economy, elasticity of demand – price, income and cross elasticities, Concept of supply equilibrium.

2. THEORY OF PRODUCTION AND COSTS:

Production function, short-run and long-run production function, different types of cost and shapes of different cost curves.

3. MARKET STRUCTURE:

Perfect, monopoly, monopolistic and oligopoly-determination of price and output, Concept of tax, market failure, New Markets: Scope and Challenges.

4. ANALYSIS AND MEASUREMENTS OF AGGREGATE OUTPUT:

Circular flow of income-concept and measurement of national income-problems of measurement – GDP and welfare (including problems).

5. KEYNESIAN THEORY, BANKING STRUCTURE IN INDIA, INFLATION, TRADE CYCLE:

Classical and Keynesian theory of output and employment determination and their related concepts, banking structure in India and its functions causes and policies to control inflation, nature and characteristics of trade cycles.

	SUGGESTED BOOKS:		
1.	Advanced Economic Theory	H.L.Ahuja	S.Chand
2.	Micro Economic Theory & Macro Economic Theory	Joydeb Sarkhel	Dey Book Concern

BBA (2nd Semester)

BMGT 201C COST ACCOUNTING

1. INTRODUCTION TO COST ACCOUNTING

Meaning, nature and scope of Cost Accounting, Advantages and disadvantages of Cost Accounting, Difference between Cost Accounting and Financial Accounting.

2. COST CONCEPTS, CLASSIFICATION and COST SHEET

Meaning of cost, Nature of cost. Importance of classification of cost. Various types of costs, Meaning, Importance of cost sheet, Items of cost sheet, Method of cost sheet,

3. MARGINAL COSTING AND CVP ANALYSIS.

Marginal costing and CVP analysis, Meaning, nature, advantages and disadvantages of Marginal costing, difference between marginal costing and absorption costing. Marginal cost statements, Relation between cost volume and profit, importance of CVP and BEP analysis, Determination of Contribution, profit volume ratio, margin of safety, angel of incidence.

4. ACCOUNTING FOR MATERIALS AND LABOUR COST.

Meaning of materials cost, Importance of inventory control, ABC analysis, determination of various Stock levels and EOQ, Methods of pricing the issue of materials, Bin cards and Double bin system, meaning of labour cost and structure of wages, Computation of wage with bonus, Labour turn over, causes of Labour turn over, Costing of Labour turn over.

5. CONTRACT COSTING.

Meaning and various terms used in contract costing, Accounting for contract profit or loss of complete and incomplete contracts.

	SUGGESTED BOOKS:		
1.	Cost and Management accounting	Jawharlal	Tata McGraw Hill
2.	Cost Accounting	Asish K. Bhattacharya	PHI
3.	Cost Accounting	Jain and Narang	Kalyani Publishers
4.	Cost and Management Accounting	M.N. Arora	Himalaya Publishing
			House

QUANTITATIVE TECHNIQES FOR MANAGEMENT

1. PROBABILITY DISTRIBUTION

Probability distribution, Binomial distribution, Poisson distribution, Normal distribution, choosing correct probability distribution.

2. CORRELATION ANALYSIS

Significance of measuring Correlation, Correlation and Causation, Types of Correlations, Methods of Correlation analysis.

3. REGRESSION ANALYSIS

Advantages of Regression analysis, Parameters of simple linear regression model, Methods to determine regression coefficients.

4. TIME SERIES AND FORECASTING

Meaning, Trend analysis, Variation in time series (Cyclical, seasonal, irregular), Forecasting and types.

SUGGESTED BOOKS:			
1.	Fundamentals of Business Statistics	J. K Sharma	1 st Edition, 2010,
			Pearson
2.	Statistics for Management	Richard L Levin &	DIII
		David S. Rubin	PHI
3.	Statistical Methods	N. G. Das	M. Das & Co.

BMGT 203C

ORGANISATIONAL BEHAVIOUR 1

1. INTRODUCTION TO O.B.:

Definition, Elements, Nature, Scope, Contributing Disciplines to O.B., Challenges & Opportunities for O.B.

2. PERSONALITY WITH EMPHASIS ON EMOTION & MOODS:

a. Concept of Personality, Determinants, Types, (Introvert, Extrovert, Type A, Type B), Theories, (Trait, Self, Psychoanalytical, Social theories, Job-Fit), b. Emotion & Moods – Definition, Functions, Sources, Emotional Intelligence, OB Applications of Emotion & Mood.

3. PERCEPTION & MOTIVATION:

a. Concept, Influencing Factors, Process, The link between perception and Individual Decision Making in the organization. b. Motivation – Concept, Contemporary Theories (Vroom's Expectancy, Porter & Lawler theories), Application of Motivation (Employee Involvement).

4. ATTITUDES AND VALUES:

Definition, Importance, Attitude Formation, Major Job Attitudes – Job Satisfaction, Job Involvement, Organisational Commitment with emphasis on Job Satisfaction, Formation of Values; Types (Terminal versus Instrumental)

5. LEARNING:

Concept, Theories (Classical Conditioning, Operant Conditioning, Social Learning), Reinforcement Concept

	SUGGESTED BOOKS:		
1.	Organisational Behaviour	S. P. Robbins	Pearson Publication
2.	Organisational Behaviour-Text & Cases	Shekharan	Tata Mcgraw Hill
3.	Organisational Behaviour	K.Aswathapa	Himalaya Publications

1. INDIAN BUSINESS ENVIRONMENT:

Concepts, Components, Significance of the study of Business Environment, Economic Environment and Economic System.

2. TECHNOLOGICAL, SOCIAL AND NATURAL ENVIRONMENT:

Meaning, Technological factors influencing business, Technology policy of the government, Meaning and Impact of society and culture on Business, Meaning an Impact of natural environment on Business.

3. ECONOMIC TRENDS:

Income, Savings and Investment, Industry, Money, Finance, Price (an overall idea)

4. PROBLEMS OF GROWTH:

Unemployment, Poverty Regional Imbalances, Social Inequality, Inflation, Industrial Sickness.

5. ROLE OF GOVERNMENT:

Monetary and Fiscal Policy, Industrial Policy, Industrial Licensing, Trade Policy Privatization Disinvestment, NITI Aayog.

SUGGESTED BOOKS:			
1	Essentials of Business Environment	K. Aswathappa	Himalaya Publishing
1.			House
2.	Economic Environment of Business	M. Adhikary	Sultan Chand & Sons
3.	Business Environment	Shaikh Saleem	Pearson
4.	Business Ethics & Professional Values	A. B. Rao	Excel Books

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Offered by outside department

BBA (3rd Semester)

BMGT 301C

ORGANIZATIONAL BEHAVIOR 2

1. STUDY OF GROUP BEHAVIOUR:

Definition of Group, Classification, Importance, Stages of Group Development, Group Properties, Group Decision Making.

2. COMMUNICATION & LEADERSHIP:

a. Communication: Concept, Functions, Process, Direction of Communication, Interpersonal and Organisational Communication. b. Leadership: Concept, Styles, Theories (Trait and Behavioral Ohio State Studies, Michigan Studies), Concept of Managerial Grid.

3. STUDY OF ORGANIZATION:

Concept, Types, Importance, Organisational Designs (Simple, Bureaucracy and Matrix), New Designs (Team Structure, Virtual Organisation)

4. ORGANISATIONAL CHANGE AND DEVELOPMENT:

An Overview of Organizational Effectiveness, Change and Development, Approaches to Manage Organisational Change and Development (Lewin 3 Stage Model, Action Research, OD), Organisational Change and Development in Indian Scenario.

5. SOME WELL KNOWN STUDIES:

Hawthorn study, Lippit and White, Coch and French and practicing few case studies from Indian perspective.

SUGGESTED BOOKS:			
1.	Organisational Behaviour	S. P. Robbins	Pearson Publication
2.	Organisational Behaviour	Robbins, Judge, Sangchi	Pearson Publication
3.	Organisational Behaviour-Text & Cases	Shekharan	Tata Mcgraww Hill
4.	Organisational Behaviour	K.Aswathapa	Himalaya Publications
5.	Understanding Organisational Behaviour	Udai Pareek	Oxford University Press

1. INDIAN CONTRACT ACT, 1872:

Introduction, essentials of a valid contract, classification of contract according to their enforceability, Formation and Performance, offer and Acceptance, consideration, capacity to contract, Free consent - Coercion, Undue influence, void voidable unenforceable and illegal Agreements', discharge of contract termination of contract, Preach of contract - Remedies, Damages, Indemnity, guarantee.

2. SALE OF GOODS ACT, 1930:

Formation of contracts of sale, goods and their classification, price, conditions and warranties, transfer of property in goods, performance of the contract of sale, unpaid seller and his rights, sale by auction, hire purchase agreement, Sales & Agreement to Sale.

3. NEGOTIABLE INSTRUMENTS ACT, 1881:

Definitions and features of different types of negotiable instruments (promissory note, bill of exchange and cheque), parties to a negotiable instrument and their capacity, holder and holder in Due course, crossing of a cheque, types of crossing, Banker and Customer, negotiation, Dishonour and discharge of negotiable instrument.

4. **COMPANIES ACT, 2013**:

Nature and kind of companies, formation, Memorandum and Articles of Association - contents, procedures for allegation, prospectus, capital shares, debentures, borrowing powers, minimum subscription, etc.

5. LAWS RELATING TO PATENTS, TRADEMARKS AND COPYRIGHTS:

A general idea

	SUGGESTED BOOKS:		
1.	Commercial and Industrial Law	Dr. N. D. Kapoor	S. Chand and Sons
2.	Company Law		Taxman
3.	Business Law	P.S.H Pillai, Bagavathi	S.Chand and Co. Ltd
4.	Business Law	Bulchandani	Himalaya Publishing
		Buichandani	House
5.	Business Law	S.N.Maheshwari	Himalaya Publishing
		3.iv.iviaiieSiiWali	House

- **UNIT 1:** Introduction to Financial Management- Meaning, Need and ;objectives of Financial Management; Goal of a Firm; Profit Maximization V/s Wealth Maximization; Concept of Valuation; Valuation of Equity Share; Valuation of Preference; Valuation of Debenture. **Time Value of Money-** Basic concept viz. compounding, discounting; Present Value of a Single Amount; Present Value of an annuity; Future value of an annuity.
- **UNIT 2: Capital Structure-** Meaning and Importance of Capital Structure; Factors determining capital structure; Theories of Capital Structure viz. Net Income Approach, Net Operating Income Approach, Traditional Approach, Modiglini and Miller Approach; Factors influencing capital structure; EBIT& EPS analysis; Leverages (Operating Leverage, Financial Leverage, Combined Leverage).
- **UNIT 3: Cost of Capital and Capital Budgeting-**Meaning and significance of cost of capital; Calculating cost of debt, Preference shares, equity capital, and retained earnings; Combined (weighted) cost of capital; Capital expenditure decisions; Pay-back period; return on investment; discounted cash flow.
- **UNIT 4: Working Capital Management-** Nature, Significance and classification of Working Capital; operating cycle and factors determining of working capital requirements (including problems); Management of working capital cash, receivables, and inventories (Problems).
- **UNIT 5: Dividend Policies** Meaning and concept, Determination of dividend policy, Dividend Policy Models viz. Walter's model, M.M. Hypothesis, Gordon's Model (Problems).

Suggested Books:

- i. Financial Management: I.M.Pandey, Vikas Publications.
- ii. Basic Financial Management: Khan & Jain, Tata McGraw Hill.
- iii. Financial Management (Text and cases): Khan & Jain, Tata McGraw Hill.

BMGT 304C

MARKETING MANAGEMENT 1

1. MARKETING PRINCIPLES AND SOCIETY:

Definition of Marketing, Importance, Scope, Core Marketing Concepts – Needs, Wants and Demands, Various concepts of Marketing, Integrated Marketing, Analyzing Macro Marketing Environment, Environmental Scanning.

2. MARKETING RESEARCH AND MARKETING INFORMATION SYSTEMS:

Meaning of Marketing Research, Process, Barrier in Marketing Research, Marketing Information System.

3. MARKETING PSYCHOLOGY & CONSUMER BUYING BEHAVIOUR:

Creating customer value, Satisfaction & Loyalty, Model of Consumer Behavior, Consumers use or Disposal of Products, Business Buying Process.

4. IDENTIFYING MARKET SEGMENTS AND TARGETS:

Segment Marketing, Niche Marketing, Local Marketing, Individual Marketing, Consumer Market Segmentation Bases, Business Market Segmentation Bases, Market Targeting, Market Fragmentation and Consolidation.

5. DEALING WITH COMPETITION:

Identifying Competitors, Analyzing Competitors, Competitive Strategies for Market Leaders, Other Competitive Strategies.

	SUGGESTED BOOKS:	
1.	Marketing Management	Kotler, Keller, Koshi and Jha
2.	Marketing	Paul Baines, Chris Fill, Kelly Page
3.	Marketing Management	Ramaswamy, Namakumari
4.	Marketing Management	Tapan K. Panda
5.	Marketing 3.0	Kotler, Kartajaya, and Setiawan

BMGT 305C

HUMAN RESOURCE MANAGEMENT 1

1. CONCEPT OF HUMAN RESOURCE MANAGEMENT:

Meaning, Definition, Nature, Scope, Objectives, Importance, Functions, Qualities and Role of HR Manager, HRM- A Line or Staff Function, Difference between Personnel Management & Human Resource Management.

2. HUMAN RESOURCE PLANNING:

Meaning, Definition, Objectives, Importance, Levels of HRP, Process, Barriers to HRP, Requisites for successful HRP.

3. JOB ANALYSIS AND DESIGN:

Meaning, Uses, Process, Methods of Data collection, Concept of Job Design, Techniques.

4. RECRUITMENT AND SELECTION:

Recruitment: Definition, Factors affecting Recruitment, Sources, Process; Selection: Meaning, Definition, Process.

5. TRAINING & DEVELOPMENT:

Placement, Induction, Socialization, Training and Development: Concept, Objectives, Benefits, Need, Steps, Methods.

	SUGGESTED BOOKS:		
1.	Human Resource Management (Text & Cases)	K.Aswathappa	Tata Mcgraw Hill
2.	Human Resource Management	N.K.Singh	Excel Books
3.	Human Resource Management	P.Subba Rao	Himalaya Publications
4.	Human Resource Management	Saiyadain	Tata Mcgraw Hill

BBA (4th Semester)

BMGT 401C

RESEARCH METHODOLOGY

1. INTRODUCTION TO RESEARCH METHODOLOGY:

Meaning, Objectives, Types of Research, Importance, Approaches, Research Process, criteria of a good Research.

Features of a good Design, Different Research, Designs, and Basic Principles of Experimental Designs.

2. SAMPLING DESIGN:

Census Vs Sample survey, steps in sampling Design, Criteria for selecting a sampling procedure, Types of Sample Design, Simple Vs Complex Random sampling Designs & Techniques.

3. MEASUREMENT & SCALING TECHNIQUES:

Measurement in Research, Measurement Scales, Errors in Measurement, Measurement Tools, Meaning of Scaling, Scale classification Bases, Scale Construction Techniques.

4. METHODS OF DATA COLLECTION:

Types of data, Collection of Primary Data, Difference between questionnaires & schedules, some other methods of data collection, Collection of Secondary data, Selecting Appropriate data collection method, Guideline for Constructing questionnaire/ Schedule, Guideline for successful interviewing, Difference between survey & Experiment.

5. TESTING OF HYPOTHESES AND REPPORT WRITING:

Definition Hypotheses, Testing of Hypotheses, Procedure for hypotheses Testing, Measuring the Power of a Hypothesis Test, Important Parametric Test: Student's T test, ANOVA, Chi-Square test.

Meaning of Interpretation, Technique of interpretation, Precaution in Interpretation, Significance of Report writing, Different steps for Report writing, layout of the Research Report, Precautions for writing Research Report, Role of Computer in Research.

	SUGGESTED BOOKS:		
1.	Research Methodology	C.R. Kothari	New Age
2.	International Business Research Methods	Zikmund, Berry, Babin	South Western
3.	Statistics for Management	Richard L Levin, David S Rubin	PHI

MARKETING MANAGEMENT 2

1. PRODUCTS, SERVICES AND BRANDING DECISIONS:

Product Levels, Classifications of Product, Product Life-Cycles and Marketing Strategies, New Product Development Process, New Product Adoption Process, Product Mix and Product Mix Decisions Branding: Definition of Brand, Types of Brands, Branding Strategies, Brand Equity, Brand Equity Models, Building Brand Equity, Managing Brand Equity, Packaging, Labelling, Brand Positioning.

2. DEVELOPING PRICING STRATEGIES AND PROGRAMS:

Pricing and Product Costs, Relationship between them. Setting Price, Adopting the Price, Responding to Price Changes.

3. DESIGNING AND MANAGING INTEGRATED MARKETING CHANNELS:

Definition of Marketing Channel, Importance, Hybrid Marketing Channel, Channel Functions and Flows, Channel Levels, Channel Design Decisions, Channel Management, Channel Integration, Retailing, Wholesaling, Market Logistics.

4. DESIGNING AND MANAGING INTEGRATED MARKETING COMMUNICATIONS:

IMC to Build Brand Equity, Communication Process Models, Developing Effective Communication, Marketing Communications Mix and Implementation of IMC Tools.

5. MARKETING ETHICS:

Ethics and Marketing, Ethical Decision Making Process, Distribution Management and Ethics, Promotion and Ethics, Products and Ethics, Pricing and Ethics.

	SUGGESTED BOOKS:	
1.	Marketing Management	Kotler, Keller, Koshi and Jha
2.	Marketing	Paul Baines, Chris Fill, Kelly Page
3.	Marketing Management	Ramaswamy, Namakumari
4.	Marketing Management	Tapan K. Panda
5.	Marketing 3.0	Kotler, Kartajaya, and Setiawan

BMGT 403C

HUMAN RESOURCE MANAGEMENT 2

1. PERFORMANCE AND POTENTIAL APPRAISAL:

Meaning, Objectives, Process, Methods, Problems, Making Performance Appraisal Effective, Steps to Appraise Potential.

2. WORKERS PARTICIPATION IN MANAGEMENT (WPM):

Definition, Meaning, Objectives, Levels, Forms, Why WPM fails? Making WPM Effective.

3. EMPLOYEE GRIEVANCES MANAGEMENT:

Employee Discipline: Concept, Features, Objectives, Types, Causes of Indiscipline, Approaches, Disciplinary Actions, Code of Discipline. Employee Grievances: Concept, Form, Causes, Effects, Model Grievance Procedure, Guideline for handling Grievances, Absenteeism; Causes and Control.

4. INDUSTRIAL DISPUTES MANAGEMENT:

Industrial Relations: Concept, Scope, Objectives, Importance, Causes for Poor Industrial Relations, Developing Sound Industrial Relations; Industrial Disputes: Concept, Forms, Causes, Prevention, Settlement.

5. JOB STRESS, COUNSELLING MENTORING:

Meaning, Nature, Symptoms, Causes & Management of Stress, Introduction, Objectives, Benefits of Counselling, Mentoring.

SUGGESTED BOOKS:			
1.	Human Resource Management (Text & Cases)	K. Aswathappa	Tata Mcgraw Hill
2.	Human Resource Management	N.K.Singh	Excel Books
3.	Human Resource Management	P.Subba Rao	Himalaya Publications
4.	Human Resource Management	Saiyadain	Tata Mcgraw Hill

BMGT 404C

OPERATIONS MANAGEMENT

1. OPERATIONS MANAGEMENT: TRENDS AND ISSUES

Manufacturing trends in India, Services as part of Operations Management, Operations management: A system perspective, challenges in operations management

Determinants of Process Characteristics in Operations, Types of Processes and operations Systems, Layout Planning, Implications of layout planning, Types of layouts, Design of Process Layout, Design of product layouts.

2. TOTAL QUALITY MANAGEMENT

The quality revolution, Quality Gurus, Definitions of quality, Total Quality Management, Quality management tools, Quality certifications and Awards, Design of quality assurance systems.

3. FACILITIES LOCATION

Globalization of operations, Factors Affecting Location Decisions, Location Planning Methods.

4. INVENTORY PLANNING AND SIX-SIGMA

Inventory Planning for independent Demand Items, Types of inventory, Inventory Costs, Inventory Control for Deterministic Demand Items, Handling uncertainty in Demand, Inventory control systems, Selective control inventory, Inventory Planning for Single-period Demand.

The Six-Sigma approach to Quality Control Management, Defects Per million Opportunities (DPMO), Organizations for Six-Sigma Quality, Process Control Fundamentals, Setting up a process Control System, Process improvement in the Long run, Six sigma and the process capability.

5. SCHEDULING OF OPERATIONS

The Need for Scheduling, Scheduling: Alternative Terms, The Loading of Machines, The Scheduling Context, Scheduling of Flow shops, Scheduling of Job shops, Input-Output Control.

	SUGGESTED BOOKS:		
1.	Operations Management: Theory & Practice	B. Mahadevan	Pearson Education
2.	Operations Management	Heizer	Dorling Kindersley
3.	Operations Management for Competitive Advantage	Chase-Jacobs-Aquilano	ТМН

BMGT 405C ENTREPRENEURSHIP DEVELOPMENT AND SMALL BUSINESS FUNDAMENTALS

ENTREPRENEURSHIP DEVELOPMENT:

1. ENTREPRENEURSHIP:

Concept, Entrepreneurial qualities and desirable characteristics of an effective Entrepreneur, Types of Entrepreneur, Significance of Entrepreneur in economic growth, Functions of an Entrepreneur, Scope and Importance of Entrepreneurship as career, Theories of Entrepreneurship,

2. ENTREPRENEURAL SYSTEM:

Search for business ideas, Idea processing, Role of Innovation in Entrepreneurship, Entrepreneurial motivation, factors determining entrepreneurial growth

SMALL BUSINESS FUNDAMENTALS:

3. SMALL BUSINESS:

Introduction, Definition as per MSMED Act, 2006, Characteristics, Objectives, Significance, Problems and Present position, Sickness in Small Business.

4. LEGAL AND TAX CONSIDERATIONS:

Registration, Provisional Registrations, Permanent Registrations, Licensing. Tax Benefits under Different Act with Special reference to North East Industrial Investment Promotion Policy (NEIIPP), 2007

5. GOVERNMENT AND NON-GOVERNMENT ASSISTANCE AND POLICIES:

National Policies and Incentives including subsidies by Central and State Governments; Role of IDBI, IFCI, SFC, NABARD, KVIC, SIDBI, SIDO, NSIC, DIC, IIE.

	SUGGESTED BOOKS:		
1.	Management and Entrepreneurship, 1/e	Kanishka Bedi	Oxford University Press
2.	Competing through innovation: Essential Strategies for Small and Medium – sized firms.	Bertrand Bellon, Graham Whittington	PHI
3.	Exploring Entrepreneurship: Practices and Perspective, 1/e	Richard Blundel & Nigel Lockett	Oxford University Press
4.	Small scale Industries and Entrepreneurship	Vasant Desai	Himalaya Publishing

BBA (5th Semester) MARKETING MANAGEMENT

BMGT 501C

CONSUMER BEHAVIOR

1. INTRODUCTION TO CONSUMER BEHAVIOUR:

Introduction, Evolution of Consumer Bahaviour, Factors affecting Consumer Behaviour, Scope & Application, Models of Consumer Behaviour (Nicosia, Howard-Sheth Model), Communication & Consumer Behaviour.

2. THE INFLUENCING FACTORS ON CONSUMER:

Personality: Nature, Theories (Freudian, Neo-Freudian, Trait), Brand Personality.

Motivation: Introduction, Dynamics of Motivation, Hierarchy of Need Theory, Motivational Research.

Learning: Elements, Theories (Classical Conditioning, Operant Conditioning, Observational Learning), Measurement of Consumer Learning.

Perception: Elements, Dynamics, Product Positioning, Perceived Price - Quality Relationship, Perceived Risk.

Attitude: Introduction, Models (Tri-component Attitude Model, Attitude – Towards - The – Ad – Model), Attitude Formation.

3. CONSUMER IN THEIR SOCIAL & CULTURAL SETTING:

Culture: Introduction, How Cultures are learned, Measurement of Culture.

Social: Introduction, Different Social classes in India, Measurement of Culture.

Situational: Introduction, Types of Situation (Purchase, Consumption, Communication), Situational influences on Consumer Behaviour.

4. CONSUMER DECISION MAKING PROCESS:

Introduction, Levels, Model of Consumer Decision Making, Gifting Behaviour, Post Purchase Behaviour.

5. CURRENT & RELATED ISSUES:

Organisational Buying Behaviour: Introduction, Organisational Buyer Characteristics, Process; Consumerism; e-Commerce & Consumer Behaviour.

	SUGGESTED BOOKS:		
1.	Consumer Behaviour	Schiffman and Kanuk	PHI
2.	Consumer Behaviour and Marketing Action	Henry Assael	Cengage Learning
3.	Consumer Behaviour in Indian Context	P.C.Jain and Monika Bhatt	S.Chand
4.	Consumer Behaviour-Text & Cases	Satish K. Batra & S. H. H. Kazmi	Excel Books

ADVERTISING AND SALES PROMOTION

ADVERTISING

- 1. Introduction, Nature and Importance, Different Advertising Functions, Types of Advertising, Economic Aspects of Advertising, Legal and Ethical Aspects of Advertising, Criticism of Advertising, Setting Advertising Objectives and Budget.
 - Advertising and Communication (Communication Model Basic and Advertising Communication Model), Role of Source, Encoding & Decoding of Messages, Media, Audience, Feedback, Noise.
- **2.** Creative aspects of Advertising: Introduction, The Planning and Managing Creative Strategy, Copy (Concept, How to Write Copy for Print and Broadcast Media), Advertising Appeals, Layout Planning.
- **3.** Advertising Media and Planning: Introduction, Different Types of Media, Media Planning and Scheduling, Advertising Campaign Planning.
 - Roles of Advertising Agency: Introduction, Types, Function, Layout, Advertising Agency and Client Relationship
 - Impact of Advertising: Consumer Behaviour and Advertisement: Introduction, Cultural, Social and Behavioural Influence on Consumer Decision

SALES PROMOTION

- **1.** Introduction, Concept, Nature, Function, Limitations of Sales Promotion, Reasons for Rapid Growth, Types of Sales Promotion Schemes.
 - Sales Promotion Objectives, Pull and Push Strategies, Sales Promotion and Consumer Behaviour: Theories (Classical Conditioning, Instrumental Conditioning, Dissonance Theory), Consumer Decision Making Related to Sales Promotion
- **2.** Sales Promotion Design: Promotion Choice, Approaches, Product Choice, Market Areas, Timing, Duration and Frequency;
 - Sales Promotion Budget: Concept, Various Techniques of Fund Allocation; Characteristics Successful Sales Promotion; Sales Promotion Effectiveness
 - Sales Promotion Schemes: Sample, Coupon, Price Off, Premium, Contests, POP, Trade Fairs and Exhibitions, Internet Promotion

	SUGGESTED BOOKS:		
1.	Advertising Principles and Practice	Wells, Moriarty,	Pearson Publication
		Burnett	
2.	Advertising Management	Jethwaney and Jain	Oxford University Press
3.	Advertising and Sales Promotion	Kazmi and Batra	Excel Books
4.	Advertising and Promotion	Belch and Belch	Tata McGraw Hill

1. INTRODUCTION TO RETAILING:

Definition, An overview of Indian Retail Industry, Global Concept, Functions performed by the Retailers, Changing Retail Land space, Growth of Retail in India, Opportunities & Challenges ahead.

Evolution of Retail Formats, Theories of Retail Development, Retail Lifecycle, Classification of Retail Stores, Franchising – A dynamic Retail opportunity

2. RETAIL STORE LOCATION:

Importance of Store Locations, Types of Locations, Steps in choosing a Retail Location, Legal considerations in Location Decisions, Trade Area Analysis.

3. RETAIL MERCHANDISING AND MERCHANDISE BUYING:

Definition, Evolution, Factors affecting Merchandising function, Functions of Merchandise Manager, Functions of a Buyer, Merchandise Planning.

Merchandise Buying process, Branding strategies, Category Management.

4. RETAIL PRICING & MERCHANDISE PERFORMANCE:

Considerations in setting Retail Price, Developing a Pricing Strategy, Price Adjustments, Pricing to increase sales, Analysing Merchandise Performance, Gross Margin Return on Investment (RMROI)

5. STORE LAYOUT, DESIGN AND VISUAL MERCHANDISING:

Importance of Store design, Objectives of Store design, Store Layouts, Space Management, Visual Merchandising, Atmospherics, and Website Design Considerations.

SUGGESTED BOOKS:			
1.	Retailing Management	Michael Levy, Barton A Weitz, Ajay Pandit	The McGraw Hill
2.	Retailing Management – Text & Cases	Swapna Pradhan	Tata McGraw Hill
3.	Retail Management – A Strategic	Barry Berman, Joel R.	Pearson Education
	Approach	Evans	rearson Education

BMGT 504C MARKETING RESEARCH

1. MARKETING RESEARCH FUNDAMENTALS:

Introduction to Marketing Research, Overview of Research, Application and Limitations of Marketing Research, Threats of Marketing Research, Marketing Information System, Marketing Decision Support System

2. MARKETING RESEARCH MANAGEMENT:

Importance of Research Management, Qualities of a Marketing Research Manager, Organising Marketing Research Function, Evaluation and Control of Marketing Research, Market Research versus Marketing Research, Marketing Research and Marketing Management

3. DATA COLLECTION, SAMPLING AND INTERVIEWING:

a. Secondary Data (Evaluating Secondary Data, Sources of Secondary Data) b. Collection of Primary Data (Observation, Methods of Observation, Questionnaire, Designing questionnaire, Choice of Survey Method) c. Sampling Designs (Some Basic Terms, Estimation and Testing of Hypothesis, Advantages & Limitations of Sampling. The Sampling Process, Types of Sample Design, Characteristics of a Good Sample Design) d. Interviewing: Conditions for a successful Interview, Selection for Interviewers, Training of Interviewers, Qualitative Research

4. DATA PROCESSING, RESEARCH ANALYSIS AND REPORTING:

Data Processing, Data Analysis – Measures of Central Tendency, Testing of Hypothesis, Factor Analysis

5. SELECTED APPLICATIONS OF MARKETING RESEARCH:

a. Sales Analysis and Forecasting: Sales Analysis, the Concept of Market Potentials, Methods of Estimating Current Demand b. New Product Development and Test Marketing: New Product Development, Process and Test Marketing c. Advertising Research: Importance of Advertising, Need for Advertising Research

SUGGESTED BOOKS:			
1.	Marketing Research	G. C. Berry	Tata McGraw Hill
2.	Marketing Research	Luck, D. J. & Rubin, R. S.	Prentice Hall
3.	Marketing Research	Naresh K. Malhotra	Prentice Hall

PROJECT REPORT - I (INTERNAL)

A. FORMAT OF PROJECT REPORT

With general guide lines on how to write a Project Report

- Consult your Guide from time to time, as well as whenever necessary, carry out suggested changes by your guide and then proceed for next step.
- Do take signature of your project guide as required on your progress report sheet.
- Work regularly with commitment and ensure you are following Project Report Activity Completion Schedule and avoid last minute's hustle.

Note: For any query contact your respective Project Guide / Class coordinator

Schedule for Project Completion Department of Business Management Summer Training Project Report

S. No.	Activities to be Completed.	Signature with Date
1.	Initial discussions & finalization of title.	
2.	Finalization of chapter scheme.	
3.	Finalization of chapter 1& 2	
4.	Finalization of chapter 3	
5.	Finalization of chapter 4 & 5	
6.	Final Draft	
7.	Approved draft shall go for binding	
8.	Final submission of report	

B. INSTRUCTIONS FOR TYPING/PRINTING

The project report should be strictly prepared according to the following guidelines.

• Finalization of the Project Report

Student should obtain clearance from their respective guide before final printing of the final project report.

Paper

The size of the paper sheet: A4

Typing should be done on one side of the paper.

Font

Type: Times New Roman

Size: 12

Line Spacing

Body of the text: 1.5 lines

List of tables/ graphs/ charts/ bibliography: Single Line

• Alignment

Title page: Centre

Chapter heading: Centre

Subheading: Left

Body of Text: Justify

Margins

At the binding edge (Left): not less than 3 cm

Other margins (Right, Top, Bottom): not less than 2 cm.

Titles

All titles and subtitles should be printed in BOLD.

All the Tables/ Graphs/ Charts/ should have appropriate titles.

Numbering of the Tables/Graphs/Charts

Tables/ Graphs/ Charts should be numbered in the following fashion. Second table/ Graph/ Chart in Second Chapter should be numbered as Table/ Graph/ Chart No 2.02 where first digit stands for Chapter No. and digits after (.) period stand for serial number of Table/ Graph/ Chart in that chapter. Same numbering system should be followed for other chapters. Tables/ Graphs/ Charts must be followed by proper explanation and analysis.

• Pagination

The title page should not carry any page number.

For initial pages (i.e. from student's declaration to Executive Summary) numbers should be given in small Roman Numbers. (Like i, ii,iii,iv etc,)

Report should contain main page numbers (i.e.1, 2.....) after Executive Summary.

Main page numbers should start from first page of Chapter 1 and will continue until last page of the report.

Page numbers are to be given at the centre of bottom of the page.

Pages separating Chapters should not be numbered but be counted.

• Binding of the report

The project should be hard bound with golden embossing as per the standard format

• Number of copies to be prepared

2 Hard copies and 1 soft copy (C.D.)

• Before submission

Students must sign Declaration and Acknowledgement before putting for the signature of the Guide.

C. TITLE OF THE PROJECT REPORT

Title of the Project Report (14, Title Case, Bold)

Submitted in Partial Fulfilment for the Award of the

Degree of Bachelor in Business Administration YYYY-YYYY (14, Bold)

Under the Guidance of: (14, Bold) Name of the Guide from Institute (14 size) Designation (14 size) **Submitted By:** (14, Bold) Name of the Student (14 size) University Enrolment No. (14 size)

Logo of Tripura University

Department of Business Management (14, Bold)

Tripura University (A Central University) (14 size) Suryamaninagar, Agartala, Tripura (W), Pin-799022 (14 size)

D. WRITING THE SUMMER PROJECT REPORT

- Student's Declaration
- Certificate from the Company
 (Mandatory if the Project is External. Otherwise required only for the students who are doing their Internal Projects in any outside organisation/ Company)
- Certificate from the Guide
- Acknowledgements
- Executive Summary
- List of Tables
- List of Charts
- List of Graphs

Table of Contents

Chapter 1 - Introduction to the topic

About the company/ topic (include details like product mix, marketing mix, HR policies, etc) according to the need of the project

Chapter 2 - Methodology

Research Design (Exploratory, Analytical etc.)

Data Collection

Primary and Secondary data

Instruments for Data Collection (Questionnaire, Inventories, Interview etc.) Method for Data Collection (Shopping Mall Intercept, Telephone, E-mail etc.)

Chapter 3 Findings & Analysis

Chapter 4 Conclusions

Chapter 5 Recommendations / Suggestions

Chapter 6 Limitations of the Study

- Bibliography
- > Annexure
 - o 1. Questionnaire (If Applicable)
 - o 2. Miscellaneous:
- > Schedule for Project completion.

E. STUDENT DECLARATION

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(On plain paper)

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degree of Bachelor of Business Administration at Department of Business Management, Tripura
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direction.
To the best of my knowledge and belief the data & information presented by him/ her in the project
has not been submitted earlier.
Signature:
Name of the Faculty:
Designation:

G. BIBLIOGRAPHY

Word or list of the words referred in a text or consulted by you for writing report. It should be arranged in alphabetical order by name of the authors.

For books

Name of the author (last name first) Title of the book, Edition, year of publication, No of Vol. (if any) Name and place of publisher.

Example:

Kothari, C.R. Research methodology, 3rd edition, 1997, Vikas Publishing House Pvt. Ltd, New Delhi.

For Research Papers, Published articles, Magazines, Periodicals, Journals, Newspaper etc. Name of the author (last name first), Title of the article, (in quotation mark) Name of the Journals/ Periodicals/ Magazines etc in italics, Volume number, year, Page numbers.

Example: Wortman, Maxs (Jr.) "Entrepreneurship: An Integrating Typology and Evaluation of the Empirical Research in the field", Journal of Management, Vol.13 (2), 1967, pp 259-279.

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Name of the Website, Date and time of referring the Website, Name of the Author, Title/Topic

H. ATTENDANCE SHEET

DEPARTMENT OF BUSINESS MANAGEMENT TRIPURA UNIVERSITY (A CENTRAL UNIVERSITY)

Attendance Sheet

Name of the Student	:
University Enrolment No.	:
Name of the Supervisor from the Industry	:

S.	Date	Time	Progress Report	Signature of the	Signature of
No				student	Supervisor
					(Institute)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

^{*}Minimum (8 out of 10) 80% attendance compulsory.

BBA (5th Semester) FINANCIAL MANAGEMENT

BMGT 506C FINANCIAL STATEMENT ANALYSIS 1

1. INTRODUCTION:

Nature and Components of Financial Statement; Meaning and need for Financial Statement Analysis (FSA), Traditional and Modern Approaches to FSA, Parties interested in FSA, Limitations of Financial Statements

2. ANNUAL REPORT:

Contents and Structure, Additional Discussion and Analysis, Environment Report, Social Report, Shareholders' Information, Stock Market Data.

3. DISCLOSURE REQUIREMENTS AND NOTES TO FINANCIAL STATEMENTS:-

Regulatory framework of Corporate Financial Reporting, Director's Report, Auditor's Report, Notes to Accounts, Full Disclosure.

4. TECHNIQUES OF FINANCIAL STATEMENT ANALYSIS:

Income Analysis, Expenses Analysis, Comparative Statements, Common Size Statements, Trend Analysis, Accounting Ratios for FSA (Preparation and Interpretation).

5. FUNDS FLOW & CASH FLOW ANALYSIS:

Funds Flow Analysis: Different concepts of Fund, whether Depreciation is a Source of Funds or not, Preparation and Interpretation; Cash Flow Analysis: Meaning, Objectives, Merits and Limitations, Preparation and Interpretation of Cash Flow Statements (as per AS-3).

	SUGGESTED BOOKS:		
1.	Financial Statement Analysis	S.K.Paul	New Central Book Agency
2.	Financial Statement Analysis	G. Foster	PHI
3.	Financial Statement Analysis and reporting	.K.Gupta and R.K.Sharma	Kalyani Publishers.
4.	Students guide to Accounting Standards	R.S.Rawat	Taxmann Publication.

1. INDIAN FINANCIAL SYSTEM:

Meaning, nature and functions of financial system, Structure of Indian financial system, Components of Indian financial system

2. BASICS OF MONEY MARKET:

Meaning and Feature of money market, Participants in money market operations, Function of money market, Money market instruments: C-Paper, T-Bill, C-Deposits.

3. BASICS OF CAPITAL MARKET:

Meaning and feature and function of capital market, Instruments of capital market, Types of capital market and issue procedure, Stock exchange operations in India, Currents issues.

4. REGULATORS OF FINANCIAL MARKETS.

Role of RBI in promoting money market, Current scenario and issues.

Role of SEBI in promoting capital market and protecting the interests of investors, Current issues.

5. BASICS OF MUTUAL FUNDS OPERATIONS (MF).

Meaning, feature and importance of mutual funds, Organisation structure of mutual fund, Classification of mutual funds, Mutual fund operations in India, Current issues.

	SUGGESTED BOOKS:		
1.	Indian Financial System	M. Y. Khan	Tata McGrawHill
2.	The Indian Financial System	Bharti V. Pathak	Pearson Education
3.	Financial Institutions and Markets,	Meir Kohn	Oxford University Press
4.	Chanakya Niti - A Perspective to Investing in Shares	B L Mittal Ravi Kant Sharma	Taxmann Publication.

- **UNIT 1: Basic Concept and Definitions:** Meaning and purpose of Income Tax; Nature of Income Tax; Assessee; Person; Assessment Year; Previous Year; Sources of Income; Heads of Income; Earned Income; Unearned Income; Gross Total Income; Tax Evasion; Tax Avoidance; Rebate Relief.
- **UNIT 2:** Residential Status, Tax incidence and Exempted Income: Residential status of all persons except company; Incidence of Tax; Exempted Income [U/S 10(11), 10(12), 10(11A), 10(12A), 10(13A), 10(23B), 10(23AAB), 10(23D), 10(25)].
- **UNIT 3:** Profits and Gains of Business or Profession including Depreciation: Meaning of Business and Profession; Depreciation of Block of Assets as per IT rules; Computation of Business Income; Computation of Professional Income; Valuation of stock.
- **UNIT 4: Capital Gains:** Meaning; Capital Assets; Types of Capital Assets; Period of holding of capital assets; Transfer not regarded as transfer; Computation of short term capital Gain and computation of long term capital gain (including exemption us 54).
- **UNIT 5: Introduction to Goods and Service Tax:** Meaning of GST; Advantages and limitation of VAT-GST as preferred tax structure; salient features of GST model; Major advantages of IGST Model; Interstate Goods and Service Tax with illustration.

Note: The assessment year immediately prior to the current assessment year will be considered (e.g. if the examination is held on 2019-20, the assessment year to be considered for the purpose is 2018-19).

Suggested Readings:

- 1. Direct Tax & Law, Singhania and Singhania, Taxman.
- 2. Direct and Indirect Taxes, S.K.Roy, ABS publishing House.
- 3. GST Ready Reckoner, V.S. Datey, Taxman's.

BMGT 509C

BANKING MANAGEMENT

1. Introduction:

Evolution, Meaning and Definition of Banking, Features, Classification of Banks, Banking System.

2. Reserve Bank of India:

Management and Administration, Functions, Monitory Policy, Credit Control and Methods of Credit Control

3. Nationalisation of Banks in India:

Nationalisation of major Commercial Banks, Reasons for Nationalisation, Criticism and Achievements

4. Banking system in India: Commercial Banks:

Functions, Balance Sheet, Off Balance Sheet Items, Window Dressing, Investment Policy; Private and Foreign Banks: Importance, Recent Trends; Cooperative Banking, Regional Rural Banks (RRBs): Structure and Sponsorship, Objectives, Difficulties, Suggested Measures

5. Banking Functions:

Debit Card and Credit Card, Fund Management, Deposits and Liquidity Management, Management of Bank Loans, Non-Performing Assets (NPA)

Suggested Readings:

- 1. Bank Management Vasant Desai Himalaya Publishing
- 2. Indian Banking S.Natatrajan & R. Parneswaram S.Chand & Sons

BMGT 510C

PROJECT REPORT - I (INTERNAL)

A. FORMAT OF PROJECT REPORT

With general guide lines on how to write a Project Report

- Consult your Guide from time to time, as well as whenever necessary, carry out suggested changes by your guide and then proceed for next step.
- Do take signature of your project guide as required on your progress report sheet.
- Work regularly with commitment and ensure you are following Project Report Activity Completion Schedule and avoid last minute's hustle.

Note: For any query contact your respective Project Guide / Class coordinator

Schedule for Project Completion Department of Business Management Summer Training Project Report

S. No.	Activities to be Completed.	Signature with Date
1.	Initial discussions & finalization of title.	
2.	Finalization of chapter scheme.	
3.	Finalization of chapter 1& 2	
4.	Finalization of chapter 3	
5.	Finalization of chapter 4 & 5	
6.	Final Draft	
7.	Approved draft shall go for binding	
8.	Final submission of report	

B. INSTRUCTIONS FOR TYPING/ PRINTING

The project report should be strictly prepared according to the following guidelines.

• Finalization of the Project Report

Student should obtain clearance from their respective guide before final printing of the final project report.

Paper

The size of the paper sheet: A4

Typing should be done on one side of the paper.

Font

Type: Times New Roman

Size: 12

Line Spacing

Body of the text: 1.5 lines

List of tables/ graphs/ charts/ bibliography: Single Line

• Alignment

Title page: Centre

Chapter heading: Centre

Subheading: Left

Body of Text: Justify

Margins

At the binding edge (Left): not less than 3 cm

Other margins (Right, Top, Bottom): not less than 2 cm.

Titles

All titles and subtitles should be printed in BOLD.

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Report should contain main page numbers (i.e.1, 2.....) after Executive Summary.

Main page numbers should start from first page of Chapter 1 and will continue until last page of the report.

Page numbers are to be given at the centre of bottom of the page.

Pages separating Chapters should not be numbered but be counted.

• Binding of the report

The project should be hard bound with golden embossing as per the standard format

• Number of copies to be prepared

2 Hard copies and 1 soft copy (C.D.)

• Before submission

Students must sign Declaration and Acknowledgement before putting for the signature of the Guide.

C. TITLE OF THE PROJECT REPORT

Title of the Project Report (14, Title Case, Bold)

Submitted in Partial Fulfilment for the Award of the

Degree of Bachelor in Business Administration YYYY-YYYY (14, Bold)

Under the Guidance of: (14, Bold) Name of the Guide from Institute (14 size) Designation (14 size) Submitted By: (14, Bold)
Name of the Student (14 size)
University Enrolment No. (14 size)

Logo of Tripura University

Department of Business Management (14, Bold)

Tripura University (A Central University) (14 size) Suryamaninagar, Agartala, Tripura (W), Pin-799022 (14 size)

D. WRITING THE SUMMER PROJECT REPORT

- Student's Declaration
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 (Mandatory if the Project is External. Otherwise required only for the students who are doing their Internal Projects in any outside organisation/ Company)
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direction.
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Name of the Faculty:
Designation:

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For books

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Example:

Kothari, C.R. Research methodology, 3rd edition, 1997, Vikas Publishing House Pvt. Ltd, New Delhi.

For Research Papers, Published articles, Magazines, Periodicals, Journals, Newspaper etc. Name of the author (last name first), Title of the article, (in quotation mark) Name of the Journals/ Periodicals/ Magazines etc in italics, Volume number, year, Page numbers.

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	Date	Date Time	Date Time Progress Report	Date Time Progress Report Signature of the student

^{*}Minimum (8 out of 10) 80% attendance compulsory.

BBA (5th Semester) Human Resource Management

BMGT 511C – Human Resource Planning

- **1. Human Resource Planning:** Introduction, Definition, Objectives, Need, Importance, Barriers, Suggestions.
 - Strategic Human Resource Planning: Concept, Characteristics, Levels, Process, Requirements, and Benefits.
- **2. Job Analysis and Design:** Job Analysis Meaning, Need, Process, Factors, Techniques of Data Collection, Uses & Limitations, Job Description & Job Specification, Job Design Approaches, Process, Job Enrichment.
 - Job Evolution: Concept, Objectives, Procedure, Advantages, Drawback, Methods, Essentials of successful Job Evaluation Programme.
- **3. Recruitment and Selection:** Definition, Factors affecting Recruitment, Sources, Process. Selection-Meaning, Definition, Process, Methods of Recruitment and Selection.
- **4. Placement, Induction, Socialisation, Dislocation, Relocation:** Meaning, Definition, Different Phases, Causes, Problems, solutions in regard to dislocation and relocation.
- **5. Internal Mobility and Separation:** Promotion, Transfer, Demotion, Separations.

	SUGGESTED BOOKS:		
1.	Manpower Management	Dwivedi, R. S.	PHI
2.	Human Resource Planning	D.K.Bhattacharya	Excel Books

BMGT 512C – Human Resource Development - 1

- **1. Human Resource Development An Introduction:** Historical Development, Concept, Characteristics, Objectives, Need, Functions of HRD, HRD & Personnel Management.
- **2. HRD System:** Process of Designing HRD System, Principles in Designing HRD Systems, Factors Affecting HRD System Designing.
- **3. HRD Mechanism:** Prerequisite for HRD, Variable in HRD Mechanism, HRD Process, HRD Outcomes, Organisational Effectiveness.
- **4. HRD Climate & Culture:** Concept of Climate, Factors Affecting HRD Climate, Indian Culture and HRD, The Development Dimensions.
- **5. Behavioural Factors:** Personality, Attitudes, Values, Perception, Job Satisfaction, Frustration, Helping Behaviour, Co-operation, Competition, Conflict, HRD/ OD Interventions.

Suggested Books:

1.	Human Resource Development	D.K Bhattacharya	Himalaya Publishing House
2.	Successful Application to HRD	IswarDayal	New Concept
3.	Management of change through HRD	Maheshwari, B.L. &Sinha, Dharni P.	Tata Mcgraw Hill

BMGT 513C - Wages and Salary Administration

- **1. Wages Concepts:** Definition, Piece Rates, Cash a Kind; Salary, Earning, Compensation, Fringe Benefits, Dearness Allowance, Real Wages, Basic Wages, Labour Cost.
- **2. Wage Administration:** Composition of Wages, Minimum Wages, Wage Structure, Wage Differentials
- 3. National Income: National Wage Structure
- **4. Labour Economics:** Wage Theories, Supply, Demand and Wages; Labour Institutions and their effects on National Income
- **5. Wage Fixation:** Criteria of Wage Fixation, Committees on Wages (Minimum Wage, Fare Wages and Living Wages)—need based minimum Wage Formula. Productivity Cost of Living, Capacity to Pay, Wage Comparison.
- 6. Wage Machinery: Employee Role; Tribunal Wage Board, Collective Bargaining

Suggested Books:

1. Understanding Waging System A.M.Sharma Himalaya Publishing House

BMGT 514C -Labour Laws - 1

- 1. Introduction to Labour Legislation:
 - a. Philosophy of Labour Law
 - b. Labour Laws Concept, Origin, Objectives
 - c. International Labour Organisation
 - d. Indian Constitution & Labour Legislation
- 2. The Factories Act 1948
- 3. Industrial Dispute Act 1947
- 4. Shops and Establishment Act
- 5. The Employee's State Insurance Act 1948, Employee's Provident Fund and Miscellaneous Provisions Act 1952

Suggested Books:

1.	Handbook of Industrial Law	Dr. N. D. Kapoor	Sultan Chand & Sons
2.	Industrial &Labour Law	S. N. Mishra	
3.	Industrial Laws (Bare Acts)		Taxmann Publication
4.	Industrial Relations &Labour Laws	B. D. Singh	

BMGT 515C – Project Report-I (Internal)

A. FORMAT OF PROJECT REPORT

With general guide lines on how to write a Project Report

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Name of the Faculty:	
Designation:	

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For books

Name of the author (last name first) Title of the book, Edition, year of publication, No of Vol. (ifany) Name and place of publisher.

Example:

Kothari, C.R. Research methodology, 3rd edition, 1997, Vikas Publishing House Pvt. Ltd, New Delhi.

For Research Papers, Published articles, Magazines, Periodicals, Journals, Newspaper etc. Name of the author (last name first), Title of the article, (in quotation mark) Name of the Journals/Periodicals/ Magazines etc in italics, Volume number, year, Page numbers.

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Attendance Sheet

	Name of the	Student	:			
ı	University E	nrolment	No. :			
	Name of the	Supervis	sor from the Industry			
S. No	Date	Time	Progress Report	Signature of the student	Signature of Supervisor (Institute)	
1						_
2						_
3						
4						
5						_
6						
7						
8						
9						
10						

^{*}Minimum (8 out of 10) 80% attendance compulsory.

BBA (6th Semester) Marketing Management

BMGT 601C

SERVICES MARKETING

1. INTRODUCTION TO SERVICE INDUSTRY:

Concept, Nature, Types, Importance, Difference between Goods & Service, Factors responsible for growth of service sector, Service Marketing Triangle, Service Marketing Environment, Service Market Segmentation, Problem areas in Segmentation, Targeting & Positioning.

2. UNDERSTANDING SERVICE INDUSTRY:

Current Trends in Service Industry, Customer Relationship Marketing, Service Quality: Concept, Dimensions, GAP model of service quality delivery, Measurement of service quality, Total Quality Management & Quality Circle, Consumer Behaviour: concept, models of Consumer Behaviour in Service Industry (EKB & GAP model), Customer Expectation & Perception, Factors affecting customer expectation & perception.

3. SERVICES MARKETING MIX-I:

- a. The Service Product: Introduction, New Service Development, Service Life Cycle
- b. Pricing Strategies: Introduction, Pricing Objectives, Methods of Pricing Services
- c. Managing Distribution Channels: Introduction, Factors Affecting Choice of Distribution Channel, Managing Distribution Channels
- d. Promotional Strategies: Introduction, promotion Objectives, Promotion Planning & Strategy.

4. SERVICES MARKETING MIX -II:

- a. People: Introduction, Challenges of Managing People, Measuring Productivity of people in Service Organization
- b. Physical Evidence: Introduction, Servicescape, Managing Physical Evidence
- c. Process: Introduction, Service Blueprinting, Managing Demand & Supply.

5. APPLICATIONS OF SERVICE MARKETING:

Marketing of Financial, Hospitality, Medicare, Educational Sectors and Tourism

	SUGGESTED BOOKS:		
1.	Service Marketing-Text and Cases	Rajendra Nargundkar	Tata Mcgraw Hill
2.	Service Marketing	Govind Apte	Oxford University Press
3.	Service Marketing-The Indian Perspective	Ravishankar	Excel Books
4.	Service Marketing-Text and Cases	Verma	Pearson
5.	Service Marketing	S.N.Jha	Himalaya Publishing

1. RURAL MARKETING: INTRODUCTION

Defining rural markets, rural myths, The rural marketing mix: challenges, the evolving rural consumer, The evolution of rural marketing, the rural environment, the rural economic environment, the rural infrastructure, The rural Boom, The way forward, Rural Dividend

Telecommunication in Rural India, Information and Telecommunication technology (ICT) in rural areas, Financial Services in Rural India, Cloud Computing for Rural banking, Rural Healthcare services.

2. RURAL CONSUMER BEHAVIOR

The Consumer buying behaviour model, the buyer decision Process, The product adoption process.

3. SEGMENTING AND TARGETING RURAL MARKETS

Segmentation, Targeting, Positioning.

4. PRODUCT AND PRICING STRATEGIES FOR RURAL MARKET

The product concept and the classification of Rural Products, Product decision and strategies, Product branding in rural markets, Packaging for rural markets, Product warranty and after sales service, New product development in rural markets.

Pricing for Rural India, Setting the price for rural products and services, price setting strategies.

5. DISTRIBUTION AND COMMUNICATION STRATEGIES FOR RURAL MARKETS

Availability: The Challenge and the Dilemma, Distribution channels, the rural retail environment. Channel behaviour in rural areas.

Challenges for Rural Communication, The communication process: An overview, developing effective rural Communication

SUGGESTED BOOKS:				
1.	Rural Marketing	Pradeep Kashyap	PEARSON	
2.	Rural Marketing (Text and Cases)	C.S.J Krishnamacharyulu,	PEARSON	
		lalitha Ramakrishnan	FLARSON	
3.	Introduction to Rural Marketing	R. Krishnamurthy	Himalaya Publishing House	

1. DEVELOPMENT & ROLE OF SELLING IN MARKETING:

Nature & Role of Selling, Characteristics of Modern Selling, Success factor for Professional Sales People, Types of Selling, Nature & Role of Sales Management, Relationship between Sales & Marketing.

Environmental & Managerial Force Imparting Sales, Sales Channel, Selling for Resale, Selling Services, Sales Promotion, Exhibitions, Public Relations

2. SALES RESPONSIBILITIES & PERSONAL SELLING SKILLS:

Prospecting, Database & Knowledge Management, Self Management, Handling Complaints, Providing Service, Sales Preparation.

The Opening, Needs & Problem Identification, Presentation & Demonstration, Dealing Objection, Negotiation, Closing Sales, Follow-up

3. SALES FORCE MANAGEMENT:

Organisation for Recruitment & Selection, Sources of Sales Force Recruits, Pre Interview Screening, Formal Application Form, The Interview, Supplementary Selection Aids.

Motivation, Leadership, Training, Conclusions, Designing Sales Compensation Plan, Types of Compensation Plans, Fringe Benefits.

4. SALES QUOTAS:

Objectives in using Quotas, Types of Sales Quota & Procedure for Quota Setting, Administering the Quota Systems.

5. SALES FORCE EVALUATION:

Sales Force Evaluation Process, Purpose of Evaluation, Setting Performance Standards, Gathering Information, Measures of Performance, Appraisal Interviewing.

SUGGESTED BOOKS:			
1.	Selling & Sales Management	David Jobber, Geoffrey Lancaster	Pearson Education
2.	Sales & Distribution Management - An	Pingali Venugopal	Response Sage
	Indian Perspective	Piligali Vellugopai	Publications Ltd
3.	Sales Management Decisions, Strategies &	Richard R. Still, Adward W.	Prentice Hall
	Cases	Cundiff, Norman A. P. Govoni	Premine Hall

BMGT 604C

INTERNATIONAL MARKETING

1. INTERNATIONAL MARKETING:

Definitions, Natures, Scope, Significance Transition from Domestic Marketing to International Marketing, International Marketing Environment (Internal and External).

2. IDENTIFICATION AND SELECTION OF ORIGIN MARKETS:

Global Market Segmentation, Decisions Relating Foreign Market Entry Mode, Barriers to Entry, International Positioning.

3. PRODUCT PLANNING FOR INTERNATIONAL MARKETS:

Product Design, Standardisation vs. Adaptation, New Product Development, Branding, Packaging.

4. INTERNATIONAL PRICING:

Factors determining International Pricing Process, Pricing Methods, Pricing Policies and Strategies International Quotation and Terms of Payments.

5. PROMOTION OF PRODUCTS/ SERVICES ABROAD:

Direct Mail and Sales Literature, Advertising and Sales Promotion, Trade Fairs and Exhibitions, Personal Selling.

Suggested Readings:

- 1. International Marketing Management Bhattacharya and Varshney Sultan Chand
- 2. International Marketing Kripalini Prentice Hall
- 3. Ten Essence of International Marketing Paliwode Prentice Hall 4. Principle of Marketing Kotler & Armstrong Prentice Hall

PROJECT REPORT - II (EXTERNAL)

A. FORMAT OF PROJECT REPORT

With general guide lines on how to write a Project Report

- Consult your Guide from time to time, as well as whenever necessary, carry out suggested changes by your guide and then proceed for next step.
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B. INSTRUCTIONS FOR TYPING/PRINTING

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Logo of Tripura University

Department of Business Management (14, Bold) Tripura University (A Central University) (14 size)

Suryamaninagar, Agartala, Tripura (W), Pin-799022 (14 size)

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 (Mandatory if the Project is External. Otherwise required only for the students who are doing their Internal Projects in any outside organisation/ Company)
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- > Schedule for Project completion.

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Place:	Name:
University Enrolment No.:	

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direction.
To the best of my knowledge and belief the data & information presented by him/ her in the project
has not been submitted earlier.
Signature:
Name of the Faculty:
Designation:

G. BIBLIOGRAPHY

Word or list of the words referred in a text or consulted by you for writing report. It should be arranged in alphabetical order by name of the authors.

For books

Name of the author (last name first) Title of the book, Edition, year of publication, No of Vol. (if any) Name and place of publisher.

Example:

Kothari, C.R. Research methodology, 3rd edition, 1997, Vikas Publishing House Pvt. Ltd, New Delhi.

For Research Papers, Published articles, Magazines, Periodicals, Journals, Newspaper etc. Name of the author (last name first), Title of the article, (in quotation mark) Name of the Journals/ Periodicals/ Magazines etc in italics, Volume number, year, Page numbers.

Example: Wortman, Maxs (Jr.) "Entrepreneurship: An Integrating Typology and Evaluation of the Empirical Research in the field", Journal of Management, Vol.13(2), 1967,pp 259-279.

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H. ATTENDANCE SHEET

DEPARTMENT OF BUSINESS MANAGEMENT TRIPURA UNIVERSITY (A CENTRAL UNIVERSITY)

Attendance Sheet

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2					
3					
4					
5					
6					
7					
8					
9					
10					

^{*}Minimum (8 out of 10) 80% attendance compulsory.

BBA (6th Semester) Financial Management

BMGT 606C

MANAGEMENT ACCOUNTING

1. USE OF MARGINAL COSTING IN DECISION MAKING:

Decision Making Process in various situations (areas), viz. make or buy provisions, accept or reject business proposals (local market+ foreign markets), Export Order, Shut-Down or Continue, Stop or further Process, Selection of Optimum Product Mix, Key factors influencing decisions, Optimum level Production

2. STANDARD COSTING:

Meaning advantages and disadvantages of standard costing, Techniques of standard costing, Variance analysis and reporting.

3. BUDGETARY CONTROL SYSTEM:

Meaning advantages and disadvantages of Budgetary control system, the Concept of Budget factor (Key or limiting factor) and the Budget Period, Types of Budgets, functional (or operational) Budgets, Sales, Production, Purchase, Cash Budget, Flexible Budgets, Zero-Based Budgets, Performance Budgets, Master Budget.

4. ACCOUNTING FOR OVERHEADS

Meaning of overhead costs, importance of overhead costing.

Methods of overhead costing – primary distribution and secondary distribution, Problems.

5. ACTIVITY-BASED COSTING(ABC)

Meaning, feature and importance of ABC, Various term used in ABC system, Advantages and disadvantages of ABC. Difference with traditional costing system, Technique of ABC, Problems on Absorption Costing and Variable Costing.

	SUGGESTED BOOKS:		
1.	Management Accounting	Paresh Shah	Oxford University Press
2.	Advanced Cost Accounting	S. P. Jain, K. L. Narang, S. Aggarwal	Kalyani Publishers

INSURANCE MANAGEMENT

1. NATURE, SCOPE AND TYPE:

Meaning, origin and development, essential elements, nature, functions and importance, Classification-scope of life, fire, marine, motor and other insurances.

2. Indian insurance market:

Insurance organizations in public and private sectors, organization structure of LIC, GIC, Insurance ombudsman.

3. Insurance Intermediaries:

Insurance agent – procedure for becoming insurance agent- rights, termination of an insurance agent- essentials for successful insurance salesman- surveyor and loss assessor- brokers- third party administrators, Privatization of Indian insurance sector.

4. Risk and fund management:

Meaning, difference between risk and uncertainty, characteristics- classification of risk and risk management- corporate risk management, personal risk management; Principles of insurance contract: under insurance- over insurance, insurance fund management: significance, characteristics, process and strategies.

5. Insurance Regulatory and Development authority:

Meaning, important terms, organizing body, functions of IRDA- eligibility, registration and capital requirements, recent regulations.

SUGGESTED BOOKS:		
1. Insurance Management	Inderjit Singh, Rakesh Katiyal, Surjit Kaur	Kalyani Publishers
2. Insurance : Theory and Practice	Pal Prabir, Tripathy, Nalini Prava	PHI
3. Fundamentals of Insurance	P.K Gupta	Himalaya Publishing House

1. INTERNATIONAL FINANCIAL ENVIRONMENT:

Evolution of the International Financial System, The Gold Standard, The Bretton Wood System and the IMF, The World Bank, WTO, Euro Bonds, Recent Pattern of International Banking Activities, Balance of Payment

2. FOREIGN EXCHANGE RISK MANAGEMENT:

Exchange Rate, Interest Rate, Inflation Rate and Exposure, Nature & Exposure of Risk, Exchange Rate and Interest Rate Volatility, Problems.

3. THEORIES ON EXCHANGE RATE MOVEMENTS:

Purchasing Power Parity, Fischer effect, International Fischer Effect.

4. GLOBAL FINANCIAL MARKETS AND INTEREST RATES:

The Global Financial Markets, Domestic & Offshore Markets, Euro Markets, Interest Rate in the Global Money Markets and an Overview of Money Market Instrument

5. FOREIGN EXCHANGE MARKET:

Structure, Types of Transaction and Settlements Rates, Exchange Rate Quotation, Forward Quotation, Exchange Rate Regimes and Foreign Exchange Market in India

	SUGGESTED BOOKS:		
1.	International Financial Management	Madhu Viz	Excel Books
2	International Financial Management	V.K. Bhalla	Anmol
2.	International Financial Management	V.K. Bildild	Publications
2	International Financial Management	LI D Machiraiu	Himalaya
3.	International Financial Management	H.R.Machiraju	Publications
1	International Financial Management	V.A. Avdhani	Himalaya
4.	International Financial Management	v.a. Avunani	Publications
5.	International Financial Management	Shashi K. Gupta & Praneet	Kalyani Publishers
٦.	international Financial Management	Rangi	Kaiyaili Fublishers

FINANCIAL STATEMENT ANALYSIS 2

1.DIFFERENT FORMS OF COMPANY BALANCE SHEET-

Vertical, Horizontal, As per Revised Schedule VI of Companies Act 1956

2. CONTENTS AND ANALYSIS OF CORPORATE INCOME STATEMENT

3. ECONOMIC VALUE ADDED (EVA) AND MARKET VALUE ADDED (MVA) REPORTING

4. ACCOUNTING STANDARDS:-

Meaning, Objectives, Merits and Limitations, Different Accounting Standards- Disclosure of Accounting Policies (AS-1), Segment Reporting (AS-17), Related Party Disclosure (AS-18), Earnings Per Share (AS-20), Accounting for Taxes on Income (AS-22), Interim Financial Reporting (AS-25), Intangible Assets (AS26), Impairment of Assets (AS-28).

5. **DISTRESS ANALYSIS:**

Indicators of Financial Distress, Distress Prediction

Suggested Readings:

- 1. Financial Statement Analysis & Reporting Shashi K. Gupta and R. K. Sharma Kalyani Publishers
- 2. Student's Guide to Accounting Standards R. S. Rawat Taxmann

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direction.
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has not been submitted earlier.
Signature:
Name of the Faculty:
Designation:

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For books

Name of the author (last name first) Title of the book, Edition, year of publication, No of Vol. (if any) Name and place of publisher.

Example:

Kothari, C.R. Research methodology, 3rd edition, 1997, Vikas Publishing House Pvt. Ltd, New Delhi.

For Research Papers, Published articles, Magazines, Periodicals, Journals, Newspaper etc. Name of the author (last name first), Title of the article, (in quotation mark) Name of the Journals/ Periodicals/ Magazines etc in italics, Volume number, year, Page numbers.

Example: Wortman, Maxs (Jr.) "Entrepreneurship: An Integrating Typology and Evaluation of the Empirical Research in the field", Journal of Management, Vol.13(2), 1967,pp 259-279.

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BBA (6th Semester) Human Resource Management

BMGT 611C – Industrial Relations

1. GROWTH OF INDUSTRIAL RELATIONS IN INDIA:

Meaning, Nature, Significance, Cause are effect for poor Industrial Relations in India, Suggestions to improve I.R.

2. INDUSTRIAL DISPUTES IN INDIA:

Meaning, forms of disputes, History of Labour disputes in India, Causes of Disputes, Results of Disputes, Trade Union and relevant Acts.

3. NATIONAL COMMISSION ON LABOUR AND I.R.:

Collective Bargaining, Discipline and Disciplinary Procedure.

4. METHODS FOR PREVENTION AND SETTLEMENT OF I.D.:

Voluntary Level, Statutory Level, Authorities for the Settlement of I.D. Voluntary Level, Statutory Level, Authorities for the Settlement of I.D. Users Committees, Conciliation Officer, Board of Conciliation, Court of Equity, Lobour Court, Industrial Tribunal and National Tribunal. Central Industrial Relations Machinery in India, Central Implementation and Evaluation Machinery, Industrial Disputes(Amendment)BillRamauryam Committee on I.R.

5. **ACTS**:

Trade Union Act 1926. Standing Order Act 1946, l.Disputes Act, 1947. Dynamics of I.R.C. B. Memoria, Himalayan Publication.

1.	Industrial Relations	A.M. Sharma	Himalaya Publishing House
2.	Dynamics of Industrial Relations	C.B.Mamoria	Himalaya Publishing House
3.	Personnel Management & Industrial Relations	R.S.Davar	Vikas Publishing House

BMGT 612C Organizational Development

- 1. Introduction to Organization Development: Concept, nature & scope of organizational development, history of organizational development underlying assumptions & values, Operational components diagnostic, action & process- maintenance component.
- **2. Action Research As A Process:** An approach- history. Use & varieties of action research- when & how to use action research in organizational development.
- **3. Organization Development Interventions:** Team interventions- inter- group interventions- personal, interpersonal & group process interventions- comprehensive interventions- structural interventions.
- **4. Implementation & Assessment of Organisational Development:** Conditions for success & failure- ethical standards in organizational development- organizational development & organizational performance- its implications.
- **5. Key Considerations & Issues in Organizational Development:** The future of organizational development Indian experiences in organizational development.

1.	Organizational Development	French & Bell
2.	Organizational Development: Theory Practice & Research	French Bell & Zawach
3.	Organizational Development: Strategies & models	Richard Beckhard
4.	Organizational Development for Excellence	Kesho Prasad
5.	Organizational Development	J. Jayasankar

BMGT 613C - Labour Laws II

- 1. Payment of Bonus Act, 1965
- 2. Payment of Gratuity Act, 1972
- 3. Payment of wages Act, 1936
- 4. Industrial Employment (Standing Order) Act, 1946
- 5. The Maternity Benefit Act, 1961

1.	Industrial & Labour Laws	S.N.Mishra	
2.	Handbook of Industrial Law	N.D.Kapoor	
3.	Industrial Laws(Bare Acts)		Taxman Publication
4.	Case Laws on Industrial Relations	L.Mishra	

BMGT 614C – Human Resource Development II

- 1. Training & Executive Development: Concept, Meaning, Definition, Features, Principles, Need & Importance, Methods, Evolution, Steps to Training & Development, Drawbacks, Suggestive System
- **2. Job Design and Career Planning:** Job Design: Job Description, Job Specification, Approaches, Job Enrichment, Succession Planning, Individual & Organisational Career Development Steps, HRD & Career Planning.
- **3. Performance & Potential Appraisal:** Concept, Purpose, Factors, Process, Methods, Limitations, Essentials of good Appraisal System, Assumptions of Performance Appraisal System, Main Components, Potential Appraisal; Steps to Develop Potential Appraisal.
- **4. Competency Mapping and Counselling:** Introduction, Definition, Needs, Types, Applications & Uses, Benefits, Methods, Competence versus Competency; **Counselling:** Concept, Characteristics, Need, Functions, Types, Objectives, Conditions for Effective Counselling, Process.
- **5. Participation & Empowerment:** Meaning, Forms, Objectives, Advantages, Evaluation, Effective WPM, Empowerment Meaning, Process, Merits, Demerits, Requisits for the success of Empowerment.

1.	Human Resource Development	D.K Bhattacharya	Himalaya Publishing
2.	Successful Application to HRD	IswarDayal	New Concept
3.	Management of change through HRD	Maheshwari, B.L. &Sinha, Dharni P.	Tata Mcgraw Hill

BMGT 615C

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Report should contain main page numbers (i.e.1, 2.....) after Executive Summary.

Main page numbers should start from first page of Chapter 1 and will continue until last page of the report.

Page numbers are to be given at the centre of bottom of the page.

Pages separating Chapters should not be numbered but be counted.

• Binding of the report

The project should be hard bound with golden embossing as per the standard format

• Number of copies to be prepared

2 Hard copies and 1 soft copy (C.D.)

• Before submission

Students must sign Declaration and Acknowledgement before putting for the signature of the Guide.

C. TITLE OF THE PROJECT REPORT

Title of the Project Report (14, Title Case, Bold)

Submitted in Partial Fulfilment for the Award of the

Degree of Bachelor in Business Administration YYYY-YYYY (14, Bold)

Under the Guidance of: (14, Bold) Name of the Guide from Institute (14 size) Designation (14 size) Submitted By: (14, Bold)
Name of the Student (14 size)
University Enrolment No. (14 size)

Logo of Tripura University

Department of Business Management (14, Bold)

Tripura University (A Central University) (14 size) Suryamaninagar, Agartala, Tripura (W), Pin-799022 (14 size)

D. WRITING THE SUMMER PROJECT REPORT

- Student's Declaration
- Certificate from the Company
 (Mandatory if the Project is External. Otherwise required only for the students who are doing their Internal Projects in any outside organisation/ Company)
- Certificate from the Guide
- Acknowledgements
- Executive Summary
- List of Tables
- List of Charts
- List of Graphs

Table of Contents

Chapter 1 - Introduction to the topic

About the company/ topic (include details like product mix, marketing mix, HR policies, etc) according to the need of the project

Chapter 2 - Methodology

Research Design (Exploratory, Analytical etc.)

Data Collection

Primary and Secondary data

Instruments for Data Collection (Questionnaire, Inventories, Interview etc.) Method for Data Collection (Shopping Mall Intercept, Telephone, E-mail etc.)

Chapter 3 Findings & Analysis

Chapter 4 Conclusions

Chapter 5 Recommendations / Suggestions

Chapter 6 Limitations of the Study

- Bibliography
- > Annexure
 - o 1. Questionnaire (If Applicable)
 - o 2. Miscellaneous:
- > Schedule for Project completion.

E. STUDENT DECLARATION

STUDENT DECLARATION

(On plain paper)

This is to certify that I have completed the Summer Project titled "(title of the project)" under the guidance of "(name of the guide)" in partial fulfilment of the requirement for the award of Degree of Bachelor of Business Administration at Department of Business Management, Tripura University (A Central University), Suryamaninagar, Agartala, Tripura (W). This is an original piece of work & I have not submitted it earlier elsewhere.

Date:	Signature:
Place:	Name:
University Enrolment No.:	

F. CERTIFICATE FROM THE INSTITUTE GUIDE

CERTIFICATE FROM THE INSTITUTE GUIDE

This is to certify that the summer project titled ""is an academic work done
by "" submitted in the partial fulfilment of the requirement for the award of the
degree of Bachelor of Business Administration at Department of Business Management, Tripura
University (A Central University), Suryamaninagar, Agartala, Tripura (W), under my guidance &
direction.
To the best of my knowledge and belief the data & information presented by him/ her in the project
has not been submitted earlier.
Signature:
Name of the Faculty:
Designation:

G. BIBLIOGRAPHY

Word or list of the words referred in a text or consulted by you for writing report. It should be arranged in alphabetical order by name of the authors.

For books

Name of the author (last name first) Title of the book, Edition, year of publication, No of Vol. (if any) Name and place of publisher.

Example:

Kothari, C.R. Research methodology, 3rd edition, 1997, Vikas Publishing House Pvt. Ltd, New Delhi.

For Research Papers, Published articles, Magazines, Periodicals, Journals, Newspaper etc. Name of the author (last name first), Title of the article, (in quotation mark) Name of the Journals/ Periodicals/ Magazines etc in italics, Volume number, year, Page numbers.

Example: Wortman, Maxs (Jr.) "Entrepreneurship: An Integrating Typology and Evaluation of the Empirical Research in the field", Journal of Management, Vol.13(2), 1967,pp 259-279.

Online published material on World Wide Web (Alphabetically arranged Webliography)

Name of the Website, Date and time of referring the Website, Name of the Author, Title/Topic

H. ATTENDANCE SHEET

DEPARTMENT OF BUSINESS MANAGEMENT TRIPURA UNIVERSITY (A CENTRAL UNIVERSITY)

Attendance Sheet

Name of the Student :	
University Enrolment No. :	
Name of the Supervisor from the Industry :	

S.	Date	Time	Progress Report	Signature of the	Signature of
No				student	Supervisor
					(Institute)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

^{*}Minimum (8 out of 10) 80% attendance compulsory.

BOTANY - SYLLABUS

Subject:- Botany Semester- I

Course Overview:-

This paper consists of mainly Fundamental Botany, Industrial BotanyI, Industrial Botany II and Environmental Botany.

Learning Objectives:-

- 1) To discuss Origin of life, Basic Taxonomical Classification, Plant Life Cycle pattern and Evolution, Darwin's Theory of Evolution, Species Concept, Mechanism of Speciation.
- 2) To focus on Environmental Botany i.e., Different types of Pollution and their effect on Human being.
- 3) To explain Industrial Botany which include Agro-Industries, Microbial Fermentation, Plant Nursery and Floriculture.
- 4) To discuss Spirulina Culture Technique, Mushroom Production and Harvesting.
- 5) To focus on Commercial Production of Ethyl Alcohol and Citric acid and Penicillin.

Learning Outcome:-

- 1) Students will learn about Basic Taxonomical Classification and their Significance.
- 2) Students will upgrade their knowledge on different Environmental Pollution and their impact on Plants and Human beings.
- 3) Students will develop knowledge on Floriculture and different kinds of Propagation Techniques
- 4) Student will learn about different Microbial Culture, Agri-Industrial Botany and different types of Plant Nursery, Floriculture, Different types of Grafting.

`Suggested Readings:-

- 1) Biotechnology- U. Satyanarayan and U. Chakrapani
- 2) Textbook of Botany-S.N. Pandey and P.S. Trivedi
- 3) Textbook of Botany-Hait, Bhattecharya, Ghosh
- 4) Studies in Botany- J. Guha and S. Chowdhury

Subject:- Botany Semester- II

Course Overview:-

This paper mainly covers Algae, Bryophyte, Pteridophyte, Gymnosperm and Palaeobotany.

Learning Objectives:-

- 1) To focus on study of Thallus Organisation, Life History, Ultra Structure of Plastid and Flagella, Origin and Evolution of Sex and Economic Importance of Algae.
- 2) To explain the General Account, Life History, Origin, Evolution, Reproduction, Gametophytic and Sporophytic Structures of Bryophytes and Pteridophytes.
- 3) To discuss Life History, Distribution, Vegetative and Reproductive Structure of Gymnosperms.
- 4) To explain different types of Plant Fossils (including Fossil Pteridophytes and Fossil Gymnosperms), Fossilization Process, and their Economic Importance.

Learning Outcomes (Theory):-

- 1) Students will learn about Thallus Organization, Life History, Economic Importance of selected species of Algae, Diatom and Bryophytes.
- 2) Students will learn about Life History, Sporophytic and Gametophytic Structure of Ptreidophytes and Gymnosperms.
- 3) Students will learn about types of Fossils and different Modes of Preservation.

Learning Outcomes (Practical):-

- 4) Students will learn to work out on different species of Algae and Pteridophyte.
- 5) Students will learn how to identify different species of Algae, Bryophytes, Pteridophytes, Gymnosperms and Fossil Plants.

- 1) Studies in Botany (Vol 1)-Mitra, Guha, Chowdhury
- 2) AText Book of Botany (Vol1)- Hait, Bhattecharya, Ghosh
- 3) College Botany- Ganguli, Kar, Santra

Subject:- Botany Semester- III

CourseOverview:-

This paper mainly covers Fungi and Plant Resource Utilization (Economic Botany), Microbiology and Plant Pathology.

Learning Objectives:-

- 1) To discuss about fungal classification upto Class Characters.
- 2) To focus on Lichen and their significance.
- 3) To explain life history of *Agaricus*, *Ascobolus*, *Mucor*, *Synchitrium*, *Penicillium*, *Polyporus* and *Fusarium*.
- 4) To discuss bacterial cell structure and genetic recombination replication of Bacteriophage; Disease cycle of Late Blight of Potato, Brown Spot of Rice and Black Stem Rust of Wheat.
- 5) To focus on Economically Important Plants and their uses.
- 6) To discuss on Cultivation of Rice, Jute, Rubber, Tea.
- 7) To discuss about Plant Quarantine.

Learning Outcomes (Theory):-

- 1) Students learn fungal classification upto class characters and life history of *Agaricus*, *Ascobolus*, *Mucor*, *Synchitrium*, *Penicillium*, *Polyporus*, *Mucor* and *Fusarium* sp.
- 2) Students will learn economically important plants and their general uses.
- 3) Students will learn Bacterial cell structure, genetic recombination, replication of Bacteriophage and different plant diseses, Parsexuality, Plant quarantine.

Learning Outcomes (Practical):-

- 1) Students will learn work out of Ascobolus, Mucor, Synchitrium, Penicillium, Polyporus, Mucor and Fusarium sp.
- 2) Students will learn Microscopic examination of Bacteria by Gram staining procedure.
- 3) Students will learn about preparation of Fungal media, Serilization process, Inoculation of pathogen from diseased leaf.

- 1) Studies in Botany (Vol 1)- Mitra, Guha, Chowdhury
- 2) ATextbook of Botany (Vol 1)- Hait, Bhattecharya, Ghosh.
- 3) Botany for Degree Students- Dr. B.P.Pandey
- 4) College Botany- Ganguli, Kar, Santra.

Semester- IV

Course Overview:-

This paper mainly consists of Morphology, Embryology, Taxonomy, Anatomy, Ecology and Phytogeography.

Learning Objectives:-

- 1) To discuss morphology, embryology and taxonomy of angiospermic plants.
- 2) To explain the general characteristics and distinguishing characters of selected families.
- 3) To make the student understand about Placentation and Fertilization method.
- 4) To discuss the nomenclature and rules of ICBN.
- 5) To discuss the Microsporogenesis, Megasporogenesis, Embryo and Endosperm Development.
- 6) To make the student learn about Ecological Succession, Hydrosere, Xerosere, Ecological Adaptation, Endemism, Red Data Book and Phytogeography.
- 7) To explain the Anatomical characteristics of plants.
- 8) To make them learn work out on Taxonomy of Angiosperms Anatomy of Angiosperm, and Identification of some selected slides with reason.

Learning Outcomes (Theory):-

- 1) Students will learn about Morphology and Taxonomy of some Angiospermicplants.
- 2) Students will learn about Anatomy of Cell wall, Meristematic and Permanent Tissue and Vascular bundle.
- 3) Student will learn about Normal secondary growth.
- 4) Students will learn Ecological succession, Hydrosere, Xerosere, Endemism, Ecological adaptation, Red Data Book and Phytogeography.
- 5) Student will learn about the Nomenclature and Rules of ICBN.
- 6) Student will learn about the Microsporogenesis, Megasporogenesis, Embryo and Endosperm Development.

Learning Outcomes (Practical):

- 1) Students will learn work out on morphological and anatomical features of different Angiospermic plants belonging to different Families.
- 2) Students will learn how to identify plants based on different morphological and anatomical features with reasons.
- 3) Students will learn how to collect different plants from different ecological regions and how to prepare Herbariums.

- 1) Taxonomy of Angiosperm- V. Singh and V.K.Jain
- 2) College Botany (Vol 2)- Gangulee and kar.
- 3) College Botany (Vol 1)- Gangulee, Das, Datta.
- 4) Systematic Botany- S.C. Datta.
- 5) Textbook of Botany (Vol 2)- Hait, Bhattacharya, Ghosh.

Semester- V

Course Overview:-

This paper mainly consists of Cell and Molecular Biology, Cytogenetics, Plant Breeding, Plant Physiology, Plant Biotechnology and Biostatistics.

Learning Objectives:

- 1) To make the students learn about Cell cycle, Cell division structure and function of Cell organelles.
- 2) To discuss chromosome morphology, organisation of eukaryotic chromosome Structure and features of Nucleic acid.
- 3) To explain DNA Replication, Transcription, Translation, Gene Mutation.
- 4) To focus on Mendelian Inheritance, Crossing Over, Complete and Incomplete Linkage.
- 5) To discuss different techniques of Plant Breeding.
- 6) To explain Plant Physiology and different techniques of Plant Tissue Culture.
- 7) To make the student learn work out on Mitotic and Meiotic study, study on Pollen Sterility-Fertility, Detection of Organic acids Carbohydrate from unknown sample.
- 8) To make student learn about different plant physiological experiments.

Learning Outcome (Theory):-

- 1) Students will learn about Cell cycle, Cell division, Structure and Function of different Cell Organelles.
- 2) Students will learn chromosome morphology, organisation of eukaryotic chromosome Structure and features of nuclic acid.
- 3) Students will learn different molecular processes like DNA replication, Transcription, Translation, Gene Mutation, Linkage, different Chromosomal aberrations etc.
- 4) Students will learn different Breeding and Hybridization techniques in Plants.
- 5) Students will know aboutBiostatistics.
- 6) Students will learn about different physiological process which are involved in plants and what are the different techniques used in plant tissue culture process.

Learning Outcome (Practical):

- 1) Students will know aboutdifferent stages of normal and abnormal Mitotic and Meiotic stages and how to prepare the permanent slides.
- 2) Students will get a brief ideaabout Pollen Sterility and Fertility.
- 3) Students will learn about how to do various hands on plant physiological experiments like Photosynthesis, Respiration, Q₁₀, Chromatography, Imbibitions, Transpiration and Evaporation.
- 4) Students will learn about different instruments and techniques used in Plant Tissue Culture process.
- 5) Students will understand about different techniques of Plant Breeding including Emasculation process.
- 6) Students will learnabout different Biochemical studies like detection of Organic acids and Carbohydrate from unknown sample.
- 7) Students will get a brief idea how Statistical data are used to verify different Biological Experiments.

- 1) Plant Physiology and Biotechnology- H.S. Srivastava
- 2) Principals of Genetics- Gardner, E. J. Simmons, M. J. Snustad.
- 3) Studies in Botany (Vol 2)- Mitra, Guha, Chowdhury
- 4) Cell Biology- C.B. Power

Subject:- Botany Semester- VI

Course Overview:-

This paper mainly consists of Biochemistry, Plant Physiology, Pharmacognosy and Plant Biotechnology.

Learning Objectives:-

- 1) To make the students learn about different bonds, classification of Carbohydrates, Proteins, Lipids, Amino acids, Enzymes, Glycolysis, TCA cycle, Membrane chemistry, Signal transduction etc.
- 2) To discuss Water potential, Photosynthesis pathways, Respiration, N- metabolism, Phytohormones etc.
- 3) To explain importance of Pharmacognosy, about Drug and its commercial production.
- 4) To focus on different Secondary Metabolites present in plants, their production and utility etc.
- 5) To explain different techniques of Plant Tissue Culture.
- 6) To make the student learn about detection of Organic acids, Carbohydratefrom unknown sample.
- 7) To make student learn about plant physiological experiments on Photosynthesis,Respiration,Transpiration.
- 8) To provide a basic environment for performing a Scientific Project Work.

Learning Outcome (Theory):-

- 8) Students will learn different Bonds, Classification of Carbohydrates, Proteins, Lipids, Amino Acids, Enzymes, Glycolysis, TCA Cycle, Membrane Chemistry, Signal Transduction etc.
- 9) Students will learn Water Potential, Photosynthesis Pathways, Respiration, N- Metabolism, Phytohormones etc.
- 10) Students will importance of Pharmacognosy, about Drugs and its commercial production.

Learning Outcome (Practical):-

- 1) Students will learn techniques Titration, Protein Estimation etc.
- 2) Students will learn different techniques of Plant Tissue Culture.
- 3) Students will learnabout detection of Organic acids, Carbohydrate, Steroids, Alkaloids from unknown sample.
- 4) Students will learn how to do a scientific research and how to write a Scientific Project.

- 1) Plant physiology and Biotechnology-H.S.Srivastava
- 2) Pricipals of Genetics- Gardner, E. J. Simmons, M. J. Snustad.
- 3) Studies in Botany (Vol 2)- Mitra, Guha, Chowdhury.
- 4) Cell Biology- C.B Power.
- 5) Textbook of Botany (Vol 3)- Hait, Bhattacharya, Ghosh.

TRIPURA UNIVERSITY

(A Central University)

Suryamaninagar – 799022

Syllabus

OF

Botany

(General & Major)

Semester – I-VI

Botany (General)

Semester Examination System

Duration: 3 Years (Six Semesters)

Semester	Theoretical Marks	Practical Marks	Total Marks
Semester - I	100 (IA*-20+ES*-80)	-	100
Semester - II	50 (IA-10+ES-40)	50 (IA-10+ES-40)	100
Semester - III	50 (IA-10+ES-40)	50 (IA-10+ES-40)	100
Semester - IV	50 (IA-10+ES-40)	50 (IA-10+ES-40)	100
Semester - V	50 (IA-10+ES-40)	50 (IA-10+ES-40)	100
Total	300	220	500

^{*}IA= Internal Assessment; *ES= End Semester Examination

Credit distribution B.Sc. (General) in Botany

Semester	Paper No.	Credit distribution		tion	Total
		L	T	P	Credits/Semester
Ι	BT - 101 (T)	3	1	0	4
II	BT - 201 (T)	2	0	0	2
	BT - 202 (P)	0	0	2	2
III	BT - 301 (T)	2	0	0	2
	BT - 302 (P)	0	0	2	2
IV	BT - 401 (T)	2	0	0	2
	BT - 402 (P)	0	0	2	2
V	BT - 501 (T)	2	0	0	2
	BT - 502 (P)	0	0	2	2
Total Credits		11	1	8	20

L = Lecture, T = Tutorial, P = Practical

Botany (General)

Course Structure

Course Title	Full Marks	Total Credits
Semester I BT 101 (Theory) (Fundamental, Environmental and Industrial Botany)	100	4
Semester II BT 201 (Theory) (Algae, Bryophytes, Pteridophytes, Gymnosperms & Paleobotany)	50	2
BT 202 (Practical) – Based on Theory Course – BT201	50	2
Semester III BT 301 (Theory) (Microbiology, Fungi, Plant Pathology & Plant Resource Utilization)	50	2
Bt 302 (Practical) – Based on Theory Course – BT301	50	2
Semester IV BT 401 (Theory) (Morphology, Taxonomy, Anatomy, Ecology & Phytogeography)	50	2
BT 402 (Practical) Based on Theory Course – BT401	50	2
Semester V BT 501 (Theory) (Cell & Molecular Biology, Cytogenetics & Plant Breeding, Plant Physiology & Plant Bio-technology)	50	2
BT – 502 (Practical) Based on Theory Course – BT501	50	2

Syllabus for B.Sc. Botany (General) Semester – I (Theoretical)

Paper - BT 101

Full Marks – 100 Total Lectures – 48 Periods (Each Period = 1 hour)

Unit - I: (Fundamental Botany)

12 Periods

- 1.1. Origin of life, Difference between plant and animal cell.
- 1.2. Three domains of classification Archaea, Bacteria, Eukaryota.
- 1.3. History of Plant classification: Natural (Bentham & Hooker), Artificial (Linnaeus) and phylogenetic (Hutchinson) system of Classification.
- 1.4. Plant life cycle pattern & alternation of generation.
- 1.5. Darwin's theory of evolution, Species concept, Isolation & mechanism of speciation.

Unit - II: (Environmental Botany)

12 Periods

- 2.1. Pollution: Definition and categories
- 2.2 Air pollution: Types and sources of air pollutants and their effects on plants and animals.
- 2.3 Water pollution: Types and sources of pollutants and their effects on plants and animals.
- 2.4 Soil pollution: Sources of pollutants and their effects on living organisms.
- 2.5 Noise pollution, heavy metal pollution and radioactive pollution.

Unit – III: Industrial Botany – I (Agri Industries and Microbial fermentation and food) 12 Periods

- 3.1 Organic farming Concept, need, types of organic fertilizers, advantages and limitations.
- 3.2 Importance of seed industries, Seed production. Seed processing and marketing, major seed industries & corporation of India.
- 3.3 Production of SCP from algae Spirulina culture technique.
- 3.4 Mushroom production and harvesting (*Volvoriella* sp.)
- 3.5 Commercial production of Ethyl alcohol and Citric acid

Unit - IV: Industrial Botany - II (Plant Nursery and Floriculture Industry) 12 Periods

- 4.1 Concept and types of nurseries: ornamental plant nursery, fruit plant nursery and vegetable plant nursery (with reference to infrastructure required and commercial applications).
- 4.2 Propagation methods: Seed propagation, natural vegetative propagation and artificial vegetative propagation (Cutting, Layering and Grafting)
- 4.3 Introduction to floriculture: Important floricultural crops, open cultivation practices, harvesting and marketing.

B.Sc. Botany (Major)

Semester Examination System

Duration: 3 Years (Six Semesters)

Semester	Theoretical Marks	Practical Marks	Total Marks
Semester - I	100 (IA-20+ES-80)	-	100
Semester - II	60 (IA-12+ES-48)	40 (IA-8+ES-32)	100
Semester - III	60 (IA-12+ES-48)	40 (IA-8+ES-32)	100
Semester - IV	60 (IA-12+ES-48)	40 (IA-8+ES-32)	100
Semester - V	60 (IA-12+ES-48)	40 (IA-8+ES-32)	200
Semester - VI	60 (IA-12+ES-48)	40 (IA-8+ES-32)	200
Total	480	320	800

Credit distribution B.Sc. (Major) in Botany

Semester	Paper No.	C	redit distribu	ıtion	Total
	_	L	T	P	Credits/Semester
I	BT - 101 (T)	3	1	0	4
II	BT - 201 (T)	2	0	0	2
	BT - 202 (P)	0	0	2	2
III	BT - 301 (T)	2	0	0	2
	BT - 302 (P)	0	0	2	2
IV	BT - 401 (T)	2	0	0	2
	BT - 402 (P)	0	0	2	2
V	BT - 501 (T)	4	0	0	4
	BT - 502 (P)	0	0	4	4
VI	BT - 501 (T)	4	0	0	4
	BT - 502 (P)	0	0	4	4
Total Credits		17	1	14	32

L = Lecture, T = Tutorial, P = Practical

Botany (Major)

Course Structure

Course Title	Full Marks	Total Credits
Semester I BT 101 (Theory) (Fundamental, Environmental and Industrial Botany)	100	4
Semester II BT 201 (Theory) (Algae, Bryophytes, Pteridophytes, Gymnosperms & Paleobotany)	50	2
BT 202 (Practical) – Based on Theory Course – BT201	50	2
Semester III BT 301 (Theory) (Microbiology, Fungi, Plant pathology & Plant Resource Utilization)	50	2
Bt 302 (Practical) – Based on Theory Course – BT301 Semester IV	50	2
BT 401 (Theory) (Morphology & Embryology, Taxonomy, Anatomy, Ecology & Phytogeography)	50	2
BT 402 (Practical) Based on Theory Course – BT401	50	2
Semester V BT 501 (Theory) (Cell & Molecular Biology, Cytogenetics, Plant breeding and Biostatistics)	100	4
BT – 502 (Practical) Based on Theory Course – BT501	100	4
Semester VI BT 601 (Theory)		
(Biochemistry, Plant Physiology, Pharmacognosy and Plant Biotechnology)	100	4
BT - 602 (Practical) Based on Theory Course - BT601	100	4

Semester – I Syllabus for B.Sc. Botany (Major) 2014 (Theoretical)

Paper - BT 101

Full Marks – 100 Total Lectures – 56 Periods (Each Period = 1 hour)

Unit - I: (Fundamental Botany)

14 Periods

- 1.6. Origin of life, Difference between plant and animal cell. Time line of plant evoluion.
- 1.7. Three domains of classification Archaea, Bacterial Eukaryota.
- 1.8. History of Plant classification: Natural (Bentham & Hooker), Artificial (Linnaeus) and Phylogenetic (Hutchinson) system of Classification.
- 1.9. Plant life cycle pattern & alternation of generation.
- 1.10. Darwin's theory of evolution, Macro & micro evolution.
- 1.11. Species concept, Isolation & mechanism of speciation.

Unit - II: (Environemental Botany)

14 Periods

- 2.1. Pollution: Definition and categories
- 2.2 Air pollution: Types and sources of air pollutants and their effects on plants and animals.
- 2.3 Water pollution: Types and sources of pollutants and their effects on plants and animals.
- 2.4 Soil pollution: Sources of pollutants and their effects on lying organisms.
- 2.5 Bioremediation, noise pollution, acid rain, classical and photochemical smog, heavy metal pollution and radioactive pollution.
- 2.6 Greenhouse effect and global warming basic concept; significance of ozone umbrella, ozone hole types of ozone depleting chemicals and their interactions.

Unit – III: Industrial Botony – I (Agri Industires and Microbial fermentation, food & Bio-fuels) 14 Periods

- 3.1 Organic farming Concept, need, types of organic fertilizers, advantages and limitations.
- 3.2 Importance of seed industries, Seed production. Seed processing and marketing, major seed industries & corporation of India.
- 3.3 Production of SCP from algae *Spirulina* culture technique.
- 3.4 Mushroom production and harvesting (Volvoriella sp. And Pleurotus sp.)
- 3.5 Commercial production of Ethyl alcohol, Citric acid and Penicillin.
- 3.6 Concept of biofuel and its need, Plants used for biofuel production.

Unit- IV: Industrial Botony- II (Plant Nursery and Floriculture Industry) 14 Periods

- 4.1 Concept and types of nurseries: ornamental plant nursery, fruit plant nursery, medicinal plant nursery, vegetable plant nursery and orchid nursery (with reference to infrastructure required and commercial applications).
- 4.2 Propagation methods: Seed propagation, natural vegetative propagation and artificial vegetative propagation (Cutting: Stem, Layering: Air layering, Grafting: Stone grafting and Approach grafting, Budding: T budding).
- 4.3 Introduction to floriculture: Important floricultural crops, open cultivation practices, harvesting and marketing.

Suggested Books:

- 1. **Brodie J and Lewis J (2007**). (Ed.) Unravelling the algae: the past, present and future of algal systematic. CRC press. New York.
- 2. Graham L.E. and Wilcox L.W. (2000), Algae. Penticce Hall, Inc.
- 3. Lee R.E. (2008) Phycotogy. Cambridge University Press.
- 4. **Das Dutta and Gangulee.** College Botany Vol I, Central Book Depot.
- 5. **Vashista B.R., Sinha A.K. and Singh V.P. (2005).** Botany for degree studets Algae, S. Chand's Publication.
- 6. **Chopra R.N. and Kumar P.K (1998).** Biology of Bryophytes. John Wiley & Sons, New York. NY.
- 7. **Parihar N.S. (1980).** Bryophytes: An Introduction to Embryophyta. Vol I. Central Book Depot, Allahabad.
- 8. **Udar R. (1970).** Introduction to Bryophytes, Shashidhar Malaviya Prakashan. Lucknow.
- 9. **Vashista B.R., Sinha A.K., Kumar A. (2008).** Botany for degree students-Bryophyta, S. Chand's Publication.
- 10. **Agashe S.N. (1995).** Paleobotany. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi.
- 11. **Arnold A.C. (2005).** An Introduction Paleobotany. Agrobios (India), Jodhpur.
- 12. **Rasid A. (1999).** An Introduction to Pteridophyta, Vikas Publishing House Pvt. Ltd. New Delhi.
- 13. **Sporne K.R. (1986).** The morphology of Pteridophytes. Hutchinson University Library, London.
- 14. **Stewart W.N. and Rothwell G.W. (2005).** Paleobotany and the Evolution of Plants. 2nd Edn. Cambridge University Press.
- 15. **Vashista B.R, Sinha A.K., Kumar A. (2008).** Botany for degree students Pteridophyta, S. chand's Publications.
- 16. **Gangulee and Kar (2006).** College Botany. New Central Book Agency.
- 17. **Parihar N.S. (1976).** Biology and Morphology of Pteridophytes. Central Book Depot.
- 18. **Bhatnagar, S.P. and Moitra, A,. 1996.** Gymnosperms. New Age Inernational (P) Ltd. Publishers, New Delhi.
- 19. **Chamberlain, CJ. 1957.** Gymnosperms Structure and Evolution Amazon.com
- 20. **Verma and Chopra 1981.** Text book of Gymnosperms; Pradeep Publications.
- 21. **Jhori, RM, Sneh Lata and Kavia Tyagi, 2012.** A Text book of Gymnosperm. Vedams books. India.
- 22. **Gurcharan Singh Randhawa and Amitabha Mukhopadhyay.** Floriculture in India. Alhed Publishers.
- 23. **Debashish Sengupta and Raj Kamal,** Floriculture Marketing in India. Exeel Books.
- 24. **Floriculture Hand Book,** Eiri, Engineers India Research in Publication.
- 25. **John Mason.** Nursery Management. John Mason, Landinks Press Publisher.
- 26. **Plant Nursery Manangement :** How to start and operate a Plant Nursery. Ray.
- 27. **The complete Book on Organic Farming and Production of Organic Compost.** NPCS Board of Consultants & Engineers. Asia Pacific Business Press Inc.
- 28. The Organic Farming Manual: A Comprehensive Guide to Starting and Running a Certified Organic Farm, Ann Larkin Hansen Storey Publications.
- 29. Hand Book of Mushroom Cultivation, Processing and Packaging, Engineers India Research in Publishers.
- 30. Handbook of seed Science and Technology: Seed biology, Production, and Technology. Amarjit S. Basra, Food Products Press publishers.
- 31. **N. Kumar 2006.** Breeding of Horticultural crops. New India Publishing house.
- 32. **D.K. Asthana and M. Asthana.** A Textbook of Environmental Studies. S. Chand and Company Ltd.
- 33. **T.K. Saha.** Ecology and Environmental Biology. Books and Allied (P) Ltd.

- 34. **M. C. Dash and S.P. Dash. Fundamental of Ecology.** The Tata Mc Graw Hill Company.
- 35. **K.P. Aneja** Experiments in Microbiology, Plant Pathology and Biotechnology. New Age Inernational Publishers.
- 36. A.K. Joshi and B.D. Singh. Seed Science and Technology, Kalyani Publishers.
- 37. **N.C. Singhal.** Seed Science and Technology. Kalyani Publishers.

Semester – II Syllabus for B.Sc. Botany (General) 2014 (Theoretical)

Paper- BT 201 Full Marks - 50

Total Lectures – 33 Periods (Each Period = 1 Hour)

Unit - I: Algae and Bryophyte

(16 Periods)

- 1. General account: 1.1 Thallus organization, 1.2 Economic importance of algae.
- 2. Diatom: 2.1 Cell structure, 2.2 Auxospore formation in Centrales and Pennales.
- 3. Life history: Oedogonium, Chara, Ectocarpus and Polysiphonia.
- 4. General account: 4.1 Origin of Bryophytes, 4.2 Amphibian nature,
- 5. Life history: Gametophyte structure & reproduction, Development of sporophyte, Spore dispersal of 5.1 *Marchantia*, 5.2 *Anthoceros*, 5.3 *Funaria*.
- 6. Evolution of sporophyte Progressive theory.

Unit - II: Pteridophyta, Gymnosperm & Palaeobotany (17 Periods)

- 1. Life history: Sporophyte structure, reproduction and structure of gametophyte of 1.1 *Lycopodium*, 1.2 *Selaginella*, 1.3 *Equisetum*, 1.4 *Pteris*.
- 2. Telome concept & its significance.
- 3. Progymnosperm A brief concept.
- 4. Life histories Distribution in India, vegetative and reproductive structure, Development of gametophyts and embryogeny of 4.1. *Cycas*, 4.2 Pinus 4.3 *Gnetum*.
- 5. Plant fossil 5.1 Types of fossils, 5.2 Different modes of preservation (Schopf 1975).
- 6. Importance of fossil study.
- 7. Geological time scale with dominant plant groups through ages.

Semester – II Syllabus for B.Sc. Botany (General) 2014 (Practical)

Paper-BT 202 Full marks - 50

1.	Work out on algae	10 Marks.
	Work out on Pteridophytes	
	Identifications with reasons (2X7)	
	(Algae-I, Bryophyta-2, Pteridophyta –I, Gymnosperm-2, Paleobotany-I)	
4.	Laboratory Note Book	8 Marks.
	Ving-noce	8 Marks

PRACTICAL: BT-202P

I. To learn use of Simple and Compound Microscopes.

II. ALGAE & BRYOPHYTES

- 1. Work out of the following algae with reproductive structure (Free hand drawing): Oedogonium, Chara, Ectocarpus.
- 2. Study of Permanent slides: Volvax, Polysiphonia.
- 3. Morphological study of the plant body (Bryophytes): Genera as mentioned in theoretical syllabus.
- 4. Study from permanent slides: *Marchantia* (L.S. through gemma cup, antheridiophore, archegoniophore, sporophyte), *Anthoceros* (L.S. of sporophyte), *Funaria* (L.S. of capsule).

III. PTERIDOPHYTES, GYMNOSPERMS & PALAEOBOTANY

- 1. Morphological study of the sporophytic plant body (Pteridophytes): Genera as mentioned in the theoretical syllabus.
- 2. Workout of the reproductive structures: Lycopodium, Selaginella, Pteris.
- 3. Study from permanent slides: *Psilotum* (T.S. of synangium), *Equisetum* (T.S. of steminternode, L.S. of strobilus).
- 4. Morphological study: Cycas (microsporophyll and megasporophyll), *Pinus* (female and male cone), *Gnetum* (female and male cone).
- 5. Study from permanent slides: Cycas (L.S. of ovule), L.S. of male and female cone), *Gnetum* (L.S. of male cone and ovule).
- 6. Study of mega fossils.

IV. LABORATORY RECORDS

Laboratory Note Book of each section must be signed by the respective teacher with date during practical classes.

Semester – II Syllabus for B.Sc. Botany (Major) 2014 (Theoretical)

Paper BT 201H Full Marks - 60

Total Lectures – 48 Periods (Each Period = 1 Hour)

Unit - I: Algae and Bryophyte

(23 Periods)

- 1. General account: 1.1 Thallus organization, 1.2 Ultra-structure of plastid & flagella, 1.3 Origin & evolution of sex.
- 2. Outline classification (Lee-1999) up to phylum with characters.
- 3. Chlorophyceae-Salient features, Life history: Chlamydomonas, Oedogonium.
- 4. Charophyceae Salient features, Life history: Chara.
- 5. Xanthophyceae Salient features, Life history Voucheria.
- 6. Bacillariophyceae (Diatom): 6.1 Cell structure, 6.2 Auxospore formation in Centrales and Pennales.
- 7. Phaeophyceae Salient feautes, Life history *Ectocarpus*.
- 8. Rhodophyceae Salient features, Life history *Polysiphonia*.
- 9. Economic importance of algae.
- 10. General account: 10.1 Origin of Bryophytes, 10.2 Amphibian nature, 10.3 Alteration of generation (Homologous and antithetic theory).
- 11. Life history: Gametophyte structure & reproduction, Development of sporophyte, Spore dispersal of 11.1 *Riccia, Marchantia*, 11.2 *Anthoceros, Pellia*, 11.3 *Funaria*.
- 12. Phyllogeny: 12.1 Evolution of sporophyte (Progressive and regressive theory)
- 13. Importance of Bryophyta.

Unit - II: Pteridophyta, Gymnosperm & Palaeobotany

(25 Periods)

- 1. Life history: Sporophyte structure, reproduction and structure of gametophyte of 1.1 *Psilotum*, 1.2. *Selaginella*, 1.3 *Equisetum*, 1.4, *Pteris*, 1.5. *Marsilea*.
- 2. Fossil Pteridophytes Structure and features, Geological distribution & evolutionary significance of 2.1. *Rhynia*, 2.2. *Lepidodendron* (reconstructed) 2.3. *Calamites* (reconstructed) 2.4. *Miadesmia*.
- 3. Telome concept & its significance.
- 4. Heterospory and seed habit.
- 5. Economic importance as food and medicine.
- 6. Progymnosperm 6.1 Diagnostic characters, 6.2 Vegetative & reproductive structures of *Archeopteris*.
- 7. Life histories Distribution in India, vegetative and reproductive structure, Development of gametophyte and embryogeny of 7.1. *Cycas*, 7.2. *Pinus* 7.3 *Gnetum*.
- 8. Fossil gymnosperms- Structure and features of 8.1 *Lyginopteris*, 8.2 *Williamsonia*, 8.3 *Cordaites*.
- 9. Economic importance with reference to wood, resins, essential oils & drugs.
- 10. Plant fossil 10.1 Types of fossils, 10.2 Different modes of preservation (Schopf 1975), 10.3 Conditions favouring fossilization, 10.4 Importance of fossil study.
- 11. Geological time scale with dominant plant groups through ages.
- 12. Indian Gondwana system.

Semester – II Syllabus for B.Sc. Botany (Major) 2014 (Practical)

Paper- BT 202H Full marks - 40

1.	Work out on algae	8 Marks.
	Work out on Pteridophytes	
3.		
	(Algae-I, Bryophyta-2, Pteridophyta -1, Gymnosperm-2, Paleobotan	y-I)
4.	Laboratory Note Book	,
	Vina-noce	5 Marks

PRACTICAL: BT-202H

I. To learn use of Simple and Compound Microscopes.

II. ALGAE & BRYOPHYTES

- 1. Work out of the following algae with reproductive structure (Free hand drawing and drawing under drawing prism with magnification); *Oedogonium, Chara, Ectocarpus, Polysiphonia.*
- 2. Study of Permanent slides: Volvax, Vaucheria, Polysiphonia.
- 3. Morphological study of the plant body (Bryophytes): Genera as mentioned in theoretical syllabus.
- 4. Study from permanent slides: Riccia (V.S. of thallus with antherdia/archegonia/sporophyte), Marchantia (L.S. through gemma cup, antheridiophore, archegoniophore, sporophyte), Anthoceros (L.S. of sporophyte), Funaria (L.S. of capsule).

III. PTERIDOPHYTES, GYMNOSPERMS & PALAEOBOTANY

- 1. Morphological study of the sporophytic plant body (Pteridophytes): Genera as mentioned in the theoretical syllabus.
- 2. Workout of the reproductive structures: Selaginella, Pteris, Marsilea.
- 3. Study from permanent slides: *Psilotum* (T.S. of synangium), *Lycopodium* (L.S. of strobilus), *Equisetum* (T.S. of stem-internode, L.S. of strobilus).
- 4. Morphological study: *Cycas* (microsporophyll and megasporophyll), *Pinus* (female and male cone), *Gnetum* (female and male cone).
- 5. Study from permanent slides: *Cycas* (L.S. of ovule), *Pinus* (L.S. of male and female cone), *Gnetum* (L.S. of male cone and ovule).
- 6. Study of mega fossils.
- 7. Study from permanent slides: Lepidodendron, Calamites, Lyginopteris, Cordaites, Glossapteris.

IV. LABORATORY RECORDS

Laboratory Note Book of each section must be signed by the respective teacher with date during practical classes.

SEMESTER - III

Syllabus for B.Sc. Botany (Major)

(Theoretical)

Paper-BT301H

Full Marks – 60 (IA – 12, E.S.E. – 48) Total Lectures – 30 (Each Lecture – 1 hr)

Unit I: Fungi and Plant Resource Utilisation

15 Periods

An outline classification of fungi upto class character (Hawksworth – 1995). Economic importance of fungi. Lichens and their significance. Fungal spore form, sexual reproduction and degeneration of sex, Mycotoxins; General account of Phycomycetes, Life history of *Mucor, Synchytrium*; General account of Ascomycetes, Life history of *Penicillium, Ascobolus*; General account of Basidiomycetes, Life history of *Polyporus, Agaricus*; General account of Deuteromycetes, Life history of *Fusarium*, Parasexuality.

Cereal – Rice, Wheat; Pulses – Gram, Moong and Lens; Beverages – Tea and Coffee: Fruits – Mango, Citrus and Papaya; Drug yielding – Cinchona, Rauwolfia, Digitalis and Papver: Spices – Ginger, Cumin and Clove; Oil yielding – Mustard, Groundnut, Coconut and Linseed: Vegetables – Potato, Radish and Cabbage; Fibre yielding – Cotton and Jute; Timber yielding – Teak and Sal; Sugar yielding – Sugarcane and Sugar beet.

Cultivation of Rice, Jute, Rubber and Tea.

Unit II: Microbiology and Plant Pathology

15 Periods

General characteristics of Plant virus and Bacteriophage, Growth cycle (Lytic, T_4 and Lysogenic, λ virus); Bacteria-Cell structure and Endospore formation, Genetic recombination- Conjugation, Transformation and Transduction, Disease concepts, Symptoms-necrotic, hypoplastic and hyperplastic; Necrotrophs and biotrophs, mode of pathogenesis, Defense mechanism with special reference to phytoalexins, Plant quarantine; Koch's postulates, Symptoms, Casual organisms, Disease cycle and Control measures of Late blight of potato, Brown sport of rice, Black stem rust of wheat and Stem rot of Jute.

SEMESTER - III

Syllabus for B.Sc. Botany (General)

(Theoretical)

Paper-BT301P

Full Marks – 50 (IA – 10, E.S.E. – 40) Total Lectures – 28 (Each Lecture – 1 hr)

Unit I: Fungi and Plant Resource Utilisation

14 Periods

An outline classification of fungi upto class character (Hawksworth – 1995). Economic importance of fungi. Lichens and their significance. General account of Phycomycetes, Life history of *Mucor, Synctitricum*; General account of Ascomyctes, Life history study of *Penicillium*; General account of Basidiomycetes, Life history of *Polyporus*; General account of Deuteromycetes, Life history study of *Fusarium*.

Cereal – Rice, Wheat; Pulses – Gram, Moong and Lens; Beverages – Tea and Coffee: Fruits – Mango, Citrus and Papaya; Drug yielding– Cinchona, Rauwolfia, Digitalis and Papaver: Spices– Ginger, Cumin and Clove; Oil yielding– Mustard, Groundnut, Coconut and Linseed; Vegetables– Potato, Radish and Cabbage; Fibre yielding– Cotton and Jute; Timber yielding– Teak and Sal; Sugar yielding – Sugarcane and Sugar beet.

Cultivation of Rice, Jute, Rubber and Tea.

Unit II: Microbiology and Plant pathology

14 Periods

General characteristics of Plant Virus and Bacteriophage, Growth cycle- Lytic (T_4) and Lysogenic (λ virus); Bacteria- Cell structure and Endospore formation, Genetic recombination- Conjugation, Transformation and Transduction; Symptoms-necrotic, hypoplastic and hyperplastic; Koch's postulates, Symptoms, Casual organisms, Disease cycle and Control measures of Late blight of potato, Brown sport of rice and Black stem rust of wheat.

Semester – III Syllabus for B.Sc. Botany (Major) 2014 (Practical)

Time: 3hrs Full Marks - 40 (IA-08, E.S.E.-32)

1.	Woı	rk out on fungi (including measurement	07
2.	Woı	rk out on microbiology	07
3.		ntification with reasons	
	a)	Plant resource utilization	2 specimens
	b)	Plant disease	2 specimens
	c)	Fungi/Microbiology	1 specimen
4.	Lab	oratory note book with submission	(3+1)=04
5.		a-voce	

Practical - BT302H

- 1. Work out of the following fungi with reproductive structures (including microscopic measurement of reproductive structures) *Mucor, Ascobolus, Penicillium, Agaricus, Puccinia, Polyporus.*
- 2. Study from permanent slides: Zygospore of *Mucor*. Conidiophore of *Penicillium*, Conidia of *Fusarium*.
- 3. Preparation of bacterial media (a) Nutrient agar and nutrient broth, (b) Preparation of slants and pouring Petriplates.
- 4. Sub-culturing of bacterial/fungal culture.
- 5. Microscopic examination of bacteria from natural habitat (curd) by Gram staining.
- 6. Preparation of fungal media (PDA).
- 7. Sterilization process.
- 8. Inoculation of pathogen from diseased leaf.
- 9. Identification: Pathological specimens of Brown spot of rice. Loose smut of wheat. Stem rot of jute, Late blight of potato; Slides of uredial, telial, pycnial & aecial stages of *Puccinia graminis*.

Semester – III Syllabus for B.Sc. Botany (General) 2014 (Practical)

Time: 3hrs Full Marks - 40 (IA-10, E.S.E.-40)

1.	Wo	rk out on fungi (including measurement)	07
2.	Wo	rk out on microbiology	07
3.		ntification with reasons	
		Plant resource utilization	
	b)	Plant disease	2 specimens
	c)	Fungi/Microbiology	2 specimens
4.		oratory note book with submission	
		a-voce	

Practical - BT302H

- 1. Work out of the following fungi with reproductive structures (excluding microscopic measurement of reproductive structures) *Mucor, Penicillium, Polyporus*.
- 2. Study from permanent slides: Zygospore of *Mucor*. Conidiophore of *Penicillium*, Conidia of *Fusarium*.
- 3. Microscopic examination of bacteria from natural habitat (curd) by Gram staining.
- 4. Preparation of fungal media (PDA).
- 5. Sterilization process.
- 6. Identification: Pathological specimens of Brown spot of rice. Loose smut of wheat, Stem rot of jute. Late blight of potato; Slides of uredial, telial, pycnial & aecial stages of *Puccinia graminis*.

Semester-IV

Syllabus for B.Sc. Botany (Major)

(Theoretical)

Paper-BT401H

Full marks-60 (IA-12, F.S.F. - 48) Total Lectures – 28 (Each Lecture-1hr)

Unit I: Morphology and Embryology, Taxonomy

14 Periods

Morphology- Inflorescence- types with examples, flower types, floral parts- calyx, corolla (Forms and aestivation), stamens (cohesion and adhesion), carpel (Apocarpous and Syncarpous), Placentation types, fertilization process; Fruits- types; Taxonomy - Nomenclature and rules of ICBN, Magnoliaceae, Poaceae, Orchidaceae, Mimosaceae, Caesalpiniaceae, Fabaceae, Malvaceae, Brassicaceae, Solanaceae, Apocynaceae, Lamiaceae, Rubiaceae and Asteraceae; Embryology- Micro and mega sporogenesis (Monosporic, bisporic and tetrasporic) Development of embryo, development of endosperm.

Unit II: Anatomy, Ecology and Phytogeography

14 Periods

Anatomy-Cell wall (Gross structure and chemical composition), Meristematic and Permanent tissue (structure, distribution and function); Vascular bundles- types, stele- types and evolution, Normal secondary growth; Anomalous secondary growth (Stems of *Boerhaavia*, *Chenopodium*, *Mirabilis*, *Bignonia*, *Nyctanthes*, Root of *Tinospora*); Ecology. Habitat and Niche (preliminary idea), Ecological succession- Hydrosere and Xerosere, Endemism, Ecological adaptation - Hydrophytes and xerophytes, Red Data Book; Ecological adaptation of Halophytes; Phytogeography- Phytogeographical regions of India (D. Chattaerjee-1960); Vegetation of Western and Eastern Himalaya, Sundarban and Tripura.

Semester IV Syllabus for B.Sc. Botany (General) (Theoretical)

Paper-BT401P

Full marks-50 (IA-10, E.S.E.40) Total Lectures – 24 (Each Lecture- 1 hr)

Unit I: Morphology and Taxonomy

12 Periods

Morphology- Inflorescence- types with examples, flower types, floral parts- calyx, corolla (Forms and aestivation), stamens (cohesion and adhesion), carpel (Apocarpous and Syncarpous). Placentation types, fertilization process; Fruits-types: Taxonomy-Magnoliaceae, Poaceae, Orchidaceae, Mimosaceae, Caesalpiniaceae, Fabaceae, Malvaceae. Brassicaceae, Solanaceae, Apocynaceae, Lamiaceae, Rubiaceae and Asteraceae.

Unit 11: Anatomy, Ecology and Phytogeography

12 Periods

Anatomy-Cell wall (Gross structure and chemical composition), Meristematic and Permanent tissue (structure, distribution and function), Vascular bundles- types, steletypes and evolution, Normal secondary growth; Ecology- Habitat and Niche (preliminary idea), Ecological succession- Hydrosere and Xerosere, Endemism, Red Data Book; Phytogeography- Phytogeographical regions of India (D. Chattaerjee-1960): Vegetation of Western and Eastern Himalaya and Tripura.

Semester IV Syllabus for B.Sc. Botany (Major) 2014 (Practical)

Time: 3 hrs

Total marks-40
(1A-08, E.S.E-32)

1. Work out on Angiosperm	
2. Work out on Anatomy	
3. Spotting (2 no.)	03
4. Identification with reasons	
(Morphology-1, Ecology-2, Embryology /Anatomy-1)	
5. Lab notebook and herbarium	$\dots (2+2) = 04$
6. Field record	03
7. Viva voce	04

Practical - BT402H

- 1. Work out on angiospermic plants- specimens to be selected from the families included in the BT 401 theory paper.
- 2. Study of anomalous secondary structures with double staining- *Boerhaevia*, *Bignonia*, *Chenopodium*, *Nyctanthes*, Root of *Tinospora*.
- 3. Identification

Microscopic study of anatomy: types of stomata, sclerides, types of Raphides, Cystolith, laticiferous duct, Aleurone grain.

- 4. Identification with reasons:
 - a) Morphology
 - i) Special types of inflorescence
 - ii) Types of stamens
 - iii) Types of Placentation
 - iv) Fruits- types
 - b) Study of adaptive anatomical features Nymphaea petiole, Nerium leaf
 - c) Embryology Stages of Embryo
- 5. At least 25 herbarium sheets must be submitted.
- 6. Students are required to go for at least 2 field study tours.

Semester IV Syllabus for B.Sc. Botany (General) 2014 (Practical)

Time: 3 hrs

Total marks-50 (1A-10, E.S.E-40)

1. Work out on Angiosperm	10
2. Work out on Anatomy	
3. Spotting identification	
4. Identification with reasons	
(Morphology/Embryology Anatomy-3, Ecology-2)	
5. Lab notebook and herbarium	(3+3) = 06
6. Field record	03
7. <i>Viva voce</i>	04

Practical - BT 402 P

- 1. Work out on angiospermic plants- specimens to be selected from the families included in the theory paper.
- 2. Study of primary structures- Monocot stem, Dicot stem, Dorsiventral leaf, Isobilateral leaf, Monocot root, Dicot root.
- 3. Identification
 - a) Morphology
 - i) Types of Placentation
 - ii) Types of fruits
 - b) Types of stomata, Raphides, Cystolith and Starch grain.
 - c) Adaptive anatomical features of Nymphaea petiole and Nerium leaf.
- 4. At least 15 herbarium sheets must be submitted.
- 5. Students are required to go for at least 1 field study tours.

SUGGESTED READINGS

- 1. Angiosperm Phylogeny Group 2003. An Update of the Angiosperm Phylogeny Group classification for the orders and families of the flowering plants. APG II. Botanical Journal of the Linnaean Society 141: 399-436.
- 2. Crawford, D.J. 2003. Plant Molecular Systematics. Cambridge University Press. Cambridge, UK.
- 3. Cronquist, A. (1981). An integrated system of Classification of Flowering Plants. Columbia University Press. New York.
- 4. Hollingsworth P.M., Bateman, R.M., and Gornall, R.J. 1999. Molecular Systematics of Plant Evolution. Taylor and Francis, London.
- 5. Judd, W.S., Campbell, C.S., Kellogg, E.A., Stevens, P.F. and Donoghue, M.J. 2008. Plant Systematics- A Phylogenetic Approach. Sinaner Associates Inc. Massachusetts, USA.
- 6. Simpson, M.C. 2006. Plant Systematics. Elsevier, Amsterdam.
- 7. Stussy, T.F. 1990. Plant Taxonomy, Columbia University Press, USA.
- 8. Singh, V. and Jain, D.K. Taxonomy of Angiosperms. Rastogi Publication, Meerut 2.
- 9. Pandy, B.P., Angiosperms- Taxonomy, Embryology and Anatomy, S. Chand and Co., New Delhi.
- 10. Raghavan, V. 2000. Developmental Biology of Flowering Plants. Springer, Netherlands.
- 11. Raghavan, V. 1997. Molecular embryology of flowering plants. Cambridge University Press.
- 12. Shivanna, K.R. 2003. Pollen Biology and Biotechnology. Science Publishers.
- 13. Bhojwani, S.S. and Bhatnagar, S.P. 2004. The Embryology of Angiosperms. Vikas Publishing House.
- 14. Johri, B.M. 1984. Embryology of Angiosperms. Springer- Verlag, Netherlands.
- 15. Dickinson, W.C. 2000. Integrative Plant Anatomy. Harcourt Academic Press. USA.
- 16. Fahn, A. 1974. Plant Anatomy. Pergmon Press, USA and UK.
- 17. Mauseth, J.D. 1988. Plant Anatomy. The Benjammin/ Cummings Publisher, USA.
- 18. Esau, K. 1977. Anatomy of Seed Plants. Wiley Publishers.
- 19. Sharma, P.D. 2009. Ecology and Environment, (10th revised Ed.) Rastogi Pub. FIP, Patparaganj, New Delhi- 92.
- 20. Edward, J. Kormondy, 2008. Concepts of Ecology (4th Ed, 2008) Pearson Education Inc. & Dorling Kindersley Pub. Inc. Capital offset Press, New Delhi.
- 21. Smith, T.M. and Smith, R.L. 2008. Elements of Ecology, Benjamin- Cummings, N.Y. (7th Edn.)
- 22. Miller, G.T., 2004. Essentials of Ecology, Brooks, Cole, N.Y. (3rd Edn.)
- 23. Odum and Barrett, Thomson, Ed. Brooks/ Cole, Fundamentals of Ecology, Cengage Learning.
- 24. Singh, Singh and Gupta Ed., Ecology, Environment and Resourses Conservation, Anamaya Pub., New Delhi.
- 25. Odum, E.P., Basic Ecology, Ed. Saunders College Pub.

Marks Distribution of Vth Semester (Elective)

Semester	Theoretical Marks	Practical Marks	Total Marks
Semester- V	50 (IA-10 + ES- 40)	50 (IA-10 + ES- 40)	100

^{*}IA= Internal Assessment; ES= End Semester Examination

Course Structure, Vth Semester (Elective)

Course Title	Full Marks
BT 501 (Theory)	50
(Cell and Molecular Biology, Cytogenetics and Plant Breeding, Plant	
Physiology and Plant Biotechnology)	
BT 502 (Practical)	50
Based on Theory Course- BT 501	

SEMESTER - V

BT - 501 (Theory) Marks: 100 (Elective)

Internal Assessment: 10 40 Periods

End Semester Examination: 40 20 Periods

Unit - I: Cell and Molecular Biology, Cytogenetics and Plant Breeding

Cell cycle and Cell division, Structure and function of Cell Organelles (Nucleus, Mitochondria, Chloroplast, Ribosome), Chromosome morphology and Organization of eukaryotic Chromosome (Nucleosome concept); Structure, forms and salient features of Nucleic Acids (DNA and RNA); DNA replication, Mechanism of DNA replication in Prokaryotes, Transcription: Initiation, elongation and termination in Prokaryotes: Amino-acylation of tRNA, initiation, elongation and termination of polypeptide chain; Gene Mutation: Transition, Transversion and Frame shift mutation, Lac Operon (brief idea).

Mendelian inheritance; Gene interactions: Incomplete Dominance (1:2:1), Modified dihybrid ratio (12:3:1, 9:3:4, 9:7), Crossing Over: Cytological proof of crossing over (McClintock's experiment); Complete and incomplete linkage; Aneuploidy and Euploidy, role of polyploidy in crop improvement; Chromosomal aberration: deletion, duplication, translocation and inversion; Methods of plant breeding: Introduction, emasculation, Hybridization and Acclimatization; Selection: Mass selection and pure selection; Male sterility: Genetic, Cytoplasmic and Cytoplasmic-genetic male sterility; Heterosis and hybrid vigour;

Unit – II: Plant Physiology and Plant Biotechnology 20 Periods

Water potential and its components; Water absorption by roots (apoplastic and symplastic pathways); Photosynthesis: photochemical reactions, Mechanism of electron transport in PS-I and PS-II, Calvin cycle; C3 and C4 plants and photosynthetic efficiency, photorespiration, Crassulacean acid metabolism (CAM); Transpiration and anti-transpirant. Respiration: Gylcolysis, Oxidative Mitohondrial ETS; N-metabolism: Assimilation of Nitrogen, Phosphorylation, Biological Nitrogen fixation: role of nitrogenase in N2 fixation; Photoperiodism: Photoperiodic responses and classification of plants, Photomorphogenesis; Plant growth regulators, physiological role and modes of action (IAA, Gibberellins and Cytokinins).

Totipotency and concept of plant tissue culture, Function and organization of a typical plant tissue culture laboratory: Techniques of plant tissue culture: cell suspension culture technique, protoplast culture technique: Modes of *in vitro* regeneration and applications, Callus culture and applications: Haploid and embryo culture; Transformation: *Agrobacterium* mediated gene transfer.

Semester – V Practical Paper – 502 Full Marks : 50

Internal Assessment: 10

End Semester Examination: 40

- 1. Mitotic Study: Temporary preparation of metaphase chromosomes from root tips of *Allium cepa*.
- 2. Identification with reasons from permanent slides: Different stages of mitosis and meiosis including abnormalities like Sticky Bridge, laggard chromosome(s), chromosomal fragmentation, ring chromosome, early separation.
- 3. Study of pollen sterility by Aceto-carmine staining technique.
- 4. Detection of organic acids: citric, tartaric, oxalic and malic acids from unknown samples.
- 5. Detection of the nature of carbohydrate: glucose, fructose and sucrose from unknown samples.
- 6. Determination of released oxygen during photosynthesis.
- 7. To extract and separate chlorophyll pigment by chromatography.
- 8. Relationship between transpiration and evaporation.
- 9. Measurement of oxygen uptake by respiring tissue (per g/hr).
- 10. Effect of temperature on absorption of water by storage tissue and determination of Q_{10} .
- 11. Comparison of imbibitions of water by starchy, proteinaceous and fatty seeds.
- 12. Demonstration and function of autoclave, laminar airflow, pH meter and culture room.
- 13. Aseptic techniques of explants culture.

Laboratory records:

1. Laboratory note book of each section must be signed by the respective teacher with date during practical classes.

Semester – V Practical – Paper 502

End Semester Examination - 40

Question Pattern:

1.	Mitotic Study: Temporary preparation of metaphase chromosomes from material provided.	root tips of 08
2.	Identification with reasons (any two –Identification– 1, Reasons– 1)	(2x2)=04
3.	Experiment on biochemical works as per practical workout.	05
4.	To perform a major physiological experiment from the list of the experiments as pe	
	contents of practical syllabus.	10
4.	Demonstration on Plant tissue culture technique.	05
6.	Practical Note Book.	04
7.	Viva voce	04

Marks Distribution of Vth & VIth Semester (Major)

Semester	Theoretical Marks	Practical Marks	Total Marks
Semester- V	100 (IA-20+ ES-80)	100 (IA-20+ ES-80)	200
Semester- VI	100 (IA-20+ ES-80)	100 (IA-20+ ES-80)	200
Total	200	200	400

^{*}IA= Internal Assessment; *ES= End Semester Examination

Course Structure, Vth & VIth Semester (Major)

Course Title	Full Marks
BT- 501 (Theory)	100
(Cell Biology, Molecular Biology, Cytogenetics, Plant breeding and	
Biostatistics)	
BT- 502 (Practical)	100
Based on Theory Course- BT 501	
BT- 601 (Theory)	100
(Biochemistry, Plant Physiology, Pharmacognosy, Plant Biotechnology)	
BT- 602 (Practical)	100
Based on Theory Course- BT 601	

SEMESTER - V (MAJOR) BT - 501 (Theory) Marks: 100

Internal Assessment: 20 56 Periods

End Semester Examination: 80

Unit - I: Cell Biology

14 Periods

Cell cycle and Cell division, equational and reductional division with respect to 'C' value, Cell cycle regulation, Theories of anaphasic movement; Structure and function of Cell Organelles (Nucleus, Mitochondria, Chloroplast, ER, Golgi Apparatus, Peroxisomes and Glyoxysomes, Ultra-structure of ribosome in Prokaryotes and Eukaryotes) Plasma membrane— Structure (Fluid mosaic model) and function; Chromosome morphology and Organization of Eukaryotic Chromosome (Nucleosome concept); Centromere and telomere— structure and function; Organization of cp and mt DNA and their significance; Apoptosis.

Unit - II : Molecular Biology

14 Periods

Structure, forms and salient features of Nucleic Acids (DNA and RNA); DNA replication – Semi-conservative replication in Prokaryotes with proof (Meselson and Stahl's Experiment), Mechanism of DNA replication in Prokaryotes, Genetic code: Properties, deciphering of genetic code; Transcription: Initiation, elongation and termination in Prokaryotes. Translation in Prokaryotes: Amino-acylation of RNA, initiation, elongation and termination of polypeptide chain; Gene Mutation: Transition, Transversion and Frame shift mutation, Effects of chemical mutagens (Base analogues and Nitrous acid) Physical agents (UV rays); DNA damage and repair, Concept of Lac Operon (Positive and Negative control). Restriction enzymes: types and function; PCR and its application (A brief idea).

Unit - III: Cytogenetics

14 Periods

Mendelian inheritance; Gene interactions: Incomplete Dominance (1:2:1), Modified dihybrid ratio (12:3:1, 9:3:4, 9:7, 9:6:1, 13:3), Atavism, Pleiotropism; Polygenic inheritance in plant (15:1); Crossing Over: Cytological proof of crossing over (McClintock's experiment); Molecular basis of Crossing Over; Complete and incomplete linkage, Thee point test cross, Problems on Gene Mapping; Sex linked trait and sex linked inheritance; Aneuploidy and Euploidy, role of polyploidy in crop improvement; Chromosomal aberration: Types and meiotic behavior of deletion, duplication, translocation and inversion; Molecular mapping – FISH technique; Bioinformatics: Genomics and proteomics (A brief idea).

Unit - IV: Plant Breeding and Biostatistics

14 Periods

Methods of plant breeding: Introduction, emasculation, Hybridization and Acclimatization; Selection: Mass selection and pure selection; Male sterility: Genetic, Cytoplasmic and Cytoplasmic-genetic male sterility; Heterosis and hybrid vigour; Collection of data (Variable and attribute, Primary and Secondary data, Population and sample); Types of charts and diagrams: Frequency distribution (Simple, Grouped and Cumulative); Measures of Central tendency: Mean Mode and Median; Measure of dispersion: Mean deviation and Standard Deviation; Standard Error; Correlation and Coefficient of Correlation (r); Student t-test; Chi Square test for goodness of fit; Classical definition of Probability, Addition and Multiplication rules.

Pattern of Question Setting (Major) BT-501 & BT-601

1. Short Questions 10 marks – Compulsory

From the rest of 70 marks, there would 2 questions of 14 marks each from each unit, Candidate will answer any five questions taking at least one from each unit.

Each a unit of 14 marks may be subdivided into 2 to 3 parts having a maximum of eight marks for a part.

Semester - V Practical Paper - 502

Full Marks: 100

Internal Assessment: 20

End Semester Examination: 80

- 1. Mitotic Study: Temporary preparation of metaphase chromosomes from root tips of *Allium cepa* and *Lens esculenta* and determination of their somatic chromosome number.
- 2. Study of mitotic index in *Allium cepa* L.
- 3. Meiotic Study: Temporary preparation of prophase I (Diplotene and diakinesis), Metaphase I and Anaphase I from flower buds of *Allium cepa, Rhoeo sp* and *Datura* sp.
- 4. Identification with reasons from permanent slides: Different stages of mitosis and meiosis including abnormalities like Sticky Bridge, laggard chromosome(s), chromosomal fragmentation, ring chromosome, early separation.
- 5. Study of pollen sterility by Aceto-carmine staining technique.
- 6. Demonstration of emasculation technique.
- 7. Graphical representation of statistical Data.
- 8. Statistical analysis of Mean, Mode, Median, Standard deviation, Standard error and T-Test.
- 9. Determination of goodness of fit in normal and modified dihybrid ratios.

Laboratory records:

1. Laboratory note book of each section must be signed by the respective teacher with date during practical classes.

Semester – V Practical – Paper 502

Mitotic Study: Temporary preparation of metaphase chromosomes from root tips of

End Semester Examination - 80

1.

7.

Viva voce.

2.	Study of mitotic index in <i>Allium cepa</i> L.	
	Or	
	Temporary preparation of meiosis from the supplied material (Any one sta	
	suggested practical works)	10
	Or	
3.	Identification with reasons (any three -Identification - 1, Reasons - 2)	(3x3)=9
4.	Study of pollen sterility by Aceto-carmine staining technique.	
	Or	
	Demonstration of emasculation technique	10
5.	Statistical analysis of the experimental data as included in the syllabus.	15
6.	Practical Note Book and Submission of permanent cytological slides.	(7+3)=10

10

material provided and determination of their somatic chromosome number.

BT - 601 (Theory) Marks: 100 (Major)

SEMESTER - VI

Internal Assessment: 20 56 Periods

End Semester Examination: 80

Unit - I: Biochemistry

14 Periods

Structure and properties of water, co-valent and non-covalent bonds, hydrogen bonds, Vander Waal's forces, pH, buffer and isoelectric points; Carbohydrate: Classification, structure and properties; Lipids: Classification and function: Protein: Classification and structure (Primary, Secondary, Tertiary and Quaternary structure); Amino acids: Structure, charge and polarity; essential amino-acids; Enzyme: Classification and function, Isozymes, Allosteric enzymes and Coenzymes; Glycolysis, conversion of pyruvic acid to Acetyl Co-A, TCA cycle; Membrane chemistry, transport and mechanism of ion uptake; Signal transduction pathway and second messenger concept-G protein.

Plant physiology: 14 Periods

Water potential and its components; Water absorption by roots (apoplastic and symplastic pathways); Photosynthesis: Components of photosynthesis, Types of chlorophyll and carotenoids and their structures and functions; Red drop effect and Enhancement effect, Antenna complex, photochemical reactions, Mechanism of electron transport in PS-I and PS-II, Calvin cycle; HSK pathway; C₃ and C₄ plants and photosynthetic efficiency, photorespiration, Crassulacean acid metabolism (CAM); Stomatal physiology; role of CO₂ ions, ABA and light, transpiration and antitranspirant. Respiration: Oxidative Phosphorylation, Mitochondrial ETS and uncouplers, PP pathway; N-metabolism: Assimilation of Nitrogen, Biological Nitrogen fixation: symbiotic fixation; 'nod' genes and 'nif' genes, role of nitrogenase in N2 fixation; Photoperiodism: Photoperiodic responses and classification of plants, Photomorphogenesis; Phytochromes Clock as photoreceptor Photoperiodism, Vernalization, Florigen and transition to flowering; Plant growth regulators, physiological role and modes of action (IAA, Gibberellins and Cytokinins), Brassinosteriods, polyamines.

Unit - III: Pharmacognosy:

14 Periods

Importance of pharmacognosy in modern medicine; Drugs: crude and commercial drugs; Method of commercial drug production, drug adulteration; Classification and evaluation of drugs: organoleptic, microscopic, chemical and physical evaluation; Secondary metabolites and secondary metabolic biosynthetic pathways; Major types of secondary metabolites with source plants: Flavonoids, steroids, terpenoids, resins, phenolics and alkalids; Organoleptic study of whole plant of *Andrographis paniculata*, Bark of *Alstonia* sp., Rhizome of Ginger, Tuber of *Dioscoria* sp., Leaves of *Adhatoda* sp.

Unit - IV: Plant Biotechnology

14 Periods

Totipotency and concept of plant tissue culture; Function and organization of a typical plant tissue culture laboratory; Techniques of plant tissue culture: cell suspension culture technique, protoplast culture technique, Meristem tip culture technique; Modes of *in vitro* regeneration and applications; *In vitro* exudation and remedial Measures; Callus culture and applications; Haploid and embryo culture; Prokaryotic vector system and marker genes; Transformation: *Agrobacterium* mediated gene transfer, Particle Bombardment method.

Practical BT - 602 (H) Full Marks - 100

Internal Assessment: 20

End Semester Examination: 80

Section: A

- 1. Detection of organic acids: citric, tartaric, oxalic and malic acids from unknown samples.
- 2. Detection of the nature of carbohydrate: glucose, fructose, sucrose and starch from unknown samples.
- 3. Detection of Ca, Mg, Fe and S from plant ash sample.
- 4. Estimation of acidity from lemon by titration method.
- 5. Colorimetric estimation of protein by Folin phenol reagent.

Section: B

- 6. Estimation of Catalase activity in plant samples.
- 7. Effect of CO_2 on the rate of photosynthesis.
- 8. To extract and separate chlorophyll pigment by chromatogram.
- 9. Determination of loss of water per stomata per hour.
- 10. Relationship between transpiration and evaporation.
- 11. Measurement of oxygen uptake by respiring tissue (per g/hr).
- 12. Determination of the RQ of germinating seeds.
- 13. Measurement of osmotic pressure of *Rhoeo* leaf by plasmolytic method.
- 14. Effect of temperature on absorption of water by storage tissue and determination of O_{10} .
- 15. Comparison of imbibitions of water by starchy, proteinaceous and fatty seeds.

Section: C

- 16. Study of Palisade ratio and Vein islet no.
- 17. Chemical tests for Steroids and Alkaloids.
- 18. Powder microscopy of the plant samples as per contents of the syllabus.

Section: D

- 19. Demonstration and function of autoclave, laminar airflow, pH meter and culture room.
- 20. Aseptic techniques of explants culture.

Laboratory records:

1. Laboratory note book of each section must be signed by the respective teacher with date during practical classes.

Practical BT - 602

Full Marks - 100

End Semester Examination: 80

1.	Experiment on biochemical works as per practical workout (A)	14
2.	To perform a major physiological experiment from the list of the experiments	as per
	contents of practical syllabus (B)	22
3.	Work out on pharmacognosy (C)	12
4.	Demonstration on Plant tissue culture technique (D)	12
5.	Practical Note Book	10
6.	Viva voce	10

Books and references:

- 1. Plant Cell Tissue and Organ Culture. O.L. Gamborg and G.C. Phillips. Narosa, 1995. ISBN. 81-7319-1018. New Delhi.
- 2. Plant T Culture: Basic and Applied. T.B. Jha and B. Ghosh. Universities Press. Pvt. Ltd. ISBN. 81-73714886. Hyderabad.
- 3. Plant Tissue Culture. M.K. Razdan, Oxford & IBH Pub. LTD.ISBN. 81-2041571-X. New Delhi.
- 4. Karp, G. 2010. Cell and Molecular Biology: Concepts and Experiments. 6th edition. John Wiley & Sons. Inc.
- 5. De Robertis, E.D.P. and De Robertis, E.M.F. 2006. Cell and Molecular Biology. 8th edition.
- 6. Lippincott Williams and Wilkins, Philadlphia.
- 7. Cooper, G.M. and Hausman, R.E. 2009. The Cell: A Molecular Approach. 5th edition. ASM.
- 8. Press & Sunderland, Washington, D.C.; Sinauer Associates, MA.
- 9. Becker, W.M., Kleinsmith, L.J., Hardein. J. and Bertoni, G.P. 2009. The World of the Cell. 7th edition Pearson Benjamin Cummings Publishing, San Francisco.
- 10. Watson, J.D., Baker T.A., Bell, S.P., Gann, A., Levine, M., and Losick, R., 2008. Molecular.
- 11. Biology of the Gene 6th edition. Cold Spring Harbour Lab. Press, Pearson Pub.
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- 13. B.B. Buchanan, W. Gruissem and R.L. Jones. USA (2000). Biochemistry and Molecular Biology of Plants. Ed. ASPP Press.
- 14. Gardner, E.J., Simmons, M.J., Snustad, D.P. (2008). VIII ed. Principles of Genetics. Wiley India.
- 15. Snustad, D.P., Simmons, M.J. (2009). Principles of Genetics. V Edition. John Wiley and Sons Inc.
- 16. Klug, W.S., Cummings, M.R., Spencer, C.A. (2009). Concepts of Genetics. XI Edition. Benjamin Cummings.
- 17. Russell, P.J. (2009). iGenetics-A Molecular Approach. III Edition. Benjamin Cummings.
- 18. Glick, B.R., Pastemark, J.J. (2003) Molecular Biotechnology-Principles and Applications of recombinant DNA. ASM Press, Washington.
- 19. Pevsner, J. (2009). Bioinformatics and Functional Genomics. II Edition. John Wiley & Sons.
- 20. Griffiths, A.J.F., Wessler, S.R., Lewontin, R.C. and Carroll, S.B.IX Edition. Introduction to Genetic Analysis. W.H. Freeman and Co.
- 21. Gupta, P.K., A Text Book of Cytology, Genetics and Evolution, Rastogi Publication, Meerut.
- 22. Mukhopadhyay P. (1999): Applied Statistics, New Central Book Agency Pvt. Ltd., Calcutta. 5. Goon A.M., Gupta M.K. and Dasgupta B. (1986): Fundamentals of Statistics, Vol. II, World Press, Calcutta. N.G. Das. Principles of Statistics. Vol I & II.
- 23. Taize, L & Zeiger, E., 2011, Plan Physiology, Sinauer associates Inc. Publishers, Sunderland, Massachusetts, USA.
- 24. Hopkins, W.G., Huner, N.P.A., 2011, Introduction to Plant Physiology, Wiley International Edition, John Wiley & Sons, USA.
- 25. Srivastava, H.S., 2008, Plant Physiology & Biochemistry, Rastogi publications, Meerut, India.
- 26. Hopkins, W.G., and Hunter, NPA, 2011, Introduction to Plant Physiology, Wiley International Edition, John Wiley & Sons, USA.

- 27. Srivastava, H.S., 2008, Plant Physiology & Biochemistry, Rastogi publications, Meerut, India.
- 28. Buchanan, B., Gruissem, W., & Jones, R.L., 2002, Biochemistry and Molecular Biology of Plants. American Society of Plant Biologists, USA.



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Suryamaninagar

SYLLABUS

OF

Human Physiology (Hons.)

Semester- I

HUMAN PHYSIOLOGY (HONOURS)

Semester 01

Paper 01 (H1)

Total Marks — 100

Unit I: Structural Units of Human System (25)

- General concept of structure and function of cell organelles of Eukaryotic cell: Endoplasmic reticulum, Golgi body, Mitochondria, Nucleus, Lysosomes, Peroxisomes, Ribosomes, Cytoskeletal system, Cell junction, Cell inclusions.
- 2. Modem concept of membrane structure models, membrane transport: Active and passive transport. carrier proteins, ion-channels, ion-pumps, symport, antiport.
- 3. Ultra-structure of mitochondria: Inner and outer membrane, mitochondrial transport.
- 4. Nucleus: nucleolus, nuclear membrane. pores, transport. chromosome.
- 5. Cytoskeleton: Classification, physiological functions.
- 6. Concept of cell cycle: Phases of cell cycle, phases and differences between mitosis and meiosis.
- 7. Concept and differences of necrosis and apoptosis.
- 8. General structure and Function of different Types of tissues.
- 9. Musculo-skeletal system:
 - a. Smooth, skeletal and cardiac muscle structure (macromolecular), movements of skeletal muscle, Flexion, extension, abduction, adduction.
 - b. Skeletal system: Bones, structure and types, Cartilage and Ligament, Joints- types, description and function, Arthritis, Osteoporosis.

Unit II: Biophysical and Biochemical Principle (25)

- 1. Biophysical processes- Osmosis, diffusion, surface tension and viscosity- definition, biological significance. basic concept of homeostasis: Factors influencing.
- 2. Donnan membrane equilibrium- its biological applications and relation with osmotic pressure and pH.
- 3. Acid bases, pH, Buffers: Definition, biological significance, Handerson-Hasselbach equation, mathematical problems on pH and buffers.
- 4. Colloids- Classification, properties: Protective colloids and biological importance of colloids.
- 5. Dialyses and ultra-filtration: definition, biological significance.

- 6. Radioactivity- Isotopes and their major biological applications. Radiation hazards on human.
- 7. Fundamental idea of subcellular fractionation: use of centrifugation; principles of chromatography and electrophoresis, paper chromatography, polyacrylamide gel electrophoresis.

Unit III: Blood, Other Body Fluids and Clinical Hematology (25)

- 1. Composition and general functions of blood. Plasma proteins: types and Functions.
- 2. Bone marrow: general structure and functions. Hemopoetic stem cells
- 3. Erythropoiesis and its factors influencing. Leucopoiesis, Thrombopoiesis.
- 4. Blood volume: Hypervolemia, hypovolemia factors affecting blood volume.
- 5. Structure, Synthesis, function and degradation of hemoglobin.
- 6 Hemostasis, blood coagulation mechanisms.
- 7. Lymph and tissue fluid: Composition, Origin, formation, circulation and functions. Oedema: types and causes, Compartmentation of fluid in the body.
- 8. Blood indices: TC. DC, PCV, MCV, MCHC, Colour Index, Arneth and Schilling Index, ESR- their determination and significances.
- 9. Anemia: types, causes and preventive measures, Thalassemia, Hemoglobinopathies, Leucocytosis, Leucopenia, Leukemia, Purpura- basic concept.
- 10. Concept of Jaundice and its types, features.
- 11. Disorder of coagulation, hemophilia, types and reasons, BT, CT and PT, Anticoagulants and their mode of action, prevention of intravascular coagulation.
- 12. Blood groups: Biochemical characteristics of ABO and Rh system- their determination, transfusion hazards and precautionary measures.

Unit IV: Biochemistry and Enzymology (25)

- 1. Definition, chemistry and classification of carbohydrate, protein, lipids and amino acidsphysiological significance and functions.
- Properties of carbohydrates: isomerism -types, functional groups, osazone reaction, polarimeter.
- 3. Polysaccharides (starch, glycogen, dextrin, cellulose): Their structure, occurrence and

- physiological significance.
- 4. Mucopolysaccharides, glycosides- structure and function.
- 5. Amino acids, peptides and protein: effect of pH, Zwitterion; primary, Secondary (alpha helix, beta sheet, globular structure), tertiary, quintenary structures of proteins; coagulation, denaturation, salting in, setting out.
- 6. Fats and fatty acids: properties, hydrolysis, hydrogenation, saponification number, iodine number, rancidity, mono and poly unsaturated fatty acids and their significance.
- 7. Sterols: chemical nature, structure, classification and physiological importance.
- 8. Enzymology: Enzyme-definition, classification, activation energy, mechanism and enzyme action.
- 9 Definition and significance of Km value, effect of temperature, pH on enzyme action.
- 10. Enzyme regulation: Allosteric regulation and covalent modifications, regulation of Enzyme synthesis.
- 11. Enzyme inhibition: their types, mechanism.

Add on topics:

- 1. Cell Signaling mechanism and techniques- basic idea.
- 2. Agarose gel electrophoresis.
- 3. Allosteric enzyme.
- 4. Wound Healing-general Idea
- 5. Cell Cycle regulation
- 6. Ramachandran plot
- 7. Ordered Bi-Bi reaction mechanism of enzyme action.

- i. The Cell Cooper.
- ii. Medical physiology Guyton & Hall.
- iii. Text Book of Physiology A. K. Jain.
- iv. Essentials of medical physiology K. Sembulingam; Prema Sembulingam.
- v. Biochemistry U. Satyanarayan and U. Chakrapani
- vi. Principles of Biochemistry- D. Das
- vii. Principles of Biophysics- D. Das



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SYLLABUS

OF

Human Physiology

(General)

Semester- I

HUMAN PHYSIOLOGY (GENERAL)

Semester 01

Paper 01 (G1)

Total Marks — 100

Unit I: Structural Units of Human System (25)

- General concept of structure and function of cell organelles of Eukaryotic cell: Endoplasmic reticulum, Golgi body, Mitochondria, Nucleus, Lysosomes, Peroxisomes, Ribosomes, Cytoskeletal system, Cell junction, Cell inclusions.
- 2. Modem concept of membrane structure models, membrane transport: Active and passive transport. carrier proteins, ion-channels, ion-pumps, symport, antiport.
- 3. Cytoskeleton: Classification, physiological functions.
- 4. Concept of cell cycle: Phases of cell cycle, phases and differences between mitosis and meiosis.
- 5. Concept and differences of necrosis and apoptosis.
- 6. General structure and Function of different Types of tissues.
- 7. Musculo-skeletal system:
 - a. Muscle: Smooth, skeletal and cardiac muscle structure (macromolecular).
 - b. Skeletal system: Bones, structure and types, Cartilage and Ligament, Joints- types, description and function, Arthritis, Osteoporosis.

Unit II: Biophysical and Biochemical Principle (25)

- 1. Biophysical processes- Osmosis, diffusion, surface tension and viscosity- definition, biological significance. basic concept of homeostasis: Factors influencing.
- 2. Donnan membrane equilibrium- its biological applications and relation with osmotic pressure and pH.
- 3. Acid bases, pH, Buffers: Definition, biological significance, Handerson-Hasselbach equation, mathematical problems on pH and buffers.
- 4. Colloids- Classification, properties: Protective colloids and biological importance of colloids.
- 5. Dialyses and ultra-filtration: definition, biological significance.
- 6. Radioactivity- Isotopes and their major biological applications. Radiation hazards on human.
- 7. Principles of chromatography and electrophoresis.

Unit III: Blood, Other Body Fluids and Clinical Hematology (25)

- 1. Composition and general functions of blood. Plasma proteins: types and Functions.
- 2. Bone marrow: general structure and functions. Hemopoetic stem cells
- 3. Erythropoiesis and its factors influencing. Leucopoiesis, Thrombopoiesis.
- 4. Blood volume: Hypervolemia, hypovolemia factors affecting blood volume.
- 5. Structure, Synthesis, function and degradation of hemoglobin.
- 6 Hemostasis, blood coagulation mechanisms.
- 7. Lymph and tissue fluid: Composition, Origin, formation, circulation and functions. Oedema: types and causes, Compartmentation of fluid in the body.
- 8. Blood indices: TC. DC, PCV, MCV, MCHC, Colour Index, Arneth and Schilling Index, ESR- their determination and significances.
- 9. Anemia: types, causes and preventive measures, Thalassemia, Hemoglobinopathies, Leucocytosis, Leucopenia, Leukemia, Purpura- basic concept.
- 10. Concept of Jaundice and its types, features.
- 11. Disorder of coagulation, hemophilia, types and reasons, BT, CT and PT, Anticoagulants and their mode of action, prevention of intravascular coagulation.
- 12. Blood groups: Biochemical characteristics of ABO and Rh system- their determination, transfusion hazards and precautionary measures.

Unit IV: Biochemistry and Enzymology (25)

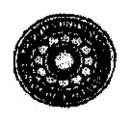
- 1. Definition, chemistry and classification of carbohydrate, protein, lipids and amino acidsphysiological significance and functions.
- 2. Properties of carbohydrates: isomerism -types, functional groups, osazone reaction, polarimeter.
- 3. Polysaccharides (starch, glycogen, dextrin, cellulose): Their structure, occurrence and physiological significance.
- 4. Mucopolysaccharides, glycosides- structure and function.
- 5. Amino acids, peptides and protein: effect of pH, Zwitterion; primary, Secondary (alpha helix, beta sheet, globular structure), tertiary, quintenary structures of proteins; coagulation, denaturation, salting in, setting out.
- 6. Fats and fatty acids: properties, hydrolysis, hydrogenation, saponification number, iodine number, rancidity, mono and poly unsaturated fatty acids and their significance.

- 7. Sterols: chemical nature, structure, classification and physiological importance.
- 1. Enzymology: Enzyme-definition, classification, activation energy, mechanism and enzyme action.
- 9. Definition and significance of Km value, effect of temperature, pH on enzyme action.
- 10. Enzyme regulation: Allosteric regulation and covalent modifications, regulation of Enzyme synthesis.
- 11. Enzyme inhibition: their types, mechanism.

Add on topics:

- 1. Cell Signaling mechanism and techniques- basic idea.
- 2. PAGE and Agarose gel electrophoresis- basic idea.
- 3. Allosteric enzyme.
- 4. Multi enzyme system.
- 5. Wound Healing-general Idea
- 6. Cell Cycle regulation.

- i. Human Physiology CC Chatterjee
- ii. The Cell Cooper.
- iii. Medical physiology Guyton & Hall.
- iv. Essentials of medical physiology K. Sembulingam; Prema Sembulingam.
- v. Biochemistry U. Satyanarayan and U. Chakrapani
- vi. Principles of Biochemistry- D. Das



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SYLLABUS

OF

Human Physiology (Hons.)

Semester- II

HUMAN PHYSIOLOGY (HONOURS)

Semester 02

Paper 02

Total Marks — 100

THEORY (H2A)

Total Marks — 60

Unit -V: Physiology of Excitable Cell (30)

- 1. Structure, properties and classification of nerve cell and fibres.
- 2. Degeneration and regeneration of nerve fibres.
- 3. Properties of nerve fibres, modern concept of generation of resting potential, generator potential,
- 4. Action potential. Propagation of nerve impulse.
- 5. Structure of synaptic junction. Properties of synapse. Classification.
- 6. Transmission of nerve impulse across the synaptic junction.
- 7. Neuro-muscular junction-structure
- 8. propagation of nerve impulse across the neuro-muscular junction.
- 9. Mechanism of transduction of stimuli from sensory receptor.
- I0. Reflex arc & reflex action. Properties of reflex action, classification of reflexes.
 Conditioned and unconditioned reflexes.
- 11. E-C coupling, sliding filament theory, Modern concept of muscle contraction, isotonic and isometric contraction.

Unit -VI: Cardio vascular system (30)

- 1. Anatomy of the heart, innervations of heart and blood vessels.
- 2. Junctional tissues of heart, origin and spread of cardiac impulse, conduction defects: arrhythmia, AV block, bundle branch block.
- 3. Cardiac output, measurements, factors controlling cardiac output.
- 4. Heart sounds-significances, murmur-causes
- Blood pressure: factors affecting blood pressure, regulation of blood pressure with special reference to sino-aortic mechanism. Bradycardia, Tachycardia, hyper-tension: primary and secondary.

- 6. E.C.G: different lead systems, different waves and intervals, their significances.
- 1. Einthoven's law, determination of electrical axis, significance.
- 2. Courses, peculiarities of coronary circulation.
- 3. Atherosclerosis, CHD, Cardiac failure, Angina pectoris, CVS shock, mitral stenosis,
- 4. Hemorrhage effects and compensatory adjustment.

Add on topics:

- 1. Walk along theory of muscle contraction.
- 2. Muscular dystrophy.
- 3. Role of Ca++ and ATP in muscle contraction.
- 4. Angioplasty, pacemaker implantation.
- 5. How to keep our heart healthy.
- 6. Obesity and its impact on human health
- 7. Metabolic syndrome

- i. Text Book of Physiology A. K. Jain.
- ii. Essentials of Medical Physiology Anil Baran Singha Mahapatra; G S Mahaptra.
- iii. Guyton and Hall text book of Medical Physiology John E. Hall; Michael E Hall.
- iv. Ganong's Review of Medical Physiology- Kim E Barrett; Susan M Barman; Jason Yuan.

PRACTICAL (H2B)

Total Marks — 40

A) Hematological Experiments:

10 marks

- 1) Preparation of blood film, identification of different blood cells.
- 2) Total count of RBC and WBC, Differential count, Arneth count.
- 3) Determination of hemoglobin concentration.
- 4) Determination of MCV, MCH, MCHC.
- 5) Blood group determination.
- 6) Coagulation time, bleeding time and ESR.
- 7) Preparation of Hemin crystal.

B) Measurement of Heart rate, blood pressure, effect of posture: 06 marks

C) Study of microscope and squamous epithelium 04 marks

D) Study of human skeleton 04 marks

Examination:

End term: 32 marks

Internal assessment: 8 marks

End term:

a. Experiment- 24

b. Viva- voce- 4

c. Lab note book - 4



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SYLLABUS

OF

Human Physiology

(General)

Semester- II

HUMAN PHYSIOLOGY (GENERAL)

Semester 02

Paper 02

Total Marks — 100

THEORY (G2A)

Total Marks — 50

Unit V: Cardiovascular and Respiratory Systems (25)

Cardiovascular System:

- 1. Anatomy of human heart and its innervations, course of circulation of blood through it.
- 2. Properties of cardiac muscle and junctional tissues, origin and spread of cardiac impulse.
- 3. Cardiac cycle and heart sound; significance of different heart sounds.
- 4. Cardiac output- its determination and factors controlling cardiac output- regulation of cardiac output.
- 5. Hear rate- factors controlling it, tachycardia, bradycardia.
- 6. Blood pressure- regulation of blood pressure, concept of hypertension.
- 7. Atherosclerosis, coronary thrombosis.
- 8. E.C.G. different lead systems, different waves and intervals, their significances.
- 9. Einthoven's law, determination of electrical axis.

Respiratory system:

- 10. Anatomy of respiratory tree and histology of trachea, alveoli, lung compliance, surfactants, airways resistance.
- 11. Respiratory muscles, mechanism of respiration.
- 12. Regulation of respiration.
- 13. Transport of respiratory gases, oxygen dissociation curve, factors affecting dissociation curve and their significances.
- 14. Spirometry, lung volume and capacity.
- 15. Coronary and pulmonary circulation.

Unit VI: Digestion and Metabolism (25)

Digestion:

I. Anatomy, histology and function of alimentary tract and digestive glands.

- 2. Composition of different digestive juices, mechanism of secretion. Formation of saliva. HCl, gastric juice, pancreatic juice, bile-functions.
- 3. Digestion and absorption: Carbohydrates, Proteins, Fats.
- 4. Movements of alimentary tract.
- 5. Absorption of Iron, Vitamin B12, Calcium.
- 6. Gastrointestinal hormones- gastrin, secretin, CCK: source and function.

Metabolism:

- 7. Enzymatic steps in glycolysis, TCA cycle, Cori cycle and their significance. HMP pathway and its significance.
- 8. Glycogenesis, glycogenolysis, gluconeogenesis.
- 9. Energy during glycolysis and TCA cycle, brief description of E.T.C, oxidative phosphorylation.
- 10. Beta oxidation: steps, energy change. ketone bodies, prostaglandins-significance.
- 11. Deamination and transamination of amino acids. Urea formation.

Add on topics:

- 1. Angina pectoris, Angioplasty.
- 2. Dietary time management
- 3. Cellular respiration and metabolism basic idea and relationship.
- 4. Vomiting and Defecation reflex.
- 5. Disorders of GI tract.
- 6. Obesity and its impact on human health
- 7. Metabolic syndrome

- i. Human Physiology CC Chatterjee.
- ii. Text Book of Physiology A. K. Jain.
- iii. Essentials of Medical Physiology Anil Baran Singha Mahapatra; G S Mahaptra.
- iv. Ganong's Review of Medical Physiology- Kim E Barrett; Susan M Barman; Jason Yuan.

PRACTICAL (G2B)

Total Marks — 50

A) Hematological Experiments:

07 marks

- 1. Preparation of blood film and identification of blood cells.
- 2. Arneth count, differential count.
- 3. Estimation of hemoglobin.
- 4. Total count of RBC and WBC.
- 5. Blood group determination.
- 6. Coagulation time and bleeding time.
- 7. Preparation of Hemin crystal.

B) Measurement of blood pressure, heart rate.

07 marks

C) Study of microscope and squamous epithelium.

05 marks

D)Qualitative identification of physiological important substances-

07 marks

HCL, Lactic acid, Uric acid, Albumin, Peptone, Gelatine, Starch, Dextrin, glucose,

Fructose, Lactose, Maltose, Sucrose, Urea, Bile salt, acetone, glycerol.

E) Study of human skeleton.

04 marks

Examination:

End term: 40 marks

Internal assessment: 10 marks

End term:

a. Experiment- 30

b. Viva-voce- 5

c. Lab note book - 5



(A Central University)
Suryamaninagar

SYLLABUS

OF

Human Physiology

(Hons.)

Semester- III

HUMAN PHYSIOLOGY (HONOURS)

Semester 03

Paper 03

Total Marks — 100

THEORY (H3A)

Total Marks — 60

Unit VII: Metabolic Biochemistry and Molecular Respiration (30)

- 1. Enzymatic mechanism and regulation of Glycolysis, Glycogenolysis and TCA cycle, Energetics of Glycolysis and TCA cycle, Anapleurotic cycle.
- 2. Oxidation and biosynthesis of fatty acids, Energetics of β -oxidation, Ketone bodies formation-function and fate.
- 3. Deamination and Transamination, Catabolism of Amino acids- Phenylalanin, Tyrosine, S-containing amino acids and tryptophan.
- 4. Urea formation- mechanism and regulation.
- 5. Inborn errors of metabolism- Glycogen storrage diusease, Phenylketunuria, Albinism.
- 6. Gluconeogenesis, Pentose Phosphate and Uronic acid Pathway- mechanism and significance.
- 7. Biosynthesis of Cholesterol: mechanism and significance.
- 8. Catabolism of Purine and Pyrimidine.
- 9. Organisation of Electron Transport Chain, Chemi-osmotic hypothesis, Uncouplers.
- 10. Mechanism of Oxidative Phosphorylation: F₀F₁ ATP-ase, Inhibitos.

Unit VIII: Digestive system & Nutrition (30)

- 1. Anatomy and histology of alimentary tract and digestive glands.
- 2. Composition, function, formation, mechanism of secretion, regulation of secretion of digestive juices, enterohepatic circulation of bile salts and bile pigments their significance, role of bile in fat digestion and absorption.
- 3. Formation of HCL, cholelithiasis, concept of hyperacidity, achlorohydria.
- 4. Digestion and absorption of carbohydrate, fats, proteins, vitamin B₁₂, iron, calcium and iodine.
- 5. Enteric nervous system, movements of alimentary canals, swallowing phenomenon-mechanism, defectation mechanism.

- 6. Disorders of digestive system, peptic ulcer, vomiting, constipation.
- 7. Vitamins- water and fat soluble vitamins-sources, daily requirements and function.
- 8. Chemical nature and structure of vitamins; biosynthesis of vitamin C, A and D.
- 9. Co-enzymatic role of vitamins in metabolism.
- 10. Vitamin deficiency symptoms and disorders; hyper-vitaminosis.
- 11. Bulk and trace elements and physiological roles of Na⁺, K⁺, Ca²⁺, Mg²⁺, Fe²⁺, Zn²⁺, Se²⁺, Cu²⁺, Iodine.
- 12. Calorific value of foods and determination by Bomb calorimeter, SDA of foods, RQ, their definition and physiological importance.
- 13. BMR, factors affecting BMR, determination by Benedict's Roth apparatus.
- 14. Nutritional importance and dietary requirements of carbohydrate, protein and fat. RDA-carbohydrates, protein, fats and other nutrients. Complete and incomplete proteins, biological value of proteins, essential amino acids and fatty acids.
- 15. Food groups, formulation of balanced diet for growing child, adult man and women, pregnant and lactating mother, elderly people.
- 16. Malnutrition, protein calorie malnutrition (Kwashiorkor) and undernutrition (marasmus), their preventive and curative measures, obesity.

Add on topics:

- 1. Cellular respiration and metabolism- relationship
- 2. Dietary time management- importance
- 3. Anthropometry- basic idea
- 4. Somatotyping-basic idea
- 5. Adolescence Growth
- 6. Xenobiotics

- i. Concise text book of physiology Indu Khurana; Arushi Khurana Text Book of Physiology Prof. A. K. Jain
- ii. Essentials of Medical Physiology Anil Baran Singha Mahapatra; G S Mahaptra
- iii. Ganong's Review of Medical Physiology- Kim E Barrett; Susan M Barman; Jason Yuan
- iv. Essentials of human nutrition- Mann and Turswell

PRACTICAL (H3B)

Total Marks — 40

A. Clinical Biochemistry

- Qualitative identification of bio-chemical samples of physiological importance HCl, Lactic acid, Uric acid, albumin, peptone, gelatin, Stach, dextrin, Glucose, Fructose, Maltose, Lactose, Sucrose, Urea, Bile Salt, acetone, Glycerol.
- 2. Estimation of serum cholesterol by Ferric chloride method.
- 3. Estimation of blood glucose by Folin-Wu method.
- 4. Estimation of serum/plasma protein by Biuret method.
- 5. Estimation of serum triglyceride by Nerl and Fringe method.
- 6. Estimation of serum SGPT/SGOT.

B. Nutritional Biochemistry

- 1. Colorimetric estimation of blood hemoglobin
- 2. Estimation of vitamin C in blood by 2,6-dichlorophenol indophenol method.
- 3. Estimation of lactose content of milk by Benedict's method.
- 4. Estimation of percentage quantity of carbohydrate in rice and potato.
- 5. Estimation of moisture content of food.
- C. Assesment of Nutritional statusby Anthropometric and diet survey method (Compulsory).

Distribution of marks:

TOTAL MARKS: 40
Internal assessment: 08
Term and exam: 32

A. Clinical Biochemistry (any-one experiment): 08

B. Nutritional Biochemistry (any-one experiment): 08

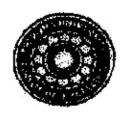
C. Nutritional Status Survey Reports 08

a) Anthropometry 04

b) Diet Survey Report 04

D. Practical Note Book 04

E. Viva Voce 04



(A Central University)
Suryamaninagar

SYLLABUS

OF

Human Physiology

(General)

Semester- III

HUMAN PHYSIOLOGY (GENERAL)

Semester 03

Paper 03

Total Marks — 100

THEORY (P3A)

Total Marks — 50

Unit VII: Neurochemistry and Neurophysiology (25 marks)

- 1. Macromolecular neurochemistry: Carbohydrate utilization in the brain, Role of Protein and Lipids in the brain.
- 2. Transmitter neurochemistry: Acetylcholine, Catecholamines, serotonin, Amino acids and Peptides.
- 3. Skin and Cutaneous recptors: Skin structure, Diversity and typres of receptors.
- 4. Structural and Functional organization of nervous system.
- 5. Properties of neuron, genesis and propagation of nerve impulse.
- 6. Transmission of impulse: Synaptic and Myoneural.
- 7. Reflex, Reflex arc. Properties of reflex action, Conditioned and unconditioned reflexes.
- 8. Ascending (sensory) tracts: origin, course, termination and function.
- 9. Descending (Motor) tracts: origin, course, termination and function.
- 10. Modern concept of Skeletal muscle contraction.

UNIT VIII: Renal Physiology and Environmental Stress Biochemistry (25 marks)

- 1. Anatomical structure of kidney, Structure and function of nephron, GFR, factors affecting GFR.
- 2. Mechanism of urine formation, Formation of dilute and concentrated urine. Normal and abnormal constituents of urine- their significance, Inulin and creatine clearance test.
- 3. Micturition and reflexes.
- 4. Renal circulation: coarse and pecularities.
- 5. Non-excretory functions of kidney: i) water balance, ii) renin-angiotensis system iii) acid-base balance, iv) Role in erythropoisis.
- 6. Chronic renal failure- Causes, Renal Hypertension.
- 7. Free radicals and Oxidative Stress, Generation of free radicals in the blood.

- 8. Role of superoxide dismutase, catalase, Glutathion in oxidatrive stress physiology, Heavy metals as agents of oxidative stress.
- 9. Major antioxidants: role of Vitamins and minerals as antioxidant, pestisides, Organo-phosphate, Organo-Chlorine and carbamate: their toxic action on human body.
- 10. Actrive and passive smoking, Major harmful compounds in smoke and their deleterious effects on human body.

Add on topics:

- 1. Somatotyping-basic idea
- 2. Adolescence Growth- General Idea
- 3. Kidney stones formation –general idea
- 4. Diabetes and kidney function relationship
- 5. Heavy metal and their toxic effect

- i. Concise text book of physiology Indu Khurana; Arushi Khurana
- ii. Text Book of Physiology Prof. A. K. Jain
- iii. Essentials of Medical Physiology Anil Baran Singha Mahapatra; G S Mahaptra

PRACTICAL (P3B)

Total Marks — 50

- 1. Identification of abnormal constituents of Urine: albumin, ketone, sugar (glucose), bile salt and blood.
- 2. Estimation of creatinine in blood.
- 3. Models of Excretory system: study of Kidney, Ureter, Urinary bladder and Urethra: their anatomical position, structure and function.
- 4. Identification of histological slides in relation to skin and excretory system.
- 5. Human Reflexes:

Superficial (Planter/Abdominal reflexes), Deep (Knee-Jerk/ Biceps & Triceps jerk reflexes)

6. Determination of muscle strength and endurance by Handgrip Dynamometry.

Distribution of marks:

Total Marks: 50 Internal assessment: 10 Term and exam: 40

Three experiments: 10 x 3= 30
 Practical Note Book 05
 Viva Voce 05



(A Central University)
Suryamaninagar

SYLLABUS

OF

Human Physiology

(Hons.)

Semester- IV

HUMAN PHYSIOLOGY (HONOURS)

Semester 04

Paper 04

Total Marks — 100

THEORY (H4A)

Total Marks — 60

Unit IX: Respiratory System and Aviation Physiology (30)

- 1. Anatomy and histology of respiratory tract and organs: Muscles of respiration.
- 2. Mechanisms of breathing: Mechanism of breathing, respiratory pressure, lung compliance, surfactant, airway resistance.
- 3. Pulmonary function test: lung volume and capacities, Spirometry: measurement of Vital capacity, FVC, Timed Vital capacity, FEV1, MVV or MBC, PEFR with their significance.
- 4. Course, peculiarities and control of pulmonary circulation.
- 5. Transport of O₂ and CO₂, O₂ dissociation curve- factors affecting and significance.
- 6. Regulation of Respiration neural and chemical
- 7. Hypoxia-types, causes and effects
- 8. Basic concepts on Asphyxia, Apnoea, Hyperapnoea, Cyanonsis, Periodic breathing, Dyspnoea, Chronic obstructive pulmonary disease asthma, restrictive pulmonary disease emphysema.
- 9. High Altitude Physiology: Baromatric and partial pressure of O₂ at high altitude, changes in the body at high altitude, motion sickness, acclimatization of high altitude.
- 10 Aviation Physiology- Acceleration and gravitational force, effects of positive and negative G force on body, space physiology, effects of weight lessness on cardiovascular system. Musculo-skeletal system, blood, immune system, Space motion sickness.

Unit X: Ergonomics and Sports Physiology (30)

- 1. Scope and application of ergonomics and work Physiology, Static and Dynamic work, Classification of work and exercise.
- 2. Energy cost of different Physical activities-its determination, Ergometry-working principle of ergometers bicycle and treadmill.
- 3. Importance of measurement of different physiological parameters like heart rate (pulse rate), O₂-consumption, blood pressure.

- 4. Anthropometry in ergonomics, commomn antropometric measurements used in work place design.
- 5. Muscles in exercise strength, power and endurance of muscles, muscles metabolic sysytem in exercise (energy source during muscular exercise) Nutrients used during exercise.
- 6. Physiological chasnges during exercise- cardiovascular (circulatory) and respiratory changes, steadst state, second wind, Fatigue-causes.
- 7. Metabolic changes during exercise-anaerobic power capacity, maximum aerobic power VO₂max its determination and significance, Recovery of metabolic systems after exercise, O₂ debt.- lactacids and alactacids.
- 8. Exercise training: Principles of training, aerobic and anaerobic training, Effects of training on muscles, cardiovascular (circulatory) and respiratory system.
- 9. Nutrition/Diet in athletics performance- pregame meal, Glycogen/carbohydrate loading.
- 10. Doping in sportsd; ethical issues, harmful effects of caffaine, steroids, amphemmine and cocaine abuse on health.

Add on topics:

- 1. Toxicology- general concept
- 2. Importance of Physical exercise.
- 3. Role of Physical exercise on lung function.
- 4. Binocular and stereoscopic perception
- 5. Abnormalities of taste
- 6. Abnormalities of smell sensation
- 7. Neuroscience method- neuroimaging, non- invasive electrophysiology, classical electrophysiology-basic idea.

- i. Text Book of Physiology A. K. Jain .
- ii. Guyton and Hall text book of Medical Physiology John E. Hall; Michael E Hall.
- iii. Concise text book of physiology Indu Khurana; Arushi Khurana.
- iv. A text book of sports and exercise physiology Swapan Kumar Dey.

PRACTICAL (H4B)

Total Marks — 40

Group -A

- 1. Spirometric determination of VC, FVC, FEV1, FRV1, MVV
- 2. Determination of heart rate, P-R interval, Q-T, QRS duration and S-T segment from electrocardiogram.
- 3. Determination of electrical axis of heart from stenoid
- 4. Effect of posture and exercise on blood pressure.
- 5. Determination of VO2 max by Queens college step tests.

Group –B

- Prediction of BMR using prediction equation of ICMR and determination of BMR of a person from the graphical record of Benedict Roth apparatus from the applied graphical record.
- 2. Estimation of body fat by using skin fold method.
- 3. Determination of respiratory rate by pneumograph: Effects of Hyperventilation, Breath holding and exercise on respiratory pattern.

Group -C

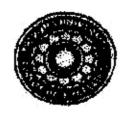
- 1. Determination of PFI by Harvard step test and graphical representation of recovery pulse rate.
- 2. Determination of muscle strength and endurance by hand grip Dynamometer.
- 3. Determination of muscular effeciency by ergography.

Distribution of marks:

Total Marks: 40

Internal assessment: 08 Term and exam: 32

Group A (any-one experiment):	08
Group B (any-one experiment):	08
Group C (any-one experiment):	08
Practical Note Book	04
Viva Voce	04



(A Central University)
Suryamaninagar

SYLLABUS

OF

Human Physiology

(General)

Semester- IV

HUMAN PHYSIOLOGY (GENERAL)

Semester 04 Paper 04 Total Marks — 100

THEORY (P4A)

Total Marks — 50

Unit IX: Brain and Sensory Physiology (25)

- 1. Cerebrum: Histology, area and centers in the central cortex, method of localization and function, Thalamus, Hypothalamus, connections and functions.
- 2. Cerebellum- Histology, Nuclei, Connections and Functions.
- 3. Concept of ANS- Classification, Structural and Functional organisation.
- 4. Basal ganglia structure, connections and functions.
- 5. Electrical activities of cerebral cortex, Physiological basis of EEG, epilepsy, Types of Sleep and effect of sleep deprivation.
- 6. CSF- composition, formation, circulation and function.
- 7. Eye: histology of retina, Photochemical changes after exposure of light on retina, accommodation, refractive errors and their corrections, Argyll Robertson pupil, visual pathway.
- 8. Ear: Structure of external, internal and middle ear. Propagation of sound waves through different parts of ear and their role in hearing, Auditory pathway.
- 9. Olfaction and Gastation: Receptors involved and their mode of perception, Neural pathway for transmission.
- 10. Perkinson and Alzaimers disease.

Unit X: Endocrinology and Reproductive Physiology (25)

- 1. Anatomical organization of endocrine glands in the body, Chemical classification of hormones, Mode of action of hormones, Signal Transduction and Second messengers.
- 2. Pituitary gland: histology, function of the anterior and posterior pituitary glands, their hormones, Symptoms of hypo and hyper function of TSH and ACTH.
- 3. Thyroid, Parathyroid and Adrenal gland: Histology, chemical nature, mode of action, physiological function.

- 4. Endocrine Pancreas: Histology of Islets of Langerhans, Chemistry and Function of insulin and glucagon; Diabetes mellitus- type I and Type II diabetes; their cause, Blood sugar regulation, role of different hormones, Glucose tolerance and their importance, Mode of action of insulin, role of GLUT transporters.
- 5. Regulation of hormones feedback mechanism.
- 6. Anatomical organization of male and female reproductive system; Primary and Secondary sex organs.
- 7. Testis-histology, Spermatogenesis, Factors affecting Spermatogenesis, Hormones of testis and their functions.
- 8. Ovary-Histology, Oogenesis, Hormones of Ovary their function and mode of action.

 Menstrual cycle and its regulation.
- 9. Concept of Fertilization, Structure of Placenta, Placental hormone and their functions, Development of three germinal layers, Pregnancy Test.

Add on topics:

- 1. Toxicology- general concept
- 2. Importance of Physical exercise.
- 3. Role of Physical exercise on lung function.
- 4. Binocular and stereoscopic perception
- 5. Abnormalities of taste
- 6. Abnormalities of smell sensation
- 7. Neuroscience method- neuroimaging.

Suggested Readings:

- i. Text Book of Physiology A. K. Jain
- ii. Guyton and Hall text book of Medical Physiology John E. Hall; Michael E
- iii. Concise text book of physiology Indu Khurana; Arushi Khurana.

PRACTICAL (P4B)

Total Marks — 50

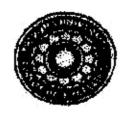
- 1. Histological slides and models on brain and endocrine system. Study of anatomical position, structure and function.
- 2. Model of Reproductive system. Study of reproductive system: organs in female pelvic cavity- their anatomical position Structure and Function (uterus, cervix, falopian tube, ovary).
- 3. Histological slides on ovary, uterus and cervix. Study of primary, secondary and Tertiary graffian fillicles, corpus leuteum, oocyte and sperm.
- 4. Models of eye, ear, nose, skin and tongue, structure and function of different parts.
- 5. Tests foe detecting defects of color vision.
- 6. Rinne's/Weber's tests for deafness.
- 7. Romberg's sign- Vestibular function.

Distribution of marks:

Total Marks: 50

Internal assessment: 10 Term and exam: 40

Three experiments
 Practical Note Book
 Viva Voce
 10 x 3= 30
 05
 05



TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar

SYLLABUS

OF

Human Physiology

(General)

Semester- V

UNDERGRADUATE

HUMAN PHYSIOLOGY (GENERAL)

Semester 05 Paper 05 Total Marks — 100

THEORY (P5A)

Total Marks — 50

Unit - XI: Nutrition and dietetics

- 1. Role of carbohydrates, fat, protein, vitamins and minerals in nutrition.
- Nutritional requirements and formulation of balanced diet for adolescents and college students, workers with sedentary, moderate and heavy physical activity, pregnant and lactating women.
- 3. BMR- Definition and determination, controlling factors affecting and its significance.
- 4. Biological value of protein, RQ, SDA and RDA. Protein calorie malnutrition definition, symptoms, classifications, major causative factors and remedial measure.
- 5. Vitamins source, requirements, deficiency symptoms and functions.
- 6. Minerals and trace elements iron, calcium and iodine: source, requirements, deficiency symptoms and physiological functions.
- 7. Diet survey- principle, significance.
- 8. Diets in diarrhoea, diabetes, goitre, obesity, hypertension.

Unit XII: Molecular biology and Immunology

- 1. Chemical nature of DNA and RNA.
- 2. DNA- the genetic material experimental evidences.
- 3. Semi conservative model of DNA replication Meselson and Stahl's experiment. Concept of gene.
- 4. DNA replication in prokaryotes. Okazaki fragments.
- 5. DNA transcription in prokaryotes
- 6. Protein synthesis in prokaryotes, activation of amino acids, initiation, elongation, termination, role of A site, P site.
- 7. Cloning of DNA into cloning vectors.
- 8. Immune system, Innate and Acquired Immunity- their components.
- 9. Primary & secondary lymphoid organs, their functions.

- 10. Antigen, immunogen, epitope, hapten, paratope, MHC molecules, CDr, CD markersgeneral idea.
- 11. Humoral immunity- (a) General structure of IgG antibodies, physiological functions of each class of antibody molecules. (b) Complement system- classical pathway.
- 12. Primary and secondary immune responses, vaccination.
- 13. Clonal selection hypothesis of antibody production. Activation of B- cells by T- cells. Basic concepts of polyclonal and monoclonal antibodies.
- 14. Cell mediated immunity role of cytotoxic T cell in cell mediated immunity, role of T-helper cell in activation of T- cytotoxic cell.
- 15. Basic principles of Enzyme Linked Immuno sorbent assay (ELISA), radioimmunoassay (RIA).

Add on topics:

- i. Toxicology- general concept.
- ii. T cell, B cell, Macrophages, Dendritic cells.

Suggested readings:

- i. Text book of Physiology Prof. A.K.Jain (7th edition)
- ii. Essential of human nutrition Mann and Turswell (4th edition)
- iii. Biochemistry U. Satyanarayan and U. Chakrapani
- iv. Cell biology, Genetics, Molecular Biology, Evolution and Ecology- Dr. PS Verma; Dr. VK Agarwal.
- v. Roitt's Essential Immunology Delvis, Martin, Burton, Roitt-Willy Blackwell

PRACTICAL (P5B)

Total Marks — 50

A. Biochemistry and nutrition:

- 1. Estimation of lactose content of milk.
- 2. Estimation of percentage quantity of carbohydrate in food.
- 3. Quantitative estimation of glucose and sucrose.
- 4. Ouster long double diffusion test (Ag-Ab reaction).
- 5. DNA electrophoresis Demonstration.

B. Assessment of Nutritional Status by Anthropometric and Diet Survey method.

(Attendance in survey programme conducted by the department and submission of Diet survey report are compulsory pre-requisites for appearing Term – End Examination).

Marks distribution:

Total marks – 50

Internal assessment – 10

Term End Exam – 40

- A. Biochemical/Nutritional experiment (any one experiment) : 15 [marks distribution for estimation: Principle -2, Procedure 2, Calculation 3, Result 8. (Error: upto 5%: 08, upto 8%: 06, upto 10%: 04, upto 12%: 02, upto 14%: 01, above 14%: 00)]
- B. Diet survey report 10 (Attendance 4, report 6)
 Anthropometric measurements & interpretation of results 5
- C. PNB-5
- D. VIVA VOCE 5



TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar

SYLLABUS

OF

Human Physiology

(Hons.)

Semester- V

UNDERGRADUATE

HUMAN PHYSIOLOGY (HONOURS)

Semester 05

Paper 05 (H5)

Total Marks — 100

UNIT – XI: Nervous System (25 marks)

- 1. Structural organization of different parts of brain and spinal cord.
- 2. Cerebrum: Histology, area and centers in the central cortex and their functions, method of localization of function; Thalamus and Hypothalamus their nuclei, connections and functions.
- 3. Cerebellum: Histology, nuclei, connections and functions.
- 4. Concepts of ANS- Classification, structural and functional organization.
- 5. Basal ganglia: Structure, connection and functions.
- 6. Electrical activities of cerebral cortex, physiological basis of EEG, waves of EEG with their significances; epilepsy, physiology of sleep, types of sleep, effect of sleep deprivation.
- 7. Brain ventricles- basic concepts; CSF composition, formation, circulation and functions.
- 8. Ascending tracts carrying touch, pain, pressure, temperature, kinesthetic sensation; descending tracts- corticospinal, corticobulbar, extra pyramidal, rubrospinal, reticulospinal tracts. Upper and lower motor neurons and their lesions.
- 9. Cerebral circulation- course, factors affecting.
- 10. Limbic system- structure, connection and function.
- 11. Maintenance and regulation of posture and equilibrium
- 12. Neurophysiology of learning and memory
- 13. Macromolecular neurochemistry: carbohydrate utilization in the brain, role of proteins and lipids in the brain.
- 14. Neurotransmitter chemistry: acetylcholine, catecholamine, serotonin, amino acids and peptides.

UNIT - XII: Excretory System, Skin and Thermoregulation (25 marks)

- 1. Anatomy of kidney, Histology of nephron and function in relation to structure.
- 2. Course, peculiarities and regulation of renal circulation.
- 3. GFR- factors affecting and regulation.
- 4. Juxta glomerular apparatus structure and function.

- 5. Hypo and hypertonic urine formation with reference to counter-current exchanger and multiplier mechanism.
- 6. Non-excretory functions of kidney i) water balance, ii) blood volume, iii) blood pressure, iv) acid base balance, v) erythropoiesis.
- 7. Renal function tests Plasma clearance concept, inulin and creatinine clearance test.
- 8. Composition of normal urine, composition and significance of abnormal constituents of urine. Diabetes insipidus- causes.
- 9. Physiology of urinary bladder, micturition process and reflexes.
- 10. Diuretics, mode of action of osmotic diuretics.
- 11. Chronic renal failure causes and renal hypertension
- 12. Cutaneous circulation and its significance
- 13. Structure of sweat glands, structure of sebaceous gland and its significance. Mechanism and regulation of sweat secretion.
- 14. Concept of homeothermy and poikilothermy, processes of heat loss and heat gain.

 Mechanism of temperature regulation.
- 15. Heat stress, pyrexia, hypothermia and physiology of hibernation.

UNIT – XIII: Endocrinology & Chronobiology (25 marks)

- Concept on autocrine, paracrine and endocrine system. Anatomical organization of endocrine glands in the body. Chemical classification of hormones. Different types of hormone receptors.
- 2. Mode of actions of hormones with examples; signal transduction, second messengers.
- 3. Pituitary glands anatomy, histology and function of anterior and posterior pituitary hormones.
- 4. Hypothalamo- hypophyseal portal system and tracts and their significance.
- 5. Thyroid, parathyroid and adrenal glands anatomy, biosynthesis and physiological functions of their hormones.
- 6. Endocrine pancreas: Hormones of Islets of Langerhans, chemistry and functions of insulin and glucagon.
- Blood sugar regulation Role of different hormones. Diabetes mellitus Type- I and Type
 II, their causes and symptoms, glucose tolerance test and its significance, role of GLUT transporters.

- 8. Hormones related to hunger and satiety leptin and ghrelin and adiponectin.
- 9. Hypo and hyper functions of endocrine glands.
- 10. Regulation of hormones feedback mechanism.
- 11. Biological clock- concept, role of pineal glands, pituitary and hypothalamus
- 12. Different biological rhythms: circadian, infradian, ultradian, tidal and linear rhythms. Gene oscillations.

UNIT-XIV: Reproductive Physiology & Development Biology (25 marks)

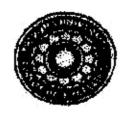
- 1. Anatomical organization of male and female reproductive system: primary and secondary sex organs. Puberty.
- 2. Testis- Histology, hormones of testis & their functions.
- 3. Ovary- Histology, hormones of Ovary their functions; Menstrual cycle ovarian and uterine changes & its hormonal regulation.
- 4. Embryogenesis: Gametogenesis- Spermatogenesis, Oogenesis, role of hormones in gametogenesis; Fertilization process; Cleavage (blastulation) process; Implantation hormonal control; Gastrulation (formation of endoderm its fate, formation of embryonic disc, formation of mesoderm, and ectoderm their fates, formation of embryonic cavity);
- 5. Placenta placental hormones and their function.
- 6. Physiological changes during pregnancy. Pregnancy tests (Immunological).
- 7. Physiology of parturition.
- 8. Development of mammary gland, physiology of lactation, its control. Mechanism of milk ejection. Importance of colostrums.
- 9. Physiology of menopause.
- 10. Fertility control- hormonal.

Add on topics:

- i. Bioinformatics- general concept
- ii. Blotting techniques basic idea
- iii. Endocrine disrupters
- iv. Polycystic ovary syndrome, anovulation.
- v. Male sterility, androgen deficiency syndrome

Suggested readings:

- Guyton and Hall text book of Medical Physiology John E. Hall; Michael E Hall. Concise text book of physiology Indu Khurana; Arushi Khurana. Text book of Physiology- A.K.Jain. i.
- ii.
- iii.



TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar

SYLLABUS

OF

Human Physiology

(Hons.)

Semester- VI

UNDERGRADUATE

HUMAN PHYSIOLOGY (HONOURS)

Semester 06

Paper 07 (H7)

Total Marks — 100

Unit XIV: Sensory Physiology (25)

- 1. Olfaction and gestation: Structure of taste buds, mechanism of taste sensation, neural pathways for taste and smell sensation with centres involved. Taste and smell adaption. Olfactometer, electro-olfactogram (EOG).
- Audition: Structure and function of auditory apparatus, organ of corti- Histology, function, propagation of sound waves, through different parts of ear and their role in hearing, auditory pathway, perception of sound frequency and loudness. Deafness, audiometry, hearing tests.
- 3. Vision: anatomy and structure of eye ball, histology of retina, photochemical changes of retina on exposure to light, visual pathway, reflexes of the eye, accommodation, refractive errors and their remedies, visual field scotopic and photopic vision, visual acuity, perception of depth, positive and negative after image, light and dark adaptation, theories of colour vision, colour blindness, basic idea about glaucoma.

Unit XVI: Microbiology, Biotechnology & Immunology (25)

Microbiology:

- 1. Bacteria, virus and fungus their structure and characteristics, bacterial classification.
- 2. Bacterial growth cycle, and factors (pH, temperature, nutritional requirement) controlling bacterial growth.
- 3. Bacterial genetics- transformation, conjugation, transduction
- 4. Bacteriostatic and bactericidal agents and their effects.
- 5. Brief idea of antibiotics with examples.
- 6. Some common diseases caused by bacteria, fungus and virus- cholera, eczema and influenza- their symptoms and preventive measures.

Biotechnology

- 7. Recombinant DNA technology, DNA cloning, cloning vector, restriction endonuclease, cloning of DNA into cloning vectors.
- 8. DNA Gel electrophoresis.

- 9. Southern blot and western blot.
- 10. Colony hybridization.
- 11. Basic concepts of PCR.

Immunology

- 12. Immune system, innate and acquired immunity- their components.
- 13. Primary and secondary lymphoid organs, T- cell, B cell, macrophage, neutrophil, dendritic cells their functions.
- 14. Antigen, immunogen, epitope, hapten, paratope, MHC molecules, CD-4 and CD-8 markers- general idea.
- 15. Humoral immunity- general structure of IgG antibodies, Primary and secondary immune responses. Clonal selection theory of antibody production.
- 16. Cell mediated immunity role of CTL and T_H in cell mediated immunity.
- 17. Complement components of classical and alternative pathways, their activation, and physiological function of complement system.

Unit XVII: Molecular biology & genetics (25)

- 1. DNA- the genetic material, transformation in pneumococcus (Avery, MacLeod and McCarty), Griffith and Hershey- Chase experiments.
- 2. Semi conservative model of DNA replication.
- 3. DNA polymerase I and III, DNA ligase, function of different subunits, Okazaki fragments.
- 4. DNA transcription: Concept of gene, difference between prokaryotic and eukaryotic gene, mechanism of gene transcription, template and non-template strand. Promoter sites, RNA polymerase- functions of different components of RNA polymerase. Post transcriptional processing of eukaryotic mRNA.
- 5. Protein synthesis: genetic code, codons, reading frame, Nirenberg's experiment, initiation codon, terminator codon, degeneracy of genetic code, Wobble hypothesis.
 - Mechanism of translation: activation of amino acid, formation of initiation complex, Shine-Dalgarno Sequence, role of A site and P site. Elongation: role of elongation factors, translocation. Termination: role of terminators and release factors, post transcriptional modification.
- 6. Mutation: spontaneous and induced mutation, mutagens- chemical, physical; transition and transversion of mutation mechanism, chemical inducing transition and transversion.

- 7. Chromosomal mutation: Structural, inversion, translocation, deletion, duplication, chromosomal number: euploidy, aneuploidy, polyploidy, repair of mutation: mismatch repair, excision repair.
- 8. Regulation of gene expression, operon concept, lac operon, cistron.
- 9. Different stages of meiosis, and behaviour of chromosome, during meiosis,
- 10. Mendelian genetics- Mendel's experiments, monohybrid crosses, principles of dominance, dihybrid crosses, incomplete dominance, Co-dominance.
- 11. Human genetics- importance, pedigree analysis, karyotyping, human genetic disorders, gene incompatibility, (ABO blood group), autosomal (phenyl ketonuria), albinism, sex linked (haemophilia, red green colour blindness) diseases

Unit XVIII: Research methodology & Epidemiology (25)

- 1. Meaning of research, objectives and significance of research, research ethics, types of research.
- 2. Scientific methods in research, selecting the research problem, need for research design, sample design and its different steps, need for basis of selecting a sampling procedure, characteristics of a good sample design, type of data.
- 3. Utility of statistics in research, measures of central tendencies (mean, median, mode), standard deviation (SD), standard error of mean (SEM), student's T- test, graphical representation of data frequency, polygon, histogram, normogram, bar diagram, pie diagram. Testing of hypothesis, null hypothesis, test of significance, degree of freedom.
- 4. Definition of epidemiology, recent development in epidemiology, definition, scope and use of epidemiology, concepts of disease occurrence, chain of infection, epidemic disease occurrence, measuring disease frequency, population at risk.

Add on topics:

- i. Case control study (CCS)
- ii. Basic steps of CCS; Odd ratio
- iii. Cohort study and its framework
- iv. Dynamics of disease transmission

Suggested Readings:

- 1. Guyton and Hall text book of Medical Physiology John E. Hall; Michael E Hall.
- 2. Basic physiology- C.C Chatterjee.
- 3. Ganong's Review of Medical Physiology- Kim E Barrett; Susan M Barman; Jason Yuan.
- 4. Kuby Immunology.
- 5. Cell biology, Genetics, Molecular Biology, Evolution and Ecology Dr. PS Verma; Dr. VK Agarwal
- 6. Microbiology Michael J Pelczar, JR. E.C.S. Chan; Noel R. Krieg.
- 7. Lehninger's Principles of biochemistry.
- 8. Lewen's Gene XII
- 9. Research methodology- C, R. Kothari.
- 10. Basic epidemiology R. Bonita, R. Beaglehole, T Kjellstrom.

HUMAN PHYSIOLOGY (HONOURS)

Semester 06

Paper 08 (H8)

Total Marks — 100

PRACTICAL

A. Microbiology & Immunology

[20 marks]

- a. Gram staining of bacteria
- b. Ouchterlony double diffusion test (pattern of antigen antibody interaction)
- c. Single colony isolation by agar streak method.

B. Sensory physiology

[20 marks]

- a. Models of eye, ear, nose, tongue, skin, structure and functions
- b. Tests for detecting defects of colour vision
- c. Rinne's weber's test for deafness
- d. Visual acuity- snellen's chart
- e. Audiometry

C. Molecular biology & genetics

[20 marks]

- a. DNA isolation
- b. DNA/Protein separation by paper electrophoresis & gel electrophoresis

D. Research methodology

[20 marks]

- a. Mean, median, mode, standard deviation, standard error of mean calculation.
- b. Test of significance (t-test) calculation.

Viva voce

[10 marks]

Laboratory note book

[10 marks].

Add on topics:

- 1. Entrance exam preparation for M.Sc. Human Physiology
- 2. Use of tools and applications for bioinformatics.
- 3. Types of research
- 4. Research Ethics.



M.A ENGLISH PROGRAMME CBCS (CHOICE BASED CREDIT SYSTEM) FORMAT/STRUCTURE

CORE COURSES

Course Code	Name of the Courses Cre	edits
EN 701C	English Literature from Chaucer to Milton	
EN 702C	The Elizabethan and Jacobean Age	
EN 703C	Seventeenth and Eighteenth Century English Literature	04
EN704C	The Rise of Fiction	04
EN 705C	Introduction to the Study of Literature and Culture-I 04	
EN801C	Romantic and Victorian Poetry	04
EN802C	The Novel in the Eighteenth and Nineteenth Century	04
EN803C	Indian Literature in English - I	04
EN804C	Literature of the Modern Age	04
EN 805C	Introduction to the Study of Literature and Culture-II	04
EN901C	Literatures in English (Special Author - Project) 04	
EN902C	Literacy Criticism and Theory-I	04
EN 909C	Introduction to Research in English Studies	04
EN1001C	The Postmodern Era to the New Millennium (Select Author - Project)	04
EN1002C	Literary Criticism and Theory-II	04
EN 1013C	Introduction to the Study of Literature and Culture- III04	

OPEN ELECTIVE COURSES

Course Code	Name of the Courses		Credits
EN903E	Linguistics-I 04		
EN 904E	Modern English Grammar and Usage		04
EN 905E	Translation Studies I		04
EN 906E	Popular Culture and Literature I		04
EN 907E	Gender in Literature I		04
EN 908E	American Literature I		04
EN 910E	New Literatures in English		04
EN 911E	Creative Writing		04
EN 912E	Book Review		04
EN 913E	Writings from the Northeast I		04
EN 1003E	Linguistics-II	04	
EN 1004E	ELT		04
EN 1005E	Translation Studies II		04
EN 1006E	Popular Culture and Literature II		04
EN 1007E	American Literature II		04

EN 1008E	Literature and Industry	04
EN 1009E	Folk and Oral Literatures	04
EN 1010E	Writings from the Northeast II	04
EN 1011E	New Literatures in English II	04
EN 1012E	Gender in Literature II	04

COMPULSORY FOUNDATION COURSES

Course Code	Name of the Courses	Credits
	Basics of Computer Applications Skill I	04
	Seminar Presentation (No End-semester examination.	
	Students shall be evaluated on their presentations of 2 semester)	04

CREDITS PER SEMESTER (from within the department):

1ST Semester: 20 2nd Semester: 20 3rd Semester: 22 4th Semester: 20

TOTAL CREDITS TO BE EARNED FROM WITHIN THE DEPARTMENT: 82

CREDITS TO BE EARNED FROM OTHER DEPARTMENTS

Basics of Computer Application Skill I: 4 At least one 4 Credit Course from an Interdisciplinary Department: 4

PREAMBLE/ STATEMENT OF INTENT:

The UGC has been stressing on substantive and significant academic and administrative reforms in higher education for the promotion of quality, excellence and employability. It has proposed the need to switch over to Semester system and to adopt the Choice Based Credit System (CBCS), in order to facilitateflexibility in curriculum development and examination reforms. Besides, the UGC has also proposed a Continuous and Comprehensive Evaluation pattern by reducing the weightage on the end-semester examination in order to scale down the stress quotient. The Department of English, Tripura University in its constant endeavour to keep up to the recent trends in the discipline and in its initiative to modify the existing syllabus of the 4-semester M.A English curriculum, has taken care to live up to the expectations of the UGC by proposing a course structure that responds to changing times and changing needs of students. English studies in India and the employment opportunities that may be opened up through a pursuit of a postgraduate degree in the subject have been kept in mind while preparing the Optional Special papers in the 3rd and 4th semesters. Besides, developing research acumen and skills have also been focussed upon so that students at the postgraduate level are introduced to the idea of research to be taken up in the course of their academic career if they so desire.

The M. A programmeof the Dept. of English, as proposed here, comprises of 20 papers to be spread across 4 semesters, amounting to 2000 marks in total. The programme and its components have been developed and designed in sync with the CBCS system with a possible list of Open papers/courses in the 3rd and 4th semesters.

Each paper would consist of 4 units, and students shall have to answer any 4 questions from the respective units amounting to 12 marks each ($12 \times 5 = 60$). Besides, short answer type questions in order to test the students' textual and conceptual understanding of an idea/ textual concerns, amounting to 10 marks would be

set, the total marks amounting to 70 in each paper. Internal Assessment tests may be organised by respective teachers offering the courses. A 30 mark- Internal Assessment test shall be taken following the principle of the UGC recommended Continuous and Comprehensive Evaluation Pattern. The modalities of the CBCS Evaluation pattern may be prepared by the respective teacher from time to time.

To keep pace with the changing tracks and methods of literary representations, the present programme has included contemporary texts both from India as well as abroad, with a Core Paper that would familiarise students of Literatures in English with texts crafted during and after the new millennium. Besides, writings from the North-East part of India both originally in English as well as in translation have been taken up both in a core paper as well as in an Optional Paper so as to add a regional flavour to the programme and to enable the students to relate to the literary and cultural concerns of their immediate topography.

The structure and content of the UGC NET/SET examinations have been considered thoroughly while framing the present programme so as to prepare prospective researchers and aspiring teachers for a fruitful career in college and university teaching right from the postgraduate classroom. To achieve this objective, the core components of British literature from the Chaucerian era to the new millennium have been given special emphasis. Besides, to inspire research activities and identify prospective research areas, the present programme has opened up a number of Optional Special papers that have been designed to initiate research curiosity and skills in a variety of study areas. Since this department is primarily a literature department dealing with literatures in English, the Core courses have been designed with this priority in mind, also taking into account the UGC Model Curriculum published in 2001 and its recommendations as well as all subsequent UGC directives.

M.A. IN ENGLISH CORE COURSES SEMESTER I

EN-701 C

CREDITS 4 CONTACT HRS 48

ENGLISH LITERATURE FROM CHAUCER TO MILTON

UNIT-I

Chaucer: Prologue to The Canterbury Tales /The Nun's Priest's Tale

IINIT₋II

The Metaphysical Poets: Introduction to key concepts, Selections from Donne& Marvell

UNIT-III

Spenser: The Faerie Queene, Book I

UNIT-IV

Milton: Paradise Lost Book IV/Samson Agonistes

EN-702C CREDITS 4 CONTACT HRS 48

THE ELIZABETHAN AND JACOBEAN AGE

UNIT-I

Shakespeare: Sonnets

Bacon: Essays

UNIT-II

Shakespeare (Comedy): A Midsummer Night's Dream/Twelfth Night

UNIT-III

Shakespeare (Tragedy): King Lear/Hamlet

UNIT-IV

Jonson: The Alchemist/Volpone

BACKROUND READING: 10 – 15 UNITS FROM THE FOLLOWING LIST:-

Pico dellaMirandola :Oration on the Dignity of Man

Machiavelli :The Prince

Wyatt : Tottel's Miscellany

Tasso : Jerusalem
Ariosto : OrlandoFurioso
Drayton : Nymphidia
Seneca : Tragedies

Vaughan : The Retreat, The Night Calvin : Institutes (Selection)

Spenser : The Faerie Queen (All books)

Erasmus : The Praise of Folly

Milton : Paradise Lost (The entire poem)

Costiglions : The Book of the Courtier

Castiglione : The Book of the Courtier
Sidney : Arcadia, An Apology for Poetry
Rabelais : Gargantuan and Pantagruel
Nash : The Unfortunate Traveler

Brown : Religio Medici

Hooker : Of the Laws of Ecclesiastical Polity

Milton : Areopagitica

Burton : The Anatomy of Melancholy

Hobbes : Leviathan Lily : Euphues

ENGL-703C CREDITS 4 CONTACT HRS 48

(17TH AND 18TH CENTURY ENGLISH LITERATURE)

UNIT-I

Dryden: Mac Flecknoe/Absalom and Achitophel

UNIT-II

Sheridan: The School for Scandal OR

Gay: The Beggar's Opera

UNIT-III

Addison: Selections from *The Spectator Papers* Swift: *Gulliver's Travels/ A Modest Proposal*

UNIT-IV

Pope: An Epistle to Dr. Arbuthnot/Essay on Criticism

Goldsmith: The Deserted Village

ENGL-704C CREDITS 4 CONTACT HRS 48

(THE RISE OF FICTION)

UNIT-I

Cervantes: Don Quixote/NovelasExemplares

UNIT-II

Defoe: Robinson Crusoe

UNIT-III

Fielding: Tom Jones

UNIT-IV

Dostoevsky: Crime and Punishment

EN 705C CREDITS 4 CONTACT HRS 48

INTRODUCTION TO THE STUDY OF LITERATURE AND CULTURE-I

UNIT-I

The Metaphysical Poets: Henry Vaughan, George Herbert (selected poems)

Moliere: School for Husbands

UNIT-II

Sidney: Astrophil and Stella Ariosto: Orlando Furioso

UNIT-III

Congreve: The Way of the World

Gray: *Elegy Written in a Country Churchyard* Arnold: Selections from *Culture and Anarchy*

UNIT-IV

Hardy: Tess of the D'Urbervilles Rousseau: Confessions Book I

BACKROUND READING: 10 - 15 UNITS FROM THE FOLLOWING LIST:-

Butler : Hudibras Johnson : London

Thomson : The Castle of Indolence

Burns : Poems Collins : Odes

Crabbe : The Library Or The Village

Pepys : Diary

Smollett : Roderick Random or Humphry Clinker

Johnson : Selected Prose

Swift : Gullier's Travels (All Books) A Tale of a Tub

Rochester : A Satire on Mankind

Sprat : History of the Royal Society

Locke : Essay Concerning Human Or Essay concerning the True

Original Extent and End of Civil Government

Dryden : Preface to Fables

Steele : The Art of Story Telling, On Judicious flattery, Fashionable

Affections, The Spectator Club, A Coffee-house and its Frequenters.

Franklin : Autobiography

Rousseau : Emile

Boswsell : The Life of Samuel Johnson

Goethe : Faust or Sorrows of Young Werther

Gibbon : The Decline and Fall of the Roman Empire

Burke : Speech on Conciliation with America or Speech on the Impeachment

of Warren Hastings

Voltaire : Candide

SEMESTER II

ENGL-801C CREDITS 4 CONTACT HRS 48

ROMANTIC AND VICTORIAN POETRY

UNIT-I

Blake: Selections from Songs of Innocence and Songs of Experience

Wordsworth: The Prelude Books I & 2

UNIT-II

Coleridge: Selected Poems

UNIT-III

Shelley: Prometheus Unbound

Byron: Selected Poems

UNIT-IV

Browning: Selected Poems

Tennyson: Selections from In Memoriam

ENGL-802C CREDITS 4 CONTACT HRS 48

THE NOVEL IN THE 18TH AND 19TH CENTURY

UNIT-I

Laurence Sterne: The Life and Opinions of Tristram Shandy,

Horace Walpole: *The Castle of Otranto* Anne Radcliffe: *The Mysteries of Udolpho*

UNIT-II

Walter Scott: Ivanhoe

Jane Austen: Mansfield Park

UNIT-III

Balzac: *Pe'reGoirot*Zola: *Nana/Germinal*Flaubert: *Madam Bovary*

UNIT-IV

Conrad: Nostromo/Heart of Darkness

Gaskell: North & South

BACKROUND READING: 10 - 15 UNITE FROM THE FOLLOWING LIST:-

Scott : Marmion
George Eliot : Adam Bede

Southey : Joan of Arc
Gassing : New Grub Street
Moor : LallaRookh
Trollope : The Warden

:

Campbell : Gertrude of Wyoming

Meredith : The Egoist Arnold : New Poems

Butler : The Way of All Flesh

C. Rossetti : The Pageant and other poems

Arnold : Culture and Anarchy
D.G.Rossetti : Ballads and Sonnets
Ruskin : The Stones of Venice

Wilde : Impressions

Morris : The story of Sigurd the Volsung and the Fall of the Niblungs

Synge : The Playboy of the Western World Hopkins : The Wreck of the 'Deutschland'

Yeats The Resurrection Hugo Inner Voices Heine **Book of Songs** Afternoon of a Faun Mallarme Verlaine Romances Without Words Stendhal The Red and the Black Balzac **Eugenie Grandet** George Sand The Devil's Pool Flaubert Madam Bovary

Zola : Nana

Manzioi : The Betrothed
Pushkin : Eugene Onegin
Googol : Dead Souls
Tolstoy : Anna Karenina
Baudlaire : The Flowers of Evil

Kierkegaard : Either/Or Godwin : Social Justice

Mill : On Liberty, The Subjugation of Women

Darwin : The Origin of Species
Newman : Apologia Pro Vita Sua
Nietzsche : The Genealogy of Morals
Marx and Engels : Communist Manifesto
Marx : Das Capital (Selections)

Carlyle : On Heroes, Hero-Worship and the Heroic in History

Pater : Appreciations.

ENGL-803C	CREDITS 4	CONTACT HRS 48

INDIAN LITERATURE IN ENGLISH-I

UNIT-I

Nissim Ezekiel: Selected Poems Kamala Das:Selected Poems ArunKolatkar: Selected Poems JayantaMahapatra: Selected Poems

UNIT-II

Amitava Ghosh: The Shadow Lines/ The Hungry Tide

JhumpaLahiri: The Namesake/ Khushwant Singh: Train to Pakistan

UNIT-III

David Davidar: The House of Blue Mangoes

Kiran Desai: The Inheritance of Loss

UNIT-IV

GirishKarnad: The Fire and the Rain/ Broken Images

Mahesh Dattani: Tara or Dance Like a Man

BACKROUND READING: 10 - 15 UNITE FROM THE FOLLOWING LIST:-

V. S. Naipaul : A House for Mr. Biswas

Chekov The Cherry Orchard KekiDaruwalla Selected Poems AdilJussawalla Selected Poems Aurodindo Selected Poems **Kipling Debits and Credits** Forster A Passage to India Huxley Brave New World Greene The Power and the Glory Nineteen Eighty-Four Orwell

Murdoch The Sandcastle

M. R. Anand Coolie

Raja Rao The Serpent and the Rope R. K. Narayan The English Teacher

G. Hariharan The Thousand Faces of the Night

K. Markandaya A Handful of Rice R.P.Jhabvala Heat and Dust

Amitava Ghosh
Anita Desai
The Imam and the Indian
Fire on the Mountain
ShashiTharoor
The Great Indian Novel

EN-804C CREDITS 4 CONTACT HRS 48

LITERATURE OF THE MODERN AGE

UNIT-I (SelectPoetry):

T.S.Eliot: The Waste Land/ Selections from Prufrock and Other Poems

UNIT-III (Drama):

Ibsen: A Doll's House/Shaw: Man and Superman/

Eliot: Murder in the Cathedral

UNIT-II (Fiction):

Henry James: Crappy Cornelia

James Joyce: Dubliners/ A Portrait of the Artist as a Young Man

UNIT-IV (Existentialism and the Literature of the Absurd):

Tom Stoppard: Rosencrantz and Guildenstern are Dead/ Beckett: Waiting for Godot.

Beckett: *The Expelled* (short fiction)

EN-805C CREDITS 4 CONTACT HRS 48

INTRODUCTION TO THE STUDY OF LITERATURE AND CULTURE- 11

UNIT-I

Robert Burns: Selection Keats: Selected Poems

UNIT-II

Bronte: Wuthering Heights Kunal Basu: The Miniaturist

UNIT-III

Sarojini Naidu: Selections A K Ramanujan: Selections Dom Moraes: Selected Poems Hoshang Merchant: Selected Poems

UNIT-IV

Albert Camus: *The Plague* Rushdie: *Midnight's Children*

SEMESTER-III

ENGL 901C(PROJECT) CREDITS 4 CONTACTHRS 48

Literatures in English: Special Author Project

ENGL-902C CREDITS 4 CONTACT HRS 48

LITERARY CRITICISM AND THEORY-I

UNIT-I

Indian Aesthetics: Notions of Rasa and Dhvani: Selections from Bharata's *The Natyashastra* Selections from Abhinavagupta's *Abhinavabharati, and* Anandavardhan *'s Dhanyalok*

UNIT-II (Formalism, Structuralism, New Criticism):

Viktor Shklovsky: "Art as Technique" Cleanth Brooks: The Language of Paradox

Bakhtin: Selections from The Dialogic Imagination

UNIT III(Post-Structuralism):

Foucault: "The Order of Discourse"

Derrida: "Structure, Sign and Play in the Discourse of Human Sciences"

10

Roland Barthes: "The Death of the Author", Selections from Mythologies

UNIT-IV (Psychoanalytic Readings and Postmodernism):

Freud: "The Uncanny"

Lacan: "The Mirror Phase" Essay Lyotard: "The Postmodern Condition"

EN 909C CREDIT 4 CONTACT HOURS 48

INTRODUCTION TO RESEARCH IN ENGLISH STUDIES

UNIT I: Introduction to Research in English Studies, Primary and Secondary Sources, Literature Survey, Formulation of Research Design, Research Problems, Hypothesis

UNIT II – Research Methods, Methodology, Skills, Research Ethics, Style Sheets – MLA et al

UNIT III – Assignment (3000 words): 35

UNIT IV – Book Review (500 – 1000 words): 35

(30 marks would be reserved for Internal Viva Voce Examinations basedon units I & II)

SEMESTER-IV

ENGL-1002C CREDITS 4 CONTACT HRS 48

LITERARY CRITICISM AND THEORY-II

UNIT-I (FEMINIST CRITICISM AND QUEER THEORY):

Kate Millet: Sexual Politics

Judith Butler: Gender Trouble/Bodies That Matter

UNIT-II (MARXIST CRITICISM);

Basic Concepts: Base and Superstructure, Ideology, Hegemony, Reification, Interpellation, Culture Readings: Raymond Williams and his notion of "Literature" from *Marxism and Literature*;

Terry Eagleton, Geog Lukacs

UNIT-III (Cultural Studies):

Stuart Hall: Selections Paul Gilory: Selections

UNIT-IV (Postcolonialism):

Edward Said: Selections from *Orientalism* HomiBhabha: Signs Taken for Wonders

Aijaz Ahmad: In Theory

ENGL-1001C CREDITS 4 CONTACT HRS 48

From the Postmodern Era to the New Millennium-Select Author Project The candidates may choose a Project on any Author/Authors/ Text/s from the Era Specimen Reading:

a) Doris Lessing: The Grass is Singing

b) Salman Rushdie: Shame

c) John Fowles: The French Lieutenant's Woman

d) Gabriel Garcia Marquez: One Hundred Years of Solitude

e) Coetzee: Waiting for the Barbarians

Selected Prose Writings:

Gabriel Garcia Marquez: The Nobel Lecture

Amitava Ghosh: "The Diaspora in Indian Literature" from The Imam and the Indian

Salman Rushdie: Selections from *Imaginary Homelands* V.S. Naipaul: Selections from *An Area of Darkness*

EN 1013C CREDIT 4 CONTACT HOURS 48

INTRODUCTION TO THE STUDY OF LITERATURE AND CULTURE-III

UNIT I: Spivak: Can the Subaltern Speak?

UNIT II – Louis Althusser: Selections

UNIT III - TemsulaAao: Selected Poems/ Mamang Dai: Select Poems/ Robin Ngangom: Selected Poems

UNIT IV -Naguib Mahfouz: Arabian Nights and Days

30 marks would be reserved for Internal Viva Voce Examinations basedon all the above units

OPEN ELECTIVE COURSES

Elective Courses have been distributed across Semester III and IV to be offered by respective mentors to students within and outside the department.

SEMESTER-III

EN 903E: LINGUISTICS I CONTACT HOURS 48 CREDITS: 4

Group A (Phonetics):

- 1. Organs of Speech
- 2. Air Stream Mechanism
- 3. Consonants
- 4. Vowels
- 5. Suprasegmentals: Stress and rhythm
- 6. Syllables
- 7. Tone and intonation

Group B (Phonology):

- 8. Sound Variation
- 9. Sound Change
- 10. Phonemes, syllables and phonological processes
- 11. Child phonology
- 12. Processing sound
- 13. Prosodic Phonology

EN 904E CREDIT 4 CONTACT HOURS 48

(MODERN ENGLISH GRAMMAR AND USAGE)

Group - A

- 1. The English Language
- 2. The Scope and Nature of Grammar
- 3. An Outline of Grammar: The Grammatical Hierarchy; above the sentence and below the word; simple,
- 4. compound, and complex sentences; declarative, interrogative, imperative, and exclamatory sentences; interrogative
- 5. sentences; tag questions; impetrative sentences; exclamatory sentences; statements, questions, directives,
- 6. exclamations; speech acts;
- 7. 4. Positive and negative sentences; active and passive sentences; the basic sentence structures;
- 8. subject and verb; subject; direct object; indirect object; subject predicative; object predicative; complements and
- 9. adverbials;
- 10. Semantic role; rearranging the basic structures; ellipsis; phrase types and word classes; verb; nouns and pronouns;
- 11. adjectives and adverbs; co-ordination and apposition
- 12. Word Classes: Open and closed classes; criteria for word classes; characteristics of nouns; proper
- 13. nouns; count and non-count nouns; regular plurals; irregular plurals; non-standard plurals; gender; case; genitive
- 14. and of -phrase; meanings of genitive and of-phrase;
- 15. Characteristics of verbs; form-types of verbs; the -s form; the -ingparticiple; the -edform in irregular verbs:
- 16. irregular verbs; non-standard verb forms: present tense; non-standard verb forms: past tense and --ed participles;
- 17. characteristics of adjectives; attributive and predicative adjectives; nominal adjectives; gradability and comparison;
- 18. adjectives and unmarked term
 - Group B
- 19. Characteristics of adverbs; adverb and adverbials; adverbs and complements; characteristics of determiners and
- 20. pronouns; definite and indefinite articles; forms of personal, possessive, and reflexive pronouns; person, number.
- 21. gender, case; generic pronouns;
- 22. Substitute pronoun *one*; *it*; Existential *there*; Primary reflexive pronouns; Emphatic reflexive pronouns; reciprocal
- 23. pronouns;
- 24. Wh-pronouns and determiners; Indefinite pronouns and determiners; demonstratives
- 25. The five types; The structure of noun phrase; Functions of noun phrases; Determiners; Premodifiers of nouns; Post

- 26. modifiers of nouns; Extraposedpostmodifiers; Restrictive and non-restrictive modifiers; Restrictive and non-restrictive
- 27. relative clauses; Sentential relative clauses; Appositives; The co-ordination of noun phrases;
- 28. The structure of verb phrase; Operators; Finite and non-finite verb phrases; Tense and aspect; Simple present and
- 29. simple past; Secondary uses of the simple tenses; Future time; Modal auxiliaries; Present subjunctive; Past subjunctive;
- 30. Present perfect; Past perfect; Modal perfect; Perfect in non-finite phrases; Progressive; Progressive in non-finite
- 31. phrases; Auxiliary-like verbs; Phrasal and prepositional verbs; Phrasal verbs; Prepositional verbs; Phrasal-prepositional
- 32. verbs; Other multi word verbs;
- 33. The structure of adjective phrase; Functions of adjective phrases; Premodifiers of adjectives; Post modifiers of
- 34. adjectives; The structure of the adverb phrase; Functions of adverb phrases; Premodifiers of adverbs; Post modifiers of
- 35. adverbs; The structure of the prepositional phrase; Functions prepositional phrases; Premodifiers of prepositions and
- 36. prepositional phrases
- 37. Complete and incomplete sentences; co-ordination of clauses; subordination of clauses; the interplay of coordination
- 38. and subordination; parataxis and hypotaxis; sentences and clause clusters; Meaning relationships in coordination
- 39. and subordination; signals in co-ordination; signals in subordination;
- 40. Forms of subordinate clauses; Functions of subordinate clauses; Nominal clauses; Forms of adverbial clauses:
- 41. Meanings of adverbial clauses; Comparative clauses; Complementation of verbs, adjectives, and nouns

EN 905E CREDIT 4 CONTACT HOURS 48

(TRANSLATION STUDIES I)

The aim of this course is to introduce the students to the theory and practice of translation. The students are expected to acquire knowledge on various issues involving translation.

UNIT I (Theory):

Discussion on the following and related issues by referring to the texts mentioned below:

Translation, translation studies, translation theory: introduction

Translation: Nature and types

UNIT II (Discussion on the following and related issues by referring to the texts mentioned below):

Translation and transcreation

Translation: approaches: Linguistic (Eugene Nida, Jakobson), CulturalTranslation: historical overview.

UNIT III (Discussion on the following and related issues by referring to the texts mentioned below):

Cultural and ideological issues in translation

Notions of translatability, equivalence and problems involving equivalence.

UNIT IV (Study and practice):

The second part of the course will consist of the study of translations in relation to the original. For this purpose, works translated from the student's mother tongue, or from other languages known to him/her, will be studied alongside the originals.

Textbooks

Munday, Jeremy *Introducing Translation Studies:theories and applications* (Routledge, London, 2001). Bassnett, Susan *Translation Studies* (Routledge, London, 2002).

Venuti, Lawrence, ed. *The Translation Studies Reader* (Routledge, London and New York, 2000).

Reference books

Baker, Mona (ed.) Critical Readings in Translation Studies (London/New York: Routledge, London/New York, 2010).

Bassnett, S. & A. Lefevre (eds.) Translation, History and Culture (Princeton UP, 1990).

EN 906E CREDIT 4 CONTACT HOURS 48

(POPULAR CULTURE AND LITERATURE -I)

Course content may be modified by the faculty offering the course from time to time.

UNIT I (Background and Theory/Canonicity):

John Storey: What is Popular Culture? (Selections)
Julie Rivkin and Michel Ryan: "The Politics of Culture"

Pierre Bourdieu: Selections from "Distinction"

Ray Browne: Against Academia: The History of the Popular Culture Association (1989)

UNIT II (Background and Theory Cont'd):

Max Horkeimer and Theodor Adorno: The Culture Industry as Mass Deception

Janice Radway: Reading the Romance

John G. Cawelti: The Concept of Formula in the Study of Popular Fiction (from Journal of Popular Culture. Vol

3, 1969)

UNIT III(Television):

John Fiske: Television Culture

(Students may be asked to analyse soap operas and Relaity shows of their choice in the light of Fiske's observations).

UNIT IV (Visual Culture – Theory):

John Berger: Ways of Seeing (Selections)

Laura Mulvey: Visual Pleasure and Narrative Cinema (Selections)

Umbero Eco: *Travels in Hyperreality*

For Internal Assessment, a project on any One of the following may be assigned:

A Study of Popular Culture as reflected in Advertisements

A Study of Popular Culture as reflected in Women's Magazines/ Glossies or Youth Magazines

A Study of the Image of the 'nation'/woman/gender in popular culture as reflected in Soaps/ TV shows/ advertisements

Or

Any other relevant topic as felt necessary by the concerned teacher.

15

EN 907E CREDIT 4 CONTACT HOURS 48

GENDER IN LITERATURE I: (Components may be modified from time to time by the mentor offering the course)

UNIT I (Patriarchy and Discourse, Masculinity, Femininity and Gender Stereotypes in Literature and Cultural Practice):

Key Texts: 1. Kate Millet's Sexual Politics

2. Sandra Gilbert and Susan Gubar: The Mad Woman in the Attic

UNIT II(Gender and Sexuality – Basic Concepts, "Being" and "Becoming" in the realm of Gender):

Key Texts: 1. Selections from Lacan's Seminars – notions of 'Real', 'Imaginary', 'Symbolic', Phallogocentrism

UNIT III(Gender, Sexuality, Labour and the Politics of Desire):

Key Texts: 1. Angela Carter: Selections from Black Venus

2. IsmatChughtai: Lihaf or The Quilt

UNIT IV(Gender, Popular Culture, Media and 'Gaze'):

Key Texts: Naomi Wolf: The Beauty Myth

EN 908E CREDIT 4 CONTACT HOURS 48

(AMERICAN LITERATURE I)

Course content may be modified by the faculty offering the course from time to time.

UNIT I

Whitman: Song of Myself (Selections), When the Lilacs Last in the Dooryard Bloom'd, Passage to India. Emerson: Rhodora, Each and All, Concord Hymn, The Problem, The Snowstorm, Ode Inscribed to W.H. Channing, Hamatreya, Terminus

Frost: Mending Wall, West Running Brook.

SylviaPlath: Lady Lazarus, Daddy

UNIT II

Langston Hughes: Selected Poems Gwendolen Brooks: Selected Poems

UNIT III

Melville: Moby Dick /

Faulkner: Light in August/ Mark Twain: The Adventures of Tom Sawyer/ Huckleberry Finn

UNIT IV

Steinbeck: *The Grapes of Wrath*/Hemingway: *A Farewell to Arms* or *The Old Man and the Sea*/ Alice Walker: *The Color Purple*.

EN 910E CREDITS4 CONTACT HOURS 48

NEW LITERATURES IN ENGLISH I

UNIT I(Poetry : African Literature):

1. Gabriel Okara: Selected Poems

Once Upon a Time, Piano and Drums, You Laughed and Laughed and Laughed, The Call of the River Nun

2. Wole Soyinka: Selected Poems *Idaure, Telephonic Conversation*

UNIT II (Poetry: Caribbean Literature):

1. Kamau Brathwaite: Selected Poems

South, Calypso, Ogun, Ananse

2. Derek Walcott: Selected Poems

A Far Cry from Africa, North, The Fortune Traveller, Jean Rhys

UNIT III (Novels):

- 1. Chinua Achebe Things Fall Apart
- 2. Jean Rhys Wide Sargasso Sea

UNIT IV (Drama):

- 1. Wole Soyinka: The Bacchae of Euripides
- 2.Derek Walcott Dream on the Monkey Mountain

Creative Writing/Book Publishing and Editing

(details to be provided by the concerned teacher offeringthe course)

EN 912E	CREDIT 4	CONTACT HOURS 48

Book Review (details to be provided by the concerned teacher offering the course)

EN 913 E	CREDIT 4	CONTACT HOURS 48	
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(Writings from the North East I)

UNIT-I (Essays):

- 1. "Introduction", Dancing Earth
- 2. "Should Writers Stay in Prison" by EasterineIralu
- 3. "Introduction", The Fragrant Joom Revisited
- 4. "Hard-edged Modernism: Contemporary Poetry in North-east India" by Kyanpham Sing Nongkynrih.

UNIT-II (Poetry):

- 1. ChandrakantaMurasingh/Shyamlal Debbarma/Shefali Debbarma: Select Poems
- 2. Nanda Kumar Debbarma/Prabhuda Sundar Kar/Asok Deb/Mridul Deb Roy: Select Poems
- 3. Memchoubi: "The Fire of Andro" and "O wind, do not sing sad songs" or, SaratchandThiyam "Sister" and "Shroud"
- 4. NilamaniPhukan: "Dancing Earth".

UNIT-III (Short Stories):

1. KeishamPriyokumar/YumlembamIbomcha: Select Short Stories

- 2. Bhabendra Nath Saikia: Select Short Stories
- 3. Debabrata Deb: Select Short Stories

UNIT-IV (Folktales):

- 1. *Chethuang* (Tripuri Folktale)
- 2. Blood Thirsty Gods (Tripuri Folktale) or, SakhiDarlong
- 3. Manipuri Folktales
- 4. Naga Folktale

Suggested Readings:

- 1. Where the Sun Rises When Shadows Fall: The North-East. Geeti Sen (ed.), New Delhi: Oxford, 2006
- 2. The Oxford Anthology of Writings from the North-East India: Poetry and Essays. TilottamaMisra (ed.), New Delhi: Oxford, 2011
- 3. Troubled Periphery: Crisis of India's North East. Subir Bhowmik, New Delhi: Sage Publications, 2009
- **4.** Emerging Literature from Northeast India: The Dynamics of Culture, Society, and Identity. Margaret Ch Zama (ed.), New Delhi: Sage Publications, 2013

OPEN ELECTIVES TO BE OFFERED IN SEMESTER-IV

(LINGUISTICS II)

Group A (Morphology):

- 1. Word classes
- 2. Building words
- 3. Morphology across languages
- 4. Word meaning
- 5. Children and words
- 6. Lexical processing and the mental lexicon
- 7. Lexical variation and change
- **8.** Lexical disorder

Group B (Syntax):

- 9. Sentences: Basic terminology
- 10. Sentence structure
- 11. Empty categories
- 12. Movement
- 13. Syntactic variation
- 14. Logical Form
- 15. Children's sentences
- 16. Syntactic disorders
- L. Bloomfield: Language (Holt, Reinhart) & Winston, NY, 1933)
- J. Lyons: *An Introduction to Theoretical Linguistics* (CUP, 1968)
- R. Quirk et al (ed.) A Grammar of Contemporary English (Longman, London, 1972)
- N. Chomsky: Reflections on Language (Pantheon, NY, 1976)

EN 1004E CREDIT 4 CONTACT HOURS: 48

ELT (to be unitized by the teacher offering the course)

Group-A

- 1. Introduction: History of ELT; approaches and methods
- 2. The Oral Approach and Situational Language Teaching.
- 3. The Audiolingual Method.
- 4. Total Physical Response.
- 5. The Silent Way.
- 6. Community Language Learning.
- 7. Suggestopedia.
- 8. Whole Language.

Group-B

- 1. Multiple Intelligences
- 2. Neurolinguistic Programming
- 3. The lexical approach
- 4. Competency-Based Language Teaching.
- 5. Communicative Language Teaching.
- 6. The Natural Approach.
- 7. Cooperative Language Learning.
- 8. Content-Based Instruction.
- 9. Task-Based Language Teaching.
- 10. The post-methods era.

EN 1005E CREDIT 4 CONTACT HOURS 48

(TRANSLATION STUDIES II)

This course shall follow the earlier course in translation. The aim of this course is to enablestudents to evaluatetexts in translation.

UNIT I (Translations: Problems and Evaluation with reference to Fiction/Short Stories):

Prescribed Texts: Tagore's *The Home and the World*/ Premchand's Short Stories Jorge Luis Borges essay "The Translators of The Thousand and OneNights"

UNIT II (Translation: Problems and Evaluation with reference to Poetry):

Prescribed Texts: *Gitanjali*in translation by W. B. Yeats/ Sukumar Ray's *AbolTabol* Poetry of theNorthEast in translation (Selected pieces)

(Refer to The Oxford Anthology of Writings from North-East India: Poetry and Essays, Vol 2, Ed by TilottamaMisra;

The Fragrant Joom Revisited: A Collection of Kokborok Poetry in English translation, Ed by Ashes Gupta, Akhsar Publications, Agartala.

The Mystic Mountain: An Anthology of Tripura Bangla Poetry in English; Translated and compiled by Ashes Gupta; Akhsar Publications, Agartala.

UNIT III (Translation: Problems and Evaluation with reference to Drama):

Prescribed Text: Tagore's *The Post Office*/Shakespeare's *Macbeth* in translation by UtpalDutta

UNIT IV (Oral Literatures in translation: Problems and Evaluations):

Prescribed Texts: Fresh Fictions: Folktales, Plays, Novellas From the North East (Selected by the North East Writers' Forum, Katha, 2005

Any anthology of the folk tales of Tripura.

For Internal Assessment, analysis and evaluation of Chosen Paired texts mat be attempted by students as Project Work.

Reference Books

Bassnett, Susan Translation Studies (Routledge, London, 2002).

Munday, Jeremy Introducing Translation Studies: theories and applications (Routledge, London, 2001).

Baker, Mona: In Other Words: A Coursebook

EN 1006E CREDIT 4 CONTACT HOURS 48

(POPULAR CULTURE AND LITERATURE II)

Course content may be modified by the faculty offering the course from time to time.

UNIT – I (Science Fiction/Canonicity):

A brief history of Science Fiction writing along with concepts such as "Utopia", "Dystopia" etc

Jules Verne: Selected Works/Issac Asimov: Selections

Mary Shelley: Frankenstein/ H. G. Wells: Time Machine/The War of the Worlds

UNIT – II (Horror Fiction):

Brief History of Horror Fiction and explanation of terms such as 'genre', 'gothic', 'uncanny'

Edgar Allen Poe: Selected texts

Bram Stoker: Dracula

UNIT III (The Thriller):

Umberto Eco: The Narrative Structure in Flemming

Jerry Palmer: What makes a good Thriller

Ian Fleming: From Russia with Love/ Casino Royale

UNIT IV(Children's Literature):

Felicity Hughes: Children's Literature: Theory and Practice

Robert Louis Stevenson: Treasure Island

Lewis Caroll: Through the Looking Glass /Adventures of Alice

EN 1007E CREDIT 4 CONTACT HOURS 48

(AMERICAN LITERATURE II)

Course content may be modified by the faculty offering the course from time to time.

UNIT I

Toni Morrison: Beloved

The Bluest Eye

UNIT II

20

Tennesse. Williams: The Glass Menagerie

A Streetcar Named Desire/Miller: Death of a Salesman

UNIT III

August Wilson: Fences

Lorraine Hansberry: A Raisin in the Sun

Edward Albee: Zoo Story Amiri Baraka: *Dutchman*

UNIT IV

Emerson: Self Reliance Poe: Selected Stories

Carson McCullers: The Member of the Wedding

EN 1008E CREDIT 4

(LITERATURE AND INDUSTRY)

UNIT I (Book Publishing and Marketing):

Copy Editing, Proof Reading, Layout, Blurb Writing, Book Review

UNIT II (Advertisement):

Caption Writing, Content Writing, etc.

UNIT III(Writing for Journalism):

Column, Reporting, Editorial, Interview.

UNIT IV(Literature and Film):

Film Script, Subtitling, Reviews, Analysing Glossies

EN 1009E CREDIT 4 CONTACT HOURS: 48

CONTACT HOURS 48

(FOLK AND ORAL LITERATURES)

Course content shall be formulated by the faculty offering the course from time to time.

(WRITINGS FROM THE NORTHEAST II)

EN 1010E: Credits: 4 CONTACT HOURS: 48

UNIT-I (Poetry):

Robin S Ngangom: "Poem for Joseph", "To a Woman from Southestern Hills", "Shadows" Desmond

Kharmawphlang: "Tyrchiang", "Letter from Pahambir", "Last Night I Dreamed"

Kynpham Sing Nongkynrih: "A Day in Sohara", "The Colour of Truth", "Winter Song".

Mona Zote: "What Poetry Means to Ernestina in Peril"

NabanitaKanango: "Give the Wind a Clue", "Laitlum"

Pradip Murasingh/Kishore Murasingh/ Sachlang Tripura: Select Poems

UNIT-II (Short-story):

TemsulaAo: Select Short Stories PurobiBormudoi: Select Short Stories

UNIT-III (Novels):

Dhruva Hazarika: Bowstring Winter or Mitra Phukan: The Collector's Wife

Mamang Dai: The Black Hill or EsterineKire: A Terrible matriarchy/Bitter Wormwood

UNIT-IV (Drama):

Ratan Thiyam: Chakravyuh/Nine Hills One Valley

Kanhailal: Pebet/Draupadi

Suggested Readings:

- 1. Where the Sun Rises When Shadows Fall: The North-East. Geeti Sen (ed.), New Delhi: Oxford, 2006.
- 2. The Oxford Anthology of Writings from the North-East India: Poetry and Essays. TilottamaMisra (ed.), New Delhi: Oxford, 2011
- 3. Troubled Periphery: Crisis of India's North East. Subir Bhowmik, New Delhi: Sage Publications, 2009
- 4. Emerging Literature from Northeast India: The Dynamics of Culture, Society, and Identity. Margaret Ch Zama (ed.), New Delhi: Sage Publications, 2013

EN 1011E - NEW LITERATURES IN ENGLISH II Credits: 4 Contact Hours: 48

UNIT I (Poetry-Australian Literature):

Judith Wright: The Moving Image, Bora Ring, Woman to Man, Nigger's Leap: New England

A. D Hope: The Wandering Islands, The Death of the Bird, Australia, The Return from the Freudian Island

UNIT II (Poetry-Canadian Literature)-

Archibald Lampman: In November

Charles G.D Roberts: The Furrow, In the Night Watcher

Frederick George Scott: The Unnamed Lake

UNIT III (Novels):

(Australian)

Peter Carey: Jack Maggs

(Canadian)

Margaret Atwood: Surfacing

UNIT IV (Drama):

Ray Lawler: Summer of the Seventeenth Doll

George Ryga: Indian

EN 1012E: GENDER IN LITERATURE II CREDITS 4 CONTACT HOURS: 48

(Components of the Course may be modified from time to time by the mentor)

UNIT I (Gender in Contemporary Western Critical Theory):

Luce Irigaray: "The Power of Discourse and the Subordination of the Feminine" from, *This Sex Which is Not One*, Cornell University, 1977 / Speculum

Nancy Chodorow: "Heterosexuality as a Compromise Formation". From, Feminisms, Masculinities, Sexualities,

The University Press of Kentucky, 1994.

E. M. Forster: Maurice

UNIT II (Bisexuality/Transgender/Intersex):

Virginia Woolf: Orlando

Foucault: Selections from Abnormal: Lectures at the College de France, 1974-75

Mahesh Dattani: Seven Steps Around the Fire

Unit – III (Gender, Performance, Mimesis):

Teresa de Lauretis: The Technology of Gender (1987)

Eve Sedgewick: "Swan in Love: The Example of Shakespeare's Sonnets". From Between Men: English

Literature and Male Homosocial Desire

Unit -IV(Gender, Power and Resistance in Modern India):

Raja Rammohan Roy: "In Defence of Hindu Women" (The English Works 1982)

Ishwar Chandra Vidyasagar: "Arguments for the Compassionate Treatment of Girls and Women" (The Evils of

Child Marriage 1849), Remarriage of Hindu Widows (1855)

Rasasundari Devi: "Learning to Read" [From Amar Jibon (My Life) Part-I 1876]

Nabaneeta Dev Sen: Medea (A Play)

COMPULSORY FOUNDATION COURSES

S1.	Subject Name of the Course	Credit/	Contact Hours/Semester	Semester
No		Course		Number
1.	Basics of Computer Applications Skill I	4	48	II
2.	Seminar Presentation (No End-semester examination. Students shall be evaluated on their presentations of 2 seminars)	2	24	Ш

Tripura University A Central University



Curriculum

For

Master of Arts in

POLITICAL SCIENCE

DEPARTMENT OF POLITICAL SCIENCE SURYAMANINAGAR 2015

FIRST SEMESTER

Course – 701 (C): Ancient Indian Political Thought

Course – 702 (C): Modern Indian Political Thought

Course – 703 (C): Western Political Thought-I

Course – 704 (C): Western Political Thought-II

Course – 905 (E): North East Indian Politics

SECOND SEMESTER

Course -801(C): Political Theory

Course – 802 (C): Comparative Politics

Course – 803 (C): Public Administration

Course – 804 (C): Theories of International Relations

Course – 805 (E):Constitution of India

THIRD SEMESTER

Course -901 (C): Political Sociology

Course - 902(C): Research Methodology

Course –903(E): Problems in International Relations

Course – 904(E): Post-Colonial Indian Politics

Course-905(E): Administration and Politics in Tripura

FIRST SEMESTER

Ancient Indian Political Thought

(Course Code-701C)

Unit-I

A brief survey of the geo-political background

Impact of Vedic Values

Salient features of the Ancient Indian Political Thought

Unit-II

Political Philosophy:

Ramayan, Mahabharata, Bhagavad Gita, Vedanta

Unit-III

Codifications of Laws:

Manu-Smriti

Narada-Smriti

Vishnu-Smriti

Sukra-niti

Unit-IV

Theories about the origin of the king/kingship

Kautilya; Theory of State, Rajmandala

Manu; Social Laws, Raj Dharma, Varnashrama, Statecraft

Benevolent Monarchism: Mauryas and Guptas

Thoughts on Local administration in India

Suggested Readings

- Sing .M.P. am Roy Himanshu, Indian Political Thought Themes and Thinkers, person, 2011.
- ChakrabartyBidyot and Pandey Rajendra Kumar, Modern Indian Political Thought Text and Context, Sage Publication, 2009.
- Aiyanger and Rangaswami: Some aspects of ancient Indian Polity
- Alteker, A.S: State and Government in Ancient India
- Bandopadhyaya, N.C :Development of Hindu Polity and Political Theories
- Beni Prasad: Theory of Government and ancient India.
- BhandarKar, D. R: Some aspects of ancient Hindu polity.
- Bhatt, S.R: Welfarism and Classical Indian Thought
- Buhler (tr): The Laws of Manu
- Choudhury, R.K: Kautilya's Political Ideas and Institutions
- Dikshitar and Ramchandra: The Mauryan polity
- Dutta, M. N.(tr): Vishnu Puranam
- Ghoshal, U.N: History of Hindu Political Theories
- Humu, R.E.(ed): Thirteen Principal Upanishads.
- Law, M.N: Aspects of ancient a India Polity
- Mukherjee, R.K: Chandragupta Maurya and his times
- Radhakrishnan, S.(tr): The Bhagavad Gita
- Radhakrishnan, S.: The Hindu of Life
- Rajagopalachari (tr): The Mohabharata
- Rso. M.V.K: Studies in Kautilya
- Salutore, B.A: Ancient Indian Political Thought and Instituitons
- Sarkar, B.K. (tr): The Sukra-niti
- Sen, A.K: Studies in ancient Indian Political Thought
- Sen, M.L.(tr): The Ramayana
- Sri Aurobindo : Essays on Gita.

(More References as and when required will be furnished by the Teachers in the Classes)

Modern Indian Political Thought

(Course Code-702C)

Unit-I

Salient features of Modern Indian Political Thought

Early Nationalist Responses: Rammohan to JotibaPhule

Socio-Political Thought: Naoroji, Ranade and Tilak

Unit-II

Swami Vivekananda to Sri Aurobindo- A Critical analysis of Indian Nationalism

Gandhi, Subhas Bose, Neheru and Patel: An estimate of their views on national integration

Rabidranath Tagore: Political Ideas, Nationalism

Unit-III

KeshabBaliramHedgewar: Concept of State(Rastra)

V.D.Savarkar: Cultural Nationalism

M.S.Golwalker: Hindu Nationalism: AS Critical Study

Deendayal Upadhyaya: Integral Humanism

Unit-IV

Syed Ahmed Khan: Socio-Political Thought

Mohammed Iqbal: Political Ideas

Mohammed Ali Jinnah: Two National Theory

Constitutionalism and Nationalism: Ambedkar and J.P.Narayan

Ram Manohar Lohia: Political Thought

Suggested Readings:

- Appadorai, A: Indial Political Thinking Through the Ages, Khama, Delhi,1992.
- Appadorai, A: Political Thought in India, Khama, Delhi, 2002.

- Battacharyya, Buddadeva: Evolutuion of the Political Philosophy of Gandhi, Calcutta Book House, Calcutta, 1969
- Gandhi, M.K: Hind Swaraj, Navajevan, Ahmedabad,1938.
- Kar, Jasubanta: Subhas Chandra Bose: The man and His Mind, (Minerva Association).
- Subhas Chandra Chatterjee- Subhas Chandra: The man and His Mission.
- Karunakaran, K.P: Indian Politics from Dadabhai Nauruji to Gandhi, Asia, Delhi, 1967.
- Lohia, Rammanohar: Marx, Gandhi and Socialism, Scientific Socialist Educational Trust, Hyderabad, 1976.
- Majumder, Bimanbehari: History of Indian Social and Political Ideas: From Rammohan to Dayananda, Bookland Private Limited, Calcutta, 1967.
- Mehta, V.R: Indian Political Thought, Manohar Publications, New Delhi, 1996.
- Mehta, V.R and Thomas Pantham (eds): Political Ideas In Modern India: Thematic Explorations, Sage Publications, New Delhi, 2006.
- Narvane, V.S: Modern Indian Thought, Orient Longman, New Delhi, 1978.
- Pantham, T.and Deutsch, K.L.,(ed): Modern Indian Thought, Sage Publications, Delhi,1986.
- Parekh, B: Colonialism, Tradition and reform, Sage Publications, Delhi, 1989.
- Pathippagam, V.B, National Integration: The Vision of Swami Vivekananda and The Mission of Rastriya Swayam sevak Sangh(RSS), Vijaya Bharatham Pathippagam Publication, Chennai, 2012.
- Seshadri, H.V.: R.S.S A Vision in action, Sahitya SindhuPrakashana, Bangalore, 2001.
- Seshadri, H.V.: R.S.S A Vision in action, Sahitya SindhuPrakashana, Bangalore, 2001.
- Bunch of Thoughts- M.S Golwalkar-3rd Edition Published by: Sahitya SindhuPrakashana, 14/3A Nripatunga Road. Bangalore 1.(1996).
- Dr. Hedgewar- the Epoch Maker, complied by B.V. Deshpande and S.R. Ramaswamy, Edited by H.V Seshadri Published by: Sahitya SindhuPrakashona, Bangalore 19, Year 1981.
- Sri Guruji- Pioneer of a new era by C.P. Bhishikar Published by Sahitya SindhuPrakashona, 14/3A Nripatungav Road, Bangalore 1.(1999).
- Sri Guruji (English)by H.V. Seshadri Published by :Suruchi Prakashon, Keshav Kunj, Jhandewalan, , New Delhi,110055. Year 1999.
- Sri Guruji-Reminiscences by K. Suryanarayana Rao Published by: Vivekananda Kendra Prakashan Trust. No. 5. Singarachari street, Triplicane, Chennai 600005. 3rd edition 2007.
- Varma, V.P: Modern Indian Political Thought, Lakshmi Narayana Agarwal, Agra, 1974.
- Savarkar, V.D: Hindutya, Bharatio Sahitya Sadan, Delhi, 1989.
- Sinari, R.A: The Structure of Indian Thought,, OUP, Delhi, 1984.

(More References as and when required will be furnished by the Teachers in the Classes)

Western Political Thought-I

(Course Code-703C)

<u>Unit-I</u>

Plato : Theory of Knowledge, Concept of Communism, Theory of Education.

Aristotle : Philosophical Method, Constitution and Citizenship, Concept of Law and

Justice.

Unit-II

St. Augustine : Augustine's method- Theory of Two Swords

St. Thomas Aquinas : Nature and Society, Natural Law Doctrine, State and the Church

Marsilio De padua : State and Church, Law and Law makers

Unit-III

Machiavelli : Republicanism and Humanism, Human Nature, Nations of Liberty Views

on State

Montesquieu : Sociology of Liberty, Separation of Powers. Argument of Liberty

Unit-IV

Hobbes : Theory of Social Contract, Idea of Sovereignty.

Locke : Theory of Natural Rights, Theory of Social Contract, Constitutionalism,

right of revolution

Rousseau :Theory of Social Contract, Critique of Liberal

Representative Government, Human Nature.

Suggested Readings:

- Adams, Ian and R.W Dyson: Fifty Great Political Thinkers, Routledge, London, 2007.
- Bhole, Bhaskar: PaschimatyaRajakiyaVicharvanta, Pimpalapure, Nagpur.1995.
- Jha, Shefali: Western Political Thought- From Plato to Marx, Dorling Kindersley Pvt, Ltd, Delhi 2010.
- Mukherjee, Subrata&SushilaRaqmaswamy: A History of Political Thought: Plato to Marx, Prentice Hall of India Pvt, Ltd,. New Delhi, 1999.
- Sabine, G.H: A History of Political Theory, George G. harrap& Co. Ltd. London, 1946.
- GaubaO.p., western Political Thought, Macmillan, 2011.
- Mukhopadhayay. Amal Kumar, Western Political Thought, K.P Bagcjhi& Company, 1988.
- Gupta M.G. Western Political Thought, Chaitanya Publishing House. 2006
- Boucher, David and Paul Kelly: Political Thinkers, Oxford University Press, Oxford, 2003.
- Bluhm, W.T: Theories of Political Systems: Classics of Ancient and Modern Political thought, Prentice Hall, New Delhi, 1981.
- Dunning, William: A History of Political Theories, Allahabad, 1996.
- Ebenstein, William: Modern Political Thought, Oxford and IBH, 1974

(More References as and when required will be furnished by the Teachers in the Classes)

Western Political Thought-II

(Course Code-704C)

Unit-I

Hume : Conception of Reason, fact and Value, Human Psychology, Idea

of Government & Legitimacy.

Bentham : Theory of Utilitarianism, Modern State, Notion of Liberty.

J.S. Mill : Critique of Utilitarianism, Gender Equality, Democracy and

Representative Government.

Unit-II

Kant : Political Ideas, Philosophy of History, Notion of Perpetual

Place and Cosmopolitanism.

Hegel : State and Freedom, Dialectics.

Green : State, Political Obligation, Concept of Moral Freedom.

Unit-III

Burke : Critique of French Revolution, Political Ideas,

Marx : Theory of Alienation, Dialectics, State and Revolution.

Lenia : State and Revolution, Party as Vanguard, Dictatorship of the

Proletariat.

Unit-IV

Mao : On Contradiction, On Practice, New Democracy, Culturul

Revolution.

Gramsci : Hegemony, State and Civil Socity

Socialism : Utopian Socialism, Anarchist Socialism, Fabian Socialism, Guild Socialism,

Syndicalism

SUGGESTED READINGS:

- Boucher, David and Paul Kelly: *Political Thinkers*, Oxford University Press, Oxford,
 2003
- Bluhm, W.T: Theories of Political Systems: Classics of Ancient and Modern Political Thought, Prentice Hall, New Delhi, 1981
- Dunning, William: A History of Political Theories, Allahabad, 1996
- Ebenstein, William: Modern Political Thought, Oxford and IBH, 1974
- Mukherjee, Subrata&SushilaRamaswamy: A History of Political Thought: Plato to Marx, Prentice Hall of India Pvt Ltd, New Delhi 1999
- Sabine, G.H: A History of Political Theory, George G.Harrap&Co.Ltd, London, 1946
- Strauss, Leo and Joseph Cropsey: History of Political Philosophy, Chicago, 1987
- Jha, Shefali: Western Political Thought- From Plato to Marx, Dorling Kindersley Pvt.
 Ltd, Delhi 2010
- McClelland, J.S, A History of Western Political Thought, Psychology Press London, 1998
- Afsanasev, N.G: Marxist Philosophy, Progress, Moscow, 1978
- Avinevi, Shlomo: Hegel's Theory of the Modern State, Cambridge University Press,
 Cambridge, 1972
- Gauba, O.P: Western Political Thought, Macmillan 2011
- Mukhopadhyay, Amal Kumar, Western Political Thought, K.P Bagchi& Company, 1988
- Gupta M.G: Western Political Thought, Chaitanya Publishing House, 2006

(More references as and when required will be furnished by the Teachers in the Classes.)

NORTH EAST INDIAN POLITICS

(Course Code-905 E)

UNIT I

Theoretical Framework for studying State Politics in India:

- Approaches to the study of State Politics
- Significance and importance of the study of State Politics
- Features and Determinants of State Politics
- North East Indian Theoretical Framework

UNIT II

The North East: An Overview:

- Geography, History: Colonial Legacy-Politics of Reorganisation of States
- Strategic Importance of North East India: Internal and External Dimension
- Emergence of North East as a Region

UNIT III

Development and North East India:

- Development Process in North East in the Post Independence Era
- Constrains and Prospects

UNIT IV

Discontent and North East India:

- Roots of discontent in the North East Indian States with special reference to Tripura
- Economic, Socio-Cultural Diversities, Ethnicity and Migration

SUGGESTED READINGS:

- Baruah, A.K (ed), *Student Power in North East India*, (New Delhi Regency, 2002)
- Baruah, Sanjib, *India Against Itself* (New Delhi: Oxford University Press, 1999)
- Baruah, Sanjib, *Durable Disorder Understanding Politics of Northeast India* (New Delhi: Oxford University Press, 2005)
- Bhaumik, Subir, *Troubled Periphery: Crisis of India's North East* (New Delhi: Sage Publications Ltd, 2009)
- Chaube, S.K, *Hill Politics in North East India*, (Calcutta: Orient Longman, 1973)
- Das, SK, *Regionalism in Power* (Delhi: Omsons Publications, 1997)
- Dutta Roy, B, *Reorganisation of North East since 1947* (New Delhi: Concept Publication, 1996)
- Elwin, Verrier, *A Philosophy of NEFA*; with a foreword by Prime Minister of India, 2nd revised edition, Shillong, Advisor to the Government of Assam, 1964
- Gassah, L.S (ed) *Regional Political Parties in North East India* (New Delhi Omsons Publications, 1992)
- Mahanta, Prafulla K, *The Tussle between the Citizens and Foreigners in Assam* (Sahidabad: Vikas Publishing House 1986)
- Pakem, B, Coalition Politics in North East India (New Delhi: Regency Publications, 1999)

(more references as and when required will be furnished by the Teachers in the Classes)

SECOND SEMESTER

Political Theory Course Code: 801 (C)

Unit – I

Different Interpretations of Political Theory:

- The Classical Tradition of Political Theory; Importance and Limitations of Classical Tradition
- Moves towards a Science of Politics Positivism and Logical Positivism
- Behaviouralism and Post-Behaviouralism
- Debate on the 'Decline'/ 'Revival' of Political Theory

Unit – II

Impact of Positivism on Political Science:

- Use of Rational Actors Models
- Public Choice Approach
- Influence of General Systems Theory: Input-Output Analysis (David Easton)
- Structural-Functionalism (Almond and Powell)
- Communication Model

Unit – III

Contemporary Liberalism:

- Libertarianism
- Communitarianism
- Multiculturalism
- Feminism

Unit - IV

Marxist View of Science and Approach:

- Analysis of Political Economy Structuralist and Marxist
- Neo-Marxist Political Theory:
- Analysis of Mode of Production Key Debates
- Nature of State Theory of relative Autonomy and Authoritarian Statism
- Critical Theory
- Post-Colonial Political Theory

Selected Readings:

- Abbas, Hoveyda and Ranajay Kumar, *Political Theory*, (Delhi: Pearson, 2012)
- Barker, Ernest, *Greek Political Theory: Plato and his Predecessors*, (New Delhi: B. I. Publications, 1980)
- Dixon, Th., *The Invention of Altruism*, (Oxford: Oxford University Press, 2008)
- Fedi, L., *Comte*, (Paris: Les Belles Lettres, 2000)
- Macpherson, C. B., *The Political Theory of Possessive Individualism*, (Oxford: Oxford University Press, 1962)
- Rawls, John, *A Theory of Justice*, (Oxford University Press, 1971)
- Ramaswamy, Sushila, *Political Theory: Ideas and Concepts*, (Delhi: MacMillan, India Ltd., 2003)
- Sabine, G. H. and Thomas L. Thorson, *A History of Political Theory*, (New Delhi, Oxford & IBH Publishing Co., 1975)
- Heyhood, Andrew, *Politics*, (New York: Palgrave Foundations, 2002)
- Verma, S. P., *Modern Political Theory*, (New Delhi: Vikas, 1982)
- Rawls, John, *Political Liberalism*, (New York: Columbia University Press, 1993)
- Farelly, Colin, An Introduction to Contemporary Political Theory, (New Delhi: SAGE, 2004)
- Sandel, Michael, *Liberalism and the Limits of Justice*, (Cambridge: Cambridge University Press, 1998)
- Kymlicka, Will, Multicultural Odyesseys: Navigating the International Politics of Diversity, (Oxford: Oxford University Press, 2009)
- Nozick, Robert, Anarch, State, and Utopia (London: Wiley Blackwell, 2001)
- John, Mary E, Women's Studies in India: A Reader (New Delhi: Penguin, 2008)

Comparative Politics Course Code: 802 (C)

UNIT I

Approaches to the Study of Comparative Politics

- Systems theory and structural functionalism
- Institutionalism
- Political Economy approach

Organizing the state

- Constitutions and Constitutionalism
- Unitary State, Federations and Confederations
- Non-democratic systems

UNIT II

Governmental Structures

- Legislatures and Constitutionalism
- Bureaucracy and Military
- Judiciary

Parties and Groups

- Electoral Systems and Elections
- Parties and Party Systems
- Political dynamics & Groups in Politics

UNIT III

Political Regimes : Democracy and Autocracy

- Types of Democracy
- Types of Dictatorship

Case Studies: South Africa, Nigeria, Iran

Institutions

- Institutions: Constitutions
- Institutions: Federalism and Decentralization
- Case-study discussions: UK, US, France and Germany

UNIT IV

Political Development

- Modernization and Political Development
- Underdevelopment
- Revolutions

Non-State Political Process

Social Movements

• Non-Governmental Organizations

Readings:

- 1. Almond G. and B. Powell, 1988, *Comparative Politics Today: A World view*, Chicago, Foresman.
- 2. Chilcote Ronald H., 1994, *Theories of Comparative Politics: The search for a Paradigm Reconsidered*, Oxford, Westview Press.
- 3. Hague Rod, Harrap Martine and Breslin Shaun; 2004, *Comparative Government and Politics: An Introduction*, Hampshire, Macmillan.
- 4. Haynes Jeffery, 2005 Comparative Politics in a Globalizing World, Polity Press, Cambridge.
- 5. O'Neil Patrick, 2004, Essentials of Comparative Politics, New York, W.W. Norton and Co.
- 6. Ray S.N., 1999, *Modern Comparative Politics: Approaches, Methods and Issues*, New Delhi, Prentice Hall.
- 7. Landman Todd, 2000, Issues and Methods in Comparative Politics: An Introduction, London, Routledge.
- 8. Daniele Caramani. 2008. Comparative Politics. Oxford: Oxford University Press.
- 9. Kenneth Newton and Jan W. van Deth. 2010. *Foundations of Comparative Politics* 2nd Edition. New York: Cambridge University Press.
- 10. Karl Fields, Patrick O'Neil and Don Sher. 2006. *Cases in Comparative Politics*. 2nd Ed. New York: W.W.Norton& Co.
- 11. Blondel Jean, 1995, Comparative Government, London, Prentice Hall, 2nd Edition.
- 12. Bara Judith and Mark Pennington, (eds) 2009, *Comparative Politics*, Los Angeles, Sage.
- 13. Newton Kenneth and Van Deth Jan, 2005, *Comparative Politics*, Cambridge, Cambridge University Press
- 14. Huntington, Samuel P. 1968. Political Order in Changing Societies.
- 15. Collier, David and Steven Levitsky. 1997. "Democracy with Adjectives. Conceptual Innovation in Comparative Research." (Research Note) World Politics, 49:3 (April 1997) 430-51
- 16. Sidney Tarrow, *Power in Movement Social Movements and Contentious Politics* (New York: Cambridge University Press, 2008).

Public Administration Course Code: 803 (C)

UNIT I (Public Administration-Evolution, Concepts & Challenges)

- Public Administration-Approaches, New Public Administration-Goals and Anti-goals of NPA.
- ii) New Public Management.
- iii) Public Choice Approach
- iv) Challenges of Liberalisation, Privatisation and Globalization to Public Administration

UNIT II (Theories of Administration & Personnel Administration)

- i) Organization- Meaning, Characteristics and typology.
- ii) Public Corporation and Departmental System.
- iii) Process and Techniques of Decision Making, Communication, Motivation and Leadership.
- iv) Development Administration-New directions in People's Self Development and Empowerment.

UNIT III (Accountability & Control)

- i) Civil Society-Evolution, Characteristics, Importance and Challenges to Civil Society.
- ii) Role of Media, Interest Groups and Voluntary Organisations in Public Administration
- iii) Citizen's Charter and Good Governance.
- iv) People's Participation and Right to Information.

UNIT IV (Financial Administration)

- i) Meaning and Scope of Financial Administration.
- ii) Principles of Financial Administration.
- iii) Performance Budgeting.
- iv) Accounts and Audit.

References and Further Reading:

- Baker, Gideon,: Civil Society and Democratic Theory: Alternative Voices, Routledge, London, 2002.
- Bhattacharya, Mohit, : Social Theory and Development Administration, Jawahar, New Delhi, 2002.
- Bhattacharya, Mohit, 1981, *Public Administration : Structure, Process and Behaviour*, The World Press Pvt. Ltd., Kolkata.
- Chandhoke, Neera,: *The Conceits of Civil Society*, Oxford University Press, New Delhi, 2004.
- Chakrabarty, Bidyut and Mohit Bhattacharya,: *Public Administration: A Reader*, Oxford University Press, New Delhi, 2003.
- Dunn, William N,: Public Policy Analysis: An Introduction, Prentice-Hall, New Jersey, 1991.
- Denhardt, Robert B. and Joseph W. Grubbs,: *Public Administration: An action Orientation*, Fourth Edition, Thomson (Wadsworth), Canada, 2003.
- Elliott, Carolyn M, : Civil Society and Democracy: A Reader, Oxford University Press, New Delhi, 2003.
- McCourt, Willy, and Martin Minogue, : *TheInternationalisation of Public Management*, Edward Elgar, USA, 2001.
- McLaughlin, Kate, Stephen Osborne and Ewan Ferlie,: New Public Management, Routledge, London, 2002.
- Mc Laughlin, Stephen P. Osborne and Evan Ferlie (Eds.), :*New Public Management: Current Trends and Future Prospects*, Routledge, London, 2002.
- Nayyar, Deepak (Ed.),: Governing Globalisation: Issues and Institutions, Oxford, New York, 2002.
- Osborne, David and Ted Gaebler,: *Reinventing Government*, Plume Books, New York, 1993.
- Sahni, Pardeep and Uma Medury,: Governance for Development: Issues and Strategies, Prentice Hall of India, New Delhi, 2003.
- Peters, B. Guy,: *The Politics of Bureaucracy*, Routledge, London, 1996.
- Sharma, A. K.,: Bureaucracy and Decentralisation, Mittal Publication, New Delhi, 2004.
- Shafritz, Jay M. and E.W. Russell,: *Introducing Public Administration*, Longman, New York, 2003.
- Self, Peter,: Government by the Market? The Politics of Public Choice, Macmillan, London, 1993.
- Sapru, R.K.,: Public Policy, Sterling, New Delhi, 2001.

Theories of International Relations Course Code: 804 (C)

Unit 1

- 1. Evolution of the discipline: The Great Debates; Significance of theorizing International Relations
- 2. Classical Realism
- 3. Structural realism: Offensive and Defensive Realism; Subaltern critique of neo-realism

Unit 2

- 4. Liberalism: Democratic Peace Theory
- 5. Neo-liberalism: Neo-Liberal Institutionalism and Complex Interdependence Theory; the neo-neo debate
- 6. Game Theory

Unit 3

- 7. Behavioral approaches: Systems Theory, Communications Theory and Decision Making Theory
- 8. Marxist theories: Dependency and World System Theory; Critical theory
- 9. Constructivism.

Unit 4

- 10. Feminist theory; Post structuralism and Post colonialism
- 11. Theories of Globalization
- 12. Peace studies

Readings:

- Alexander Wendt, Social Theory of International Relations, Cambridge: Cambridge University Press, 1999.
- Alexander Anievas, *Marxism and World Politics: Contesting Global Capitalism*, London: Routledge, 2010.
- E. H. Carr, The Twenty Years Crisis 1919-1939: An Introduction to the Study of International Relations: London: Palgrave, 2001.
- Hans J. Morgenthau, Kenneth Thompson and David Clinton, *Politics Among Nations: The Struggle for Power and Peace*, 7th Edition, Tata Macgraw Hill, 2005.
- John Baylis, Steve Smith and Patricia Owens (eds.), *The Globalization of World Politics: An Introduction to International Relations*, Oxford: Oxford University Press, 2014.
- J. Edkins and Vaugan Williams (eds.), *Critical Theorists and International Relations*, London: Routledge, 2009.
- John Mearshemeir, *The Tragedy of Great Power Politics*, New York: Norton, 2014.
- J. Ann Tickner, Gendering World Politics, New York: Columbia University Press, 2001.
- Kenneth Waltz, *Theory of International Politics*, Waveland Pr Inc, 2001.
- Mahendra Kumar, *Theoretical Aspects of International Politics*, Agra: Shivlal Agarwal & Company, 1976.
- Martin Hollis and Steve Smith, *Explaining and Understanding International Relations*, Oxford: Oxford University Press, 1991.
- Robert Jackson and George Sorenson, *Introduction to International Relations: Theories and Approaches*, 5th Edition, Oxford: Oxford University Press, 2013.
- Robert Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, New Jersey: Princeton University Press, 2005
- Robert Keohane and Joseph Nye, *Power and Interdependence*, 4th Edition, New York: Longman, 2011.
- Robert Cox and T. Sinclair, *Approaches to World Order*, Cambridge: Cambridge University Press, 1996
- Scott Burchill et al, *Theories of International Relations* 4thed, Basingstoke: Palgrave Macmillan, 2008.
- Tim Dunne, M. Kurki and Steve Smith (eds), *International Relations. Discipline and Diversity*, 3rdEdition, Oxford University Press, 2013.
- W. E. Scheuerman, Frankfurt School Perspectives on Globalization, Democracy and the Law, London: Routledge, 2012.

CONSTITUTION OF INDIA COURSE CODE: 805 (E)

UNIT-1

Framing of the Indian Constitution:

- Composition and role of the Constituent Assembly;
- Philosophy of the constitution, Preamble
- Fundamental Rights and Duties,
- Directive Principles

UNIT-II

Federalism- Union-State Relations; Recent Trend Union Executive:

- Power and position of President.
- Power and position of Prime Minister,
- Power and position of Council of minister

Government of the States:

- Power and position of Chief Minister,
- Power and position of Council of Ministers
- State Legislature: Composition and Functions.

UNIT III

Union Legislature:

- LokSabha&RajyaSabha, Organisation, Functions,
- Law-making Procedure,
- Privileges, relationship of two houses,
- Committee system
- Role of Speaker
- RTI Act-2005

UNIT IV

The Judiciary:

- Supreme Court and High Courts: Composition and Functions
- Doctrine of Judicial Activism
- Constitutional Amendment
- Procedure of Constitutional Amendment
- 73rd&74th Amendment
- 6th& 7th Schedule

References:

- M. V. Pylee: Constitutional Government in India. (Latest Edition)
- S.C. Kashyap (ed): Perspectives on the Constitution.
- D. D. Basu: An Introduction to the Constitution of India.
- B. K. Sharma: Introduction to the Constitution of India.
- S. Kaunshik (ed.): Indian Government and Politics.
- A.G. Noorani: Constitutional Questions in India. The President Parliament and the States.
- S. P. Aiyer and U. Mehta (eds): Essays in Indian Federalism.
- C.P.Bhambri: the Indian State: Fifty Years
- B.L.Fadia: State Politics in India (2 Vols)
- Bhargava,Rajeev(ed)Politics and Ethics of the Indian Constitution,Oxford
 Publication,2011
- Austine, Granville, Working a Democratic Constitution: A History of the Indian Experience, Oxford Publication, 2011

THIRD SEMESTER

POLITICAL SOCIOLOGY

COURSE CODE: (901- C)

Unit I

1. Nature and Scope of Political Sociology:

- Evolution of Political Sociology as a discipline
- Approaches to the study of Political Sociology

2. Stratification and Power:

- Social Stratification and Politics; Caste and Class
- Conceptualization of Power, Authority and Legitimacy

Unit II

3. Political Socialisation and Culture

- Political Socialisation
- Political Participation and Communication
- Cultural bases of Politics: From Modernism to Post Modernism
- Media and Politics
- Gender and Politics Women Empowerment

Unit III

4. Some Basic Concepts:

- Elitism: Definition, Rise of Elitism, Elite Theories
- Bureaucracy: Marx, Weber and Merton
- Social Ethics and Politics: The Domain of Social Ethics
- a) Social Discrimination
- b) Poverty and Hunger
- c) Values of Secularism
- d) Fundamentalism

Unit IV

5. State and Society in India

- State and Society under Capitalism; Citizenship and Welfare State
- State and Society under Socialism; State Control and Institutional Autonomy

6. Contemporary trends in Political Sociology in India

• Ethnic Conflicts in India.

- Social Inequality and Exclusion
- Political participation

Reference Books:

- Tom Mertes(ed.), A Movement of Movements: Is Another World Really Possible?
 Verso, London, 2004.
- Singh, Rajinder, Social Movement: Old and New: A Post-modernist Critique, SAGE
 Publications, New Delhi, 1990
- Rao, MSA, Social Movements in India: Studies in Peasant, Backward Classes,
 Sectarian, Tribal and Womens Movements, Monohor Publications, New Delhi, 1990
- Desai, A.R, ed. Peasant Struggles in India, Oxford University Press, New Delhi, 1979
- Bhargava, Rajeev, Ed. Secularism and Its Critics, New Delhi, Oxford University Press, 1999.
- LaFollette, Hugh, Ethics in Practice, Massachusetts, 1997.
- Ali, Ashrof and I. N Sharma, Political Sociology A New Grammer of Poitics, Universities Press, New Delhi, 1983.
- Giddens, Anthony, Sociology, Blackwell, 2006.
- Gupta, Dipankar, <u>Political sociology in India: contemporary trends</u>, Orient Longmen Limited, New Delhi, 1996.
- Roy, Shefali, Society and Politics in India Understanding Political Sociology, PHI Learning Private Limited, Delhi, 2014.
- Kumar, Anand, *Political Sociology of Poverty in India: Between Politics of Poverty and Poverty of Politics*, CPRC India Working Paper, 2003.
- Nayak, Smita, *Whither Women: A Shift from Endowment to Empowermen*, Edupedia Publications Pvt. Ltd. New Delhi, 2016.
- Weiner, Myron, Sons of the Soil: Migration and Ethnic Conflict in India, Princeton University Press, 1978.

RESEARCH METHODOLOGY COURSE CODE- (902-C)

UNIT I

Basics of Research:

- Meaning and aims
- Steps in Research Process
- Research Design
- Methods and Types of Research

Survey and Research:

- Kinds of Survey
- Stages in Survey Method

Hypothesis:

- Meaning
- Criteria for Hypothesis Construction
- Nature of Hypothesis
- Difference between a Proposition, a Hypothesis and a Theory

UNIT II

Sampling:

- Probability and Non Probability Sampling
- Their Applications

Data Collection:

- Types of Data- Primary and Secondary Data, Qualitative and Quantitative Data
- Talcott Parsons (on Social system and Pattern Variables)

GROUP B

UNIT III

- Measures of Central Tendency
- Measures of Dispersion
- Correlation

UNIT IV

- Regression and Prediction
- Testing Hypothesis
- Basic Concepts of Computer

SUGGESTED READINGS:

- Bernstein, Robert and James A.Dyer: An Introduction to Political Science Methods, Prentice Hall, New Jersey, 1984
- Burns, Robert B: Introduction to Research Methods, Sage Publications, London 2000
- Goel, MadanLal and VB Singh: *Social and Political Science Research Methods*, Ajanta Publications, New Delhi, 1996
- Gopal, MH: An Introduction to Research Procedure in Social Sciences. Asia Publishing House, Bombay 1970
- Kumar, Ranjit: Research Methodology: A step by step guide for Beginners, Sage Publications, London 1999
- Young PV: Scientific Social Survey and Research, Prentice Hall, New Delhi, 1975
- Singh Kultar: Quantitative Social Research Methods, Sage Publications, New Delhi 2007

(More References as and when required may be furnished by the Teachers in the Classes)

PROBLEMS IN INTERNATIONAL RELATIONS

COURSE CODE: POLS 903E

This course envisages introducing students to the current challenges and contentions in International politics. In the process it also deals with the questions of the changing nature and frontiers of the primary categories of war, peace, state, sovereignty and security used for understanding international relations. The course is designed taking into consideration the contemporary problems in world politics and is designed to be executed in lectures and interactive sessions.

Unit 1

Post Cold War Challenges in International Relations – its effect on interstate and state – non-state relations.

Global and Regional Distribution of Power

Unit 2

Global inequality: World economic system and the hegemony of finance capital; limits of the free market, gendered nature of labour in globalization.

Global Militarization: nuclear proliferation and the Arms control debate; the changing nature of war

Unit 3

International terrorism: resurgence of religious violence, state sponsored terrorism.

Challenges to sustainable development: climate change, environment development debate;

Unit 4

Human security: Refugee crisis; politics of humanitarian intervention.

Globalization and state sovereignty: increasing relevance of non-state actors, role of social media, media networks, Wiki leaks and whistleblowers.

Readings:

- Bailis, John and Steve Smith (2014) *The Globalization of World Politics: An Introduction to International Relations*, Sixth Edition, London: Oxford University Press.
- Blanton, Shannon and Charles Kegley (2015), World Politics: Trends and Transformations, Boston: Cengage Learning.
- Betts, Alexander and Gill Loescher eds. (2011), *Refugees in International Relations*, New York: Oxford University Press
- Carr M (2016), US Power and the Internet in International Relations: The Irony of the Information Age, New York: Palgrave Macmillan
- Chomsky, Noam (2015) *Pirates and Emperors Old and New: International Terrorism in the Real World*, Chicago: Hey Market Books.
- Cox, Michael et al (1999), *The Interregnum: Controversies in World Politics, 1989-1999*, Cambridge: Cambridge University Press.
- Duffy Toft Monica et. al (eds) (2012), *Rethinking Religion and WorldAffairs*, New York: Oxford
- Futter, Andrew (2015), *The Politics of Nuclear Weapons*, New Delhi: Sage.
- Ghosh Jayati (2009), Never Done and Poorly Paid: Women's Work in Globalising India, New Delhi: Women Unlimited.
- Held, David Ayse Kaya (2007), Global Inequality: Patterns and Explanations, Cambridge: Polity.
- Holzgrefe, J. F. And Koehane R. (2002), *Humanitarian Intervention: Ethical, Legal and Political Dilemma*, Cambridge: Cambridge University Press.
- Juergensmeyer, M. (2000), *Terror in the Mind of the God: The Global Rise of Religious Violence*, Berkley: University of California Press.
- Lawson, Stephanie Ed. (2002), The New Agenda for International Relations: From Polarization to Globalization of International Politics, Cambridge: Polity Press.
- Martin, Gus (2015) *Understanding Terrorism: Challenges, Perspectives, and Issues*, California: Sage.
- Sagan Scott D. And Kenneth Waltz (1995), *The Spread of Nuclear Weapons: A Debate*, London: W.W. Norton.
- Thakur, Ramesh (2015), *Nuclear Weapons and International Security*, New York: Routledge.
- Volger, John and Mark Imber (1996), *Environment and International Relations: Theories and Processes*, London: Routledge.
- Kavalski, Emilian (2015), Encounters with World Affairs, London: Ashgate Publishing.

POST COLONIAL INDIAN POLITICS

COURSE CODE: (POLS 904E)

This course will focus on the trajectory of the Indian state after 1947 leading upto the present epoch. The readings will focus on the social, cultural, and economic aspects of Indian politics and examine the major debates and contributions pertaining to the aspects. The course will delineate the contours of nationalism, democracy, and citizenship as major themes. The underlying intention is to explain the contradictions and convergences – in the fabric of the body politic – that are critical to understand the present state of Indian democracy and its historical genealogy.

Schedule and topics of reading:

Unit I

- Lineages of the Post Colonial State
- Modernity and the Indian State
- Questions of Politics

Unit II

- Nationalism and its discontents
- The Democratic Paradox
- The Citizenship Debate

Unit III

- Political Participation in India
- The Resilience of Caste
- Religion and Politics

Unit IV

- The Developmental State in Context
- The Politics of Liberalization
- Scaling Up: Developments in Political Science Research

Readings:

Anderson, Perry. "After Nehru." London Review of Books 2 August 2012: 1-45.

Mitra, Subrata. "Democracy's Resilience: Tradition, Modernity and Hybridity in India." <u>Harvard</u> International Review Winter 2011: 1-8

Kothari, Rajni. "The Indian Enterprise Today. " <u>Daedalus Fall 1989: 50-67</u>

Chandra, Kanchan. "Counting Heads: A Theory of Elite and Voter Behaviour in Patronage Democracies." in Herbert Kitschelt and Steven WIlkinson eds. Patrons, Clients and Policies. 2007, Cambridge: <u>Cambridge University Press</u>

Roy, Srirupa. "Beyond Belief: India and the Politics of Post Colonial Nationalism." 2007, Durham: <u>Duke University Press</u>

Chatterjee, Partha. "The Nation and its Fragments: Colonial and Post Colonial Histories." 1994, Princeton: <u>Princeton University Press</u>

Guru, Gopal. "The Idea of India:Derivative, Desi and Beyond." <u>Economic and Political Weekly</u> September 2014: 37-44

Jayal, Nirja Gopal. "Citizenship and its Discontents: An Indian History." 2015, Massachusetts: Harvard University Press

Kaviraj, Sudipta. "The Enchantment of Democracy and India." 2012, Ranikhet: Orient Blackswan

Zacariah, Benjamin. "Playing the Nation Game: The Ambiguities of Nationalism In India." 2011, New Delhi: Yoda Press

Deshpande, Satish ed. "The Problem of Caste: Essays from Economic and Political Weekly." 2015, Noida: Orient Blackswan

Chibber, Vivek. "Bureaucratic Rationality and the Developmental State." <u>American Journal of Sociology</u> January 2002: 951-89

Kohli, Atul. "Poverty Amid Plenty in the New India." 2012, New Delhi: <u>Cambridge University Press</u>

Chibber, Pradeep. "Do Party Systems Count? The Number of Parties and Government Performance in Indian States". Comparative Political Studies March 2004: 152-187

Singh, Prerna. "Subnationalism and Social Development: A Comparative Analysis of Indian States." <u>World Politics</u> July 2015: 506-562

Administration and Politics in Tripura

(COURSE CODE: POLS 905-E)

Unit-I

- 1. Tripura- The Land-The People- Religion and Language.
- 2. State formation in ancient Tripura.
- 3. History of Tripura Raj- Ancient, Medieval, Modern. Rise, Reform & Recline of the Raj: Tripura's ties with Tagore.
- 4. Tripura's merge with the Indian Union.

Unit-II

- 1. Political Institutions in Princely Tripura.
- 2. General Administration.
- 3. Revenue Administrations.
- 4. Welfare Administration- Schemes.

Unit-III

- 1. Transformation of Political Status of Tripura.
- 2. Electoral Politics- Political parties-Regional Politics.
- 3. Pressure Groups.
- 4. Movements- Movements by GMP, Naxalite Movements, Peasant Movements, Labour Movement etc.

Unit-IV

- 1. Process of Decentralization- Subdivision, Districts, Block, Panchayat, ADC.
- 2. Socio- Cultural Dynamics in Tripura.
- 3. Insurgency and Human Security.
- 4. Human Development in Tripura.

References:

- MenonK.D Tripura District Gazetteers Tripura, Govt. of Tripura, 1975.
- Chaudhuri J. Gan:Tripura: The Land and its People, Leela Devi Publication, New Delhi, 1980
- Thakurata S N Guha: India The Land and the People of Tripura, National Book Trust, India, New Delhi, 1986
- Chaudhuri J. Gan: A Constitutional History of Tripura, Parul Prakashani, Kolkata, 2004
- Chaudhuri J. Gan: A Political History of Tripura: Inter-India Publications, New Delhi, 1985
- Mackenzie, A: History of the Relations of the government with the Hill Tribes of the Northeast Frontier of Bengal, Cal.-1884 reprinted by Mittal Publications, Delhi, 1979.
- Bhattacharya Banikantha: Tripura Administration, The era of modernization, Mittal Publications, Delhi, 1986.
- Chakraborty, M (edited): Administration reports of Tripura state, Vol.4, Gyan Publishing House, New Delhi, 1994.
- Chaudhri, D.K.: Administration reports of the Political Agency, Hill Tipperah, 2 Vol, Govt. of Tripura, 1996.
- Sur A K, British Relations with the state of Tripura (1760-1947), Nabachandra Prakashani, Agartala, 2010
- Singh K.S, People of India: Tripura, Vol. XLI, Seagul Books Cal-17
- Borah Swapnali&Tourangbam Deke, Encyclopedia studies of North-Eastern States of India, Tripura, New Academic Publishers, New Delhi, 2010.
- SaigalOmesh: Tripura, Concept Publishing House, Delhi-05, 1st Published 1978.
- ChaudhuryBikach, Rabindranath in the perspective of Tripura, Tripura Darpan, 2014.
- Majumder Benimadhab, The Legislative opposition in Tripura, Tripura State Tribal Cultural Research Institute & Museum, Agartala, 1997.
- Bhattacharya.A: Tribal Politics in Tripura, Lamberd Publication, Jerman, 2012
- Chaudhuri J. Gan: Tripura Historical Documents:Farma K.L,Kolkata,1993
- Chaudhuri J. Gan: A Cultural History of Tripura, Vasudev Pal, Kolkata, 2006
- Chaudhuri J. Gan: The Tale of Three Cities, Nagpur, 2010
- Sharma SK Susha: Discovery of North East-India (vol.11), New Delhi, 2005.
- Gassah, L.S, Regional Political Parties in North East India, New Delhi, 1992
- Chube, S.K, Electoral Politics North East India

TRIPURA UNIVERSITY



(A Central University)

Suryamaninagar

SYLLABUS

OF

COMMERCE

(Major)

B.Com. (Honours)

SEM-I	
Code	Subject
FNDC1	English
C1P1	Principles of Management
C2P1	Business Laws
HI	Financial Accounting: Theory & Applications
	SEM-II
Code	Subject
FNDC2	Modern Indian Language and History of Arts & Culture
C1P2	Business Economics and Business Mathematics
C2P2	Corporate Laws
H2	Cost Accounting
SEM-III	
Code	Subject
FNDC3	Environmental Studies
C1P3	Indian Financial System
C2P3	Entrepreneurship Development
Н3	Corporate Accounting
	SEM-IV
Code	Subject
FNDC4	Computer Skills
C1P4	Business Economics and Business Statistics
C2P4	Business Ethics & Communication
H4	Auditing & Assurance
	SEM-V
Code	Subject
FNDC5	Constitution of India and Planning
C1P5	Information Technology & e-Commerce
C2P5	Marketing Managements Human Resource Management
H5	Direct Taxation
H6	Accounting Theory & Management Accounting
	SEM-VI
Code	Subject
FNDC6	Project
H7	indirect Taxation
Н8	Financial Management
	Any one Group consisting of Two Papers from the following Optional
Optional III	(i) Banking Laws & Practice; (ii) Principles & Practice of Insurance
	(i) Human Resource Planning, (ii) Human Resource Development

B.Com (Honors) Course First Semester

H1: Financial Accounting: Theory and Applications

Full Marks 100

(Written Examination: 80 & Internal Assessment: 20)

Course objective:

A business organization needs a language to communicate its results and position to stakeholders, a language commonly understood by all. For that purpose, accounting serves as the 'language of business'. Bearing these in mind, this course aims to convey sufficient knowledge foran adequate interpretation, analysis and use the information provided by financial accounting to the students.

Learning Outcomes:

- Ability to prepare financial statements in accordance with Generally Accepted Accounting Principles.
- Ability to understand various techniques and procedures to record, summaries and classify the financial data.
- Ability to develop knowledge to measure, demonstrate and communicate financial data.
- Ability to develop the knowledge to critically analyze and interpret published financial information.
- Ability to understand the needs of the various financial report users and able to communicate it to several stakeholders.

UNIT-I:

Nature and scope of accounting, Users of accounting information, Characteristic of accounting information, Basic accounting equation. Meaning of assets, liabilities, Equity, Revenue and Expenses. Accounting Concept and Accounting Conventions, Accounting Standards - brief introduction of AS-1, AS-2, AS-9 and IFRS.

Revenue recognition: Meaning, Objectives, Timing of revenue recognition, Recognition of expenses.

UNIT-II:

Rectification of Errors: Clarification, process preparation of separate account.

Depreciation: Meaning, causes, Characteristics, Methods (SLM, WDV and change of method only) as per accounting standard. Reserve and Provision: Meaning, Objective, types and Accounting. Preparation of Financial Statements of Sole Proprietorship business firm and a Trial Balance - Manufacturing, Trading, Profit and Loss Account, Balance sheet.

UNIT-III:

Consignment Account: Nature, Consignment Vs. Sale, Proforma Invoice, account, sales, Commission, Stock Valuation, Normal and abnormal Loss, preparation of accounts.

Joint Venture Account: Nature, Joint Venture vs Partnership, Methods of preparation of accounts, Consignment and Joint Venture. Branch Accounts: Debtors methods, Stock and Debtors methods, Final account method. Bills of Exchange (including accommodation bill).

UNIT-IV:

Partnership Accounts: Characteristics, Deed, Fixed and Fluctuating Capital, Valuation and fundamentals of Goodwill, Joint life policy, Changes of profit sharing ratio.

Reconstitution of Partnership Firm: Admission of Partner, Retirement, Death of a Partner, Dissolution of partnership firm, Modes of dissolution, Insolvency of one or more partners, Consideration of private estate and private liabilities.

References:

- Gupta & Menon: Principles of Accountancy
- Jain &Narang: Advanced Accounts
- Tulsian: Accountancy- Foundations for CA
- Shukla, Grewal& Gupta: Advanced Accounts
- Financial Accounting by S N Maheshwari (Vikas Publishers)
- Corporate Accounting by V.K Goyal&RuchiGoyal (PHI Learning Pvt. Ltd)
- Corporate Accounting by Hanif& Mukherjee

C1P1: Principles of Management

Full Marks 100

(Written Examination: 80 & Internal Assessment: 20)

Course objective:

- To develop capabilities and acquaintance of students to become effective business professionals.
- To orient undergraduates on recent changes and development in the field of business, management, and commerce.
- To impart knowledge on Contemporary subjects and challenges in the field of management and commerce.

Learning Outcomes:

- Students will be capable of applying the knowledge in the field of management to the reallife business situation.
- This subject will enable the student to enhance their managerial, leadership and administrative ability and professional skills.

Unit -1 Introduction to Management:

Management - Definition Importance - functions and Scope, Nature as profession, science and art, Universality of management - Role and Functions of a Manager - Levels of Management, Development of different school of management thought; contribution of classical school (Taylor and Fayol); Neo classical and human relation approach.

Unit - II Planning:

Meaning -Nature - Importance - Forms and Steps in Planning, types of Plans; barrier to effective planning. Objectives: MBO; concepts and process - Policies - Procedures and Methods - Nature and Types of Policies. Decision-making: Types and technique of decision making.

Unit - III Organizing:

Concepts, Nature and Types of Organizations - Organization Structure - Span of Control. - Departmentalization - Informal Organization. Power - The sources of power - Authorities, Authority Line, staff and functional authority - Difference between Authority and power - delegation of

authority - Advantages and disadvantages of Delegation.

Unit - IV Co-ordination:

Meaning, Nature, Importance and Type and Techniques of Coordination. Coordination as essence of Management. Controlling - Meaning and Importance of controlling - Relationship between Planning and Controlling - Control Process - Characteristics of a sound control System and techniques of control.

References:

- Koontz and Weinrich, Essentials of Management Tata McGraw Hill, New Delhi
- Drucker, P F, Management Challenges for the 21s1 Century, But cur worth, OxfordLuthans, F,
 Organizational Behavior, McGraw Hill, New York
- Mien, L A, Management and Organisation, Tokyo
- Stoner and Freeman, Management, PHI, New Delhi
- Griffin, R W, Management, HoughcanMiffin, Boston
- Tripathy, P C, Reddy, P N, Principles of Management, Tata McGraw Hill, New Delhi
- Raviehandran, K, Nakkiran, S, Principles of Management, Avinash Paperbacks. Delhi
- Jwalkar, Ghanckar&Bhivpathaki, Principles & Practice of Management, Everest Publishing House
- ParagDewan, Management Principles & Practices, Excel Books
- Essentials of Management, by R. Tripathi, Himalaya Publishing House.
- Principles & Practices of Management, by R.S. Gupta; B. D. Sharma & N. S. Bhalla, Kalyani Publishers
- Essentials of Management, Koontz, H., & Weihrich, H., McGraw Hill Publishers.

C2P1: Business Law

Full Marks 100

(Written Examination: 80 & Internal Assessment: 20)

Course Objectives: This course in Legal and Regulatory Framework of Business deals with the acts which have been formed and implemented from time to time thus, ensuring the smooth functioning of businesses in the Indian commercial scene.

Learning Outcomes:

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

- Understand the role played by legal and regulatory acts which have evolved over a period of time
- Appreciate the relevance of business law to individuals and businesses and the role of law in an
 economic, political and social context.
- identify the fundamental legal principles behind contractual agreements
- examine how businesses can be held liable in tort for the actions of their employees
- Understand the legal and fiscal structure of different forms business organisations and their responsibilities as an employer.
- Get an idea about how such acts as Indian Contact Act work
- They will develop an understanding about the various nuances related to the three acts which are covered in this course

Unit-I:

The Indian Contract Act, 1872: Contract - meaning, characteristics and kinds, essentials of valid contract-Offer and Acceptance - Consideration - Capacity of Parties - Competency to contract - Consent - Void and Voidable Agreements - Discharge of Contracts - Special Contracts.

Unit- II:

Sale of goods Act 1930: Introduction on: definition; goods and their classification, Sale v/s Agreement to Sell, Goods, price and Time, Condition and Warranties, Express and Implied Conditions. "Doctrine of Caveat Emptor" and its exceptions, Performance of Contract of sale.

Unpaid seller - meaning and rights of an unpaid seller against the goods and buyer.

Unit - III:

Negotiable Instruments Act 1881: Nature and Characteristics of Negotiable instruments, Kinds of Negotiable Instruments - Promissory Notes, Bills of Exchange and Cheques. Parties to Negotiable Instruments, Negotiation, Presentment, Discharge and Dishonor of Negotiable Instrument, Law of agency, Bailment & Pledge.

Unit-IV:

References:

Consumer Protection Act, 1986: Introduction: objective of the Act, definitions of complaint, consumer; consumer dispute, goods, services, etc. - Objectives of Central Council and State Council - Consumer Dispute Redressal Agencies: composition and jurisdiction of district forum, State - Commission and National Commission. Manner of Lodging a Complaint: procedure of complaint; findings of District Forum, Appeal.

- Tulsian.P.C.. Business Law TMH
- Chandra P.R., Business Law,
- Galgoia Mathur, Satish B.,
- Business Law, TMH Kapoor, N.D.,
- Business Law, Sultan Chand
- Gulshan, S.S., Business Law, Excel Books
- Mathur S.B., Business Law, Tata McGraw Hill Education Pvt. Ltd
- Sen & Mitra, Commercial & Industrial Law

B.Com (Honours) Course

Second Semester

H2 (Cost Accounting)

Full Marks 100

(Written Examination: 80 & Internal Assessment: 20)

Course objective:

To develop an understanding various concepts of cost and management accounting such as, cost classification, cost allocation, cost absorption, etc. and how the various costing techniques are useful in the process of managerial decision-making. This subject is very important and useful for optimum utilization of existing resources.

Learning Outcomes:

To familiarize the students with costing terminology.

- To understand how cost accounting arises out of the need to make business decision.
- To gain knowledge regarding various techniques of costing.

To develop skills in using various techniques of costing and their implementation for decision making.

Unit-I:

Introduction: Definition, objectives and significance of Cost Accounting, Cosl Accounting Vs financial Accounting, Methods of Costing, Classification ol Costs. Material and Labour. Need for and Advantages of Material Control System, Pricing Issue of Materials, Labour - Time Keeping, Time Booking, Treatment of Idle Time and Labour Turnover.

Unit-II:

Overheads: Types and Methods of Absorption of Overheads. Practical problem on overhead recovery rate

Unit Costing: Preparation of Cost Sheet

Unit-III:

Process Costing: Preparation of Process Accounts. Treatment of Normal and Abnormal loss. Treatment of Joint Product and By-product.

Contract Costing: Preparation of Contract Ledger, Determination of Profit on Completed and Uncompleted Contracts

Unit-IV:

Marginal Costing: Concepts of marginal and absorption costing. Cost Volume Profit (CVP) analysis. Break Even Analysis.

Standard Costing: Concept and Use. Setting up of standards, Computation of variance relating to Materials and Labour Cost.

References:

- B.Banerjee, Cost Accounting, PHI
- Jawahar Lai & Seema Srivastava, Cost Accounting, TMH
- M.Y.Khan&P.K.Jain, Management Accounting. TMH
- R.Anthony, Management Accounting, Taraporewala
- Colin Drury, Management & Cost Accounting, Chapman & Hall

- K.S.Thakur, Cost Accounting, Excel Books
- S'atishlnamdar, Cost & Management Accounting, Everest Publishing House
- Atkinson, Management Accounting, Pearson
- Bhatlacharyya. Ashisb K., Cost Accounting for Business Managercs. Elsevier
- Jain, Khandelwal, Pareek— Cost Accounting (Ajmera Book depot, Jaipur)
- Oswal, Managal, Bidawat— Cost Accounting (RBD, Jaipur)
- Saxena and Vashistha— Advanced Cost Accounts (Sultan Chand & Sons)

C1P2 (Business Economics and Business Mathematics)

Full Marks 100

(Written Examination: 80 & Internal Assessment: 20)

First Half (BUSINESS ECONOMICS) (Full Marks: 50)

(Written Examination: 40 & Internal Assessment: 10)

Course objective:

- To provide a strong theoretical base of micro and macroeconomic principles and concepts applied in the field of management.
- To provide a strong understanding of the challenges of modern managers in the decision making process.

Learning Outcomes:

After completion of this course, students will be able:

- To understand various terminologies, concepts, theories and laws
- To understand various microeconomic variables that helps to take business decisions.
- To apply various concepts and knowledge in real time situation in business.

UNIT-I:

Introduction: Meaning, Importance and Relevance of Business Economics in Decision Making.

Elasticity of Demand: Concept and Measurement of elasticity of demand - price- income and cross suggestion for details elasticity - Average revenue - marginal revenue and elasticity of demand - Determinants of elasticity of demand, Importance of elasticity of demand- Production Function - Law of variable proportions - Short-run analysis - Different Stages of Productions.

Theory of cost - short run and long run cost curve - traditional and modern approaches.

UNIT-II:

Market structure and business decisions - Objectives of business firm:

Perfect Competition - profit maximization and equilibrium of firm and Industry - run supply curve - price and output determination, Practical applications. Derivation of supply curve from total cost curves. Monopoly - Determination of price under monopoly - Equilibrium of a firm - Comparison between perfect competition and monopoly - price determination and practical applications.

Factor pricing - Marginal Productivity Theory - Determination of rent - wage - interest and profit.

References:

- Pindyke and Rubinfeld, Micro Economics
- Gould & Perguson, Micro Economic Theory
- Bernheim&Whinston, Microeconomics, TMH

- Managerial Economics by Arun Kumar & Rachana Sharma, Atlantic Publishers and Distributors
 Pvt Ltd.
- Managerial Economics by D.N. Dwivedi, Vikas Publishing House Pvt. Ltd.

Second Half (BUSINESS MATHEMATICS) (Full Marks: 50)

(Written Examination: 40 & Internal Assessment: HI)

UNIT-III

Compound interest and Annuities: Different types of Interest rates - Types of Annuities - Concept of present value - present value and amount of an Annuity - Valuation of Simple Loans and Debenture, problems relating to sinking funds.

Functions: Definition of functions - classification of functions - Different types of functions (Except Trigonometrical) - Even and Odd functions - Parametric functions - Composite function. Graphical representation of functions - Elementary ideas of Limit and Continuity through the use of simple algebra functions.

Set Theory: Definition of Set - presentation of Set - different types of Sets - Null Set - Finite and infinite Sets - Universal Sets - Sets - Power Set etc. - Set operations - Law of Algebra of Sets - Venn diagram,

UNIT-IV

Matrices and Determinants: Definition of Matrices - Types of Matrices Properties of Determinants - Calculation of value of Determinants up to third order - Adjoin of Matrices • Elementary Row and Column operations - Inverse of Matrix - Solution of system of Linear Equation having unique solutions of a Matrix (By Cramers Rule and Matrix inversion Method)

Differentiation: Derivatives and its meaning - Rule of Differentiation - Significance of Derivatives - Rate measurement • Second order Derivatives.

Application of Derivatives - Increasing and Decreasing functions - Cases of one variable involving Second and maxima and minima of function point of inflection Higher Order Derivative.

References:

- S. Baruah, Basic Mathemaiics and its Application in Economics, Macmillan
- R.G. D. Allen, Mathematical Analysis for Economists, Macmillan
- J. Chakrabarti, Business Mathematics and Statistics, Dey Book Concern

C2P2 (Corporate Laws)

Full Marks 100

(Written Examination: 80 & Internal Assessment: 20)

Course Objectives:

This course in Legal and Regulatory Framework of Business deals with the acts which have been formed and implemented from time to time thus, ensuring the smooth functioning of businesses in the Indian commercial scene.

Learning Outcomes:

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

 Understand the role played by legal and regulatory acts which have evolved over a period of time.

- Appreciate the relevance of business law to individuals and businesses and the role of law in an economic, political and social context.
- identify the fundamental legal principles behind contractual agreements
- examine how businesses can be held liable in tort for the actions of their employees
- Understand the legal and fiscal structure of different forms business organisations and their responsibilities as an employer.
- Get an idea about how such acts as Indian Contact Act work
- They will develop an understanding about the various nuances related to the three acts which are covered in this course

UNIT-I:

Characteristic of company; Lifting of company veil; Types of companies; Association not for profit; Illegal association; Formation of company - promoters, their legal position, per- incorporation contract and provisional contracts.

UNIT-II:

Documents: Memorandum of Association, Articles of Association, Doctrine of conservative Notice and Indoor management, Prospectus and Book building.

Share Capital: Issue, Allotment and Forfeiture of share, Transmission of shares, Buy-back and provision regarding Buy-back of share; Dividend provision and issue of bonus share.

UNIT-III:

Directors, Classification of Directors, Disqualifications, Appointment, Legal positions, Powers and Duties, Removal of Directors, Meeting of shareholders and Board; Kinds, convening and conduct of meetings.

UNIT-IV:

Winding up: Concept and Mode of winding up, grounds for compulsory and voluntary winding up Emerging issues in company law; One Person Company (OPC), Small Company, Postal Ballot, Small shareholder on board, Directors Identity number (DIN), Corporate Identity Number (CIN), MCA-21, Online filing of document, Online registration of company, National Company Law Tribunal (NCLT), LLP, Insider trading. Rating agencies, Producer Company, Class Action, Secretarial Audit, Corporate Social Responsibility (CSR.)

References:

- Kapoor, N.D., Corporate Law, Sultan Chand
- Sen&Mitra, Commercial Law including Company Law. World Press
- Bhadra, Satpati&Mitra, KarbariAinerRuprekha (Bengali Version), Dishari
- Ramaiya, A., Guide to the Companies Act., Wadhwa& Co.
- S.B.Mathur, Business Law, Tata McGraw Hill Education Pvt. Ltd

SEMESTER- III H3: CORPORATE ACCOUNTING

Full Marks-100

(Theory-80, Internal Assesment-20)

Course objective:

The application of accounting in the business sector has become an indispensable factor. Company secretary has to provide the complete and accurate information about the financial operations of the company to management for decision making. Thus this course will enable the B.Com.(Hons) student to understand accounts for issue and redemption of shares, issue and redemption of debentures and preparation of final accounts of company, valuation of shares and goodwill, calculation of profit prior to incorporation, Consolidation Accounts, Accounts for Banking and Insurance Business. To acquire knowledge and understanding of the concepts, principles and practices of company accounts in accordance with statutory requirements.

Learning Outcomes:

After completion of the course the students will be able:

- To develop knowledge of relevant accounting standards and the ability to apply them to solve practical problems that arise from inter-entity relationships.
- To select the appropriate accounting techniques, as prescribed by the relevant accounting standards, and perform the accounting treatment for each type of inter-entity relationship (including preparing consolidated financial statements).
- To form a solid foundation in accounting and reporting requirements of the Companies Act 2013.

Unit 1

Issue of Shares (Including Pro-rata allotment). Forfeiture and Re-issue of Shares. Redemption of Preference Shares and Debentures.

UNIT II

Preparation and Presentation Company's Final accounts. Valuation of Goodwill - Valuation of Shares

Unit - III

Accounting for Amalgamation (AS-14), Absorption. Reconstruction (Internal and External) of Companies.

UNIT IV

Holding Company Accounts (Except Chain Holding and Cross Holding) Company Liquidation Accounts.

- 1. R. L. Gupta & Radheswamy, Advanced Accounting Vol. I, S. Chand Publication.
- 2. Maheshwari & Maheshwari. Advanced Accounting Vol. I. Vikash Publishing House.
- 3. Tulsian, Financial Accounting, Pearson Higher Education.
- 4. Hanif, M., & Mukhetjee. A. Corporate Accounting. McGrew Hill Publication, New Delhi.
- 5. Basu, Amitabha, Corporate Accounting, Tee Dee Publication. Kolkata.
- 6. Accounting Standards Issued by ICAI.

Suggested readings:

- Advanced Accountancy: R.L. Gupta and Radhaswamy, Sultan Chand &sons
- Accountancy III S.P. Jain & K.L Narang Kalyani Publishers
- Financial Accounting Dr.V.K.Goyal Excel Books
- Introduction to Accountancy T.S.GrewalS.Chand and Co.
- Advanced Accountancy: Shukla and Grewal, S.Chand& Co.

C1P3 INDIAN FINANCIAL SYSTEM

Full Marks-100 (Theorv-80 Internal Assessment- 20)

Course Objectives:

The objective of the course is to provide to the students an understanding of financial markets, the major institutions involved and the services offered within this framework. In this course the students will learn the concept of financial system and the financial markets and will also know about classification of financial market, functions of financial market and differences between money market and capital market.

Learning Outcomes:

After going through this course, the students will be able to:

- explain the financial system and its importance
- explain the components and the functions of a financial system
- explain the functions and classifications of the financial market
- distinguish between capital market and money market
- explain the functions of the regulatory institutions in the financial system describe the institutions providing long-term finance

Unit-I

Financial System: Meaning. Significance & Components - Structure of Indian Financial System (Concepts Only).

Commercial Banks - Credit Creation & Limitations Reserve Bank of India- Credit Control Policy.

Unit-II

Money Market: Concept, Structure of Indian Money Market. Acceptance House, Discount House. Call Money Market, Recent Trend of Indian Money Market.

Unit-III

Capital Market: Concept, Security Market, **Primary and** Secondary Market - Functions & Role, Functionaries of Stock Exchange- Broker, **Sub-Broker**. Jobbers, Consultants. Institutional Investors.

Unit-IV

Non-Banking Financial Company- Functions and Roles. Investors' Protection Functions & Role of the SEBI & Company Law Board. Financial Service: Merchant Banking - Functions & Roles. Credit Rating - Concept and Types.

Suggested Readings:

- Khan, M. Y., Indian Financial System- Theory and Practices, TMH. New Delhi.
- Bhole, L.M. Financial Markets and Institutions, TMH, New Delhi
- Pathak, B., Indian Financial System-Pearson, New Delhi
- Nayak and Sana, Indian Financial System and Financial Market Operations, Rabindra Library, Kolkata
- Mukherjee, Ghosh and Roy, Indian Financial System and Financial Market Operations, Dey Book concern, Kolkata.
- Clifford, Gomez, Financial Markets, Institutions and financial service, PHI.

C2P3: ENTREPRENEURSHIP DAVELOPMENT

Full Marks-100

(Theory-80, Internal Assessment- 20)

Course Objectives:

This course in entrepreneurship development has been designed to develop entrepreneurship skills in the students. The students will get a basic idea about how enterprises are formed and what is required to develop them in the right direction.

Learning Outcomes:

- It also covers the varied facts of financial analysis of projects, assesses the sources of finance available to entrepreneurs.
- It explains the Operations of small scale enterprise, Issues in financial management, Operations management. Marketing management, Organizational; relations, Performance assessment
- Ability to recognize a business opportunity regarding attractive market.
- Ability to understand and create business model& plan.
- Ability to understand the global and local business environment.
- Ability to analyze the internal/external factors affecting a business/organization to evaluate business opportunities.

UNIT -1

Concept of Entrepreneurship and Entrepreneur - Nature of Entrepreneurship. Scope and Importance - Entrepreneurship as a career - Characteristics and Functions of Entrepreneur - Entrepreneurial Qualification - Role of Creativity and Innovation in Entrepreneurship:

Micro Small and Medium Entrepreneurship. Sole Proprietorship, and Family Venture.

UNIT II

The Entrepreneur and Law: Legal Protection of Innovations - Patents — Trademarks and Copyright.

UNIT III

Promotion of a Venture: Opportunity Analysis. External Environment Analysis - Economic. Social and Technical factors.

Legal Requirements for establishing a New Unit.

Financing of New Ventures: Methods of **Financing** - Equity Financing. Venture Capital, Debt Financing and Government Grants.

UNIT IV

Project Planning and Feasibility Studies: **Methods of** Preparation of Project Plans: Technical. Financial and Commercial Feasibility; Contents **of a project** report Entrepreneurial Development Programme **(EDP):- Need** Objectives. Phases Relevance and Achievements.

Recommended Books:

- Entrepreneurship and small Business Start-up, Growth and Maturity Paul Bums.
- Entrepreneurship: Robert D Hisrich. Michael P Peters, Dean A Shepherd
- Entrepreneurship in the New Millennium- Kuratko, Hodgetts
- Pandey I. M: Venture Capital The Indian Experience; Prentice Hall of India.
- Prasanna Chandra: Project Preparation, Appraisal, Implementation: Tata McGraw Hill, New Delhi.
- S.S. Khanka: Entrepreneurial Development, **S. Chand & Co**, New Delhi.
- Vasant Desai: Dynamics of Entrepreneurial Development & Management. Himalaya Publishing House.

Suggested readings:

- Entrepreneurship Development by Vasant Desai
- Entrepreneurship Development and Small Business Enterprise by Poornima M. Charantimath,
- Entrepreneurship Development by S. S. Khanka

B.Com. General

SEM-III (Pass Course)
Paper Code: C3P3
ADVANCED ACCOUNTING
Full Marks-100

Theory-80 Internal Assessment- 20

Course objective:

This course will enable the student to understand accounts for issue and redemption of shares, issue and redemption of debentures and preparation of final accounts of company and to acquire knowledge and understanding of the concepts, principles and practices of company accounts, valuation of shares and goodwill, calculation of profit prior to incorporation, Consolidation Accounts.

Learning Outcomes:

After completion of the course the students will be able:

- To develop knowledge to deal with various aspect of issues and cancellation of equity shares.
- To know and apply various techniques of amalgamation and internal reconstruction of companies
- To know wider concepts not only about a company and its accounting activities but also about the corporate worlds transaction, its accounting and its interpretation.

Unit 1

Self-Balancing System

Issue of Shares (Excluding Pro-rata allotment) Redemption of reference shares.

UNIT II

Accounting for Amalgamation.

Absorption and Internal Reconstruction of Companies.

UNIT III

Departmental and Branch Accounts (Excluding Foreign Branch & Independent Branch) Government Accounting- Emerging Trend Fire Insurance Claim (Loss of Stock only)

UNIT IV

Royalty Accounts (Excluding Sub-royalty)

Accounting for Packages and Empties

Accounting for Higher Purchase and Installment **Payment** system.

- 1. R. L. Gupta & Radheswamv, Advance Accounting Vol. I. S. Chand Publication.
- 2. Maheshwari & Maheshwari. Advance Accounting Vol. I, Vikash Publishing House.
- 3. Tulsian, Financial Accounting. Pearson Higher Education.
- 4. Hanif. M.. & Mukherjee. A. Corporate Accounting McGrew Hill Publication. New Delhi.
- 5. Hanif. M., & Mukherjee. A. Financial Accounting McGrew Hill Publication. New Delhi.
- 6. Basu. Amitabha. Corporate Accounting. Tee Dee Publication. Kolkata.
- 7. Accounting Standards Issued by ICAL

Semester-IV **H4: AUDITING AND ASSURANCE**

Full Marks=100 (Theory=80, Internal Marks=20)

Course Objective:

This course is designed to provide an introduction to auditing. The objectives include principles and practices used by public accountants and internal auditors in examining financial statements and supporting data. Special emphasis is given to assets and liabilities. This course is a study of techniques available for gathering, summarizing, analyzing and interpreting the data presented in financial statements and procedures used in verifying the fairness of the information. Also emphasizes ethical and legal aspects and considerations.

Learning Outcomes:

After completion of the subjects the students will be able:

- To understand various concepts& terminologies of Auditing and its characteristics.
- To know about the duties of auditors and other assurance providers.
- To develop the skills of understanding the implication of Auditing
- To know the contemporary changes in Auditing laws and assurance providers.

UNIT - I

Meaning Objective and scope of Audit, Types of Audit, Steps before commencement of Audit of a Firm, Company. Audit Programmed (Basic Concepts).

Concept and Principles of Interna! Check and Internal Control, Auditor's duties regarding interna: checking, Distinction between internal check and internal control, Auditor's position in relation to Interna! Checking of cash, Stock in trade, Large Department stores.

UNIT-II

Vouching: Meaning, objectives, importance and factors, vouching of cash book, cash sales, receipts from debtors, preliminary expenses, travelling expenses.

Verification and valuation of assets and liabilities, meaning, importance and auditor's duties in regard to verification and valuation of stock, investment, goodwill, creditors.

UNIT-III

Company Audit. Qualification, appointment, remuneration, rights, duties and liabilities of company auditor, Divisible profit and dividend - Auditor's Duties (with case laws).

UNIT-IV

Audit report and certificate - definition, distinction between report and certificate Types of report, Contents and specimen of Company Audit report.

Auditing and assurance Standards - Overview's, standard setting process, objectives and functions of Auditing and Assurance, Standard Board (AASB), Documentation and Audit Evidence [Topics to be studied with reference to AAS in India].

Suggested Readings:

- Auditing: Principles and Practiceby <u>R</u> Kumar
- Auditing: Principles and Techniques by <u>S. K. Basu</u>
- A Hand Book of Practical Auditing by <u>B.N.</u> Tandon
- Auditing & Assurance By S.K.Basu
- Contemporary Auditing By Kamal Gupta
- An Insight into Auditing By B.K.Basu

C1P4: Business Economics and Business Statistics

GROUP-A

Business Economics

Course objective: Business Economics

- To provide a strong theoretical base of micro and macroeconomic principles and concepts applied in the field of management.
- To provide a strong understanding of the challenges of modern managers in the decision making process.

Learning Outcomes:

This course intends to provide the students an understanding of the various economic theories and micro-economic variables that have an impact in the business decision making.

Unit I

Macro-economic Concepts and National Income

Marco-Economic Variables. Circular Flow of income in Two, Three, Four Sector Economy, Relation between Leakages and Injections in Circular Flow; National income: Concepts, Definition, Methods of 'Measurement-GNP identity, basic macroeconomic identity, Problems in Measurement-sf-National Income & Precautions in Estimation of National Income.

Role and Limitations of Macro Economic Concept in Business Economic decision Making.

UNIT-II

Income, Employment, and Price Level

Theory of Employment and Income: Classical Approach and Simple Keynesian Approach.

Consumption Function, Relationship between Saving and Consumption. Investment function: Induced and

Autonomous, Multiplier in Two Sector Model (Concept only).

Functions and Forms of Money, Demand for Money, Measures of Money Supply, Quantity Theory of Money, Inflation: Types, Causes, Impact and Remedies.

GROUP-B

Business Statistics

Course objective: Business Statistics

The objective of this course is to make the students aware of various statistical techniques to be used for critical appraisal of Business Information.

Learning Outcomes:

- To be able to identify the source of a quantifiable problem, recognize the issues involved and produce an appropriate action plan.
- To able to understanding of different mathematical techniques and applications.

Unit-I Presentation and Classification of Statistical Data

Definition, scope, functions and limitations of-Statistics; Statistical Data: Meaning and types, Collection, classification and presentation of data. Construction of a frequency distribution; different charts and diagrams, Different measures of central tendency, Different measures of dispersion: Relative and Absolute

Unit II Correlation, Regression and Time Series Data Analysis.

Correlation - Types of Correlation, measurement of correlation (Karl Pearson's and Rank Correlation Method)

Simple Regression - meaning and regression equations. Relationship between correlation and regression. Analysis of Time series data-Components of a time series. Importance of Time Series, Methods of trend-semi average method, moving average method, and method of least square method.

Suggested Reading:

- 1 Statistics S.P.Gupta
- 2 Business statistics-S.N.Dey
- 3 Statistics S C.Gupta
- 4. Statistics -N.G.Das
- 5 Economics Branson
- 6 Macro Economics-J. Sarkhel
- 7 Macro Economics-Bhattacharjee & Sarkar

C2P4: BUSINESS ETHICS AND BUSINESS COMMUNICATION

Full Marks=100

(Theory=80; Internal Assessment=20)

Course objective:

- Train students in communication, grammar skills and proficiency in reading, paragraph writing and essay writing
- Expose students to visual text as a means to learn language and the issues concerning social and economic stratification.

Learning Outcomes:

- Improved grammar skills.
- Increased proficiency in reading, paragraph writing and essay writing.

UNIT- I

introduction of Ethics: Meaning, Some Canon of Ernies, Nature cf Ethics. Eihica; Stsncard, Factors to be considered in makingthe ethical judgment.

UNIT-II

Ethics at Work Place: Ethics in Marketing and Consumer Protection - Ethics in Accountingind Finance. Corporate Social responsibility.

UNIT-III

Business Communication: Introduction, Objectives, Basic feature of Communication, Effective Communication - Principles, Models.

Types of Communication: Formal & Informal Communication, Corporate Communication, Group Discussion, Mock Interview, Seminar. Modern Forms of Communication - FAX, E-Mail, Video Conferencing.

UNIT-IV

Writing of Business Letters, Quotation & Offer, Inquiries, Placement of Order, Cancellation, Modification, Status Enquiry, Insurance & Bank Matters.

- C. Fernando, Business Ethics 3nd Corporate Governance, Pearson Education
- U.C. Mathur, Corporate Governance & Business Ethics Text & Cases, McMillon
- N.Ghosh, Business Ethics and Corporate Governance, Tata McGraw hill
- Ashik.K.Ladhani, Business Ethics & Business Business Communication, Taxman
- R.S.N.Piliai, Bag3vsth", Modern Commercial Correspondence, S. Chand

Semester-V

H5: Direct Taxation

Full Marks=100

(Theory=80, Internal Assessment=20)

Course Objectives:

- To provide an in-depth knowledge of the detailed procedure and documentation involved in tax management, direct
- To understand the basic concept of direct taxes.
- To know various terminology and its implication.

Learning outcomes

- 1. The Syllabus aims to test the abilities of the students to compare and contrast the managerial decision with regards to taxation.
- 2.The students at the end of the course will be able to prepare tax planning for the business concerned as well as for the individuals.

UNIT-1

Basic Concepts and Definitions: Income, Assessee, Previous year, Assessment year, Sources of Income, Heads of Income, Gross Total Income, Total Income, Tax Evasion, Tax Avoidance, Tax Planning

Residential Status and Incidence of Tax: Residential Status of all persons except Company

Income not forming part of Total Income (Except Section 10A, 10AA, 10B, 10BA)

Agricultural Income: Definition, Determination of Agricultural and Non-agricultural Income, Assessment and Tax Liability

UNIT-2

Heads of Income and Provisions governing Heads of Income

(a) Income from Salaries (b) Income from House Property

UNIT-3

Heads of Income and Provisions governing Heads of Income

- (a) Profits and Gains from Business and Profession
- (b) Capital Gains

UNIT-4

Income from Other Sources: Basic Concepts (excluding Deemed Dividend) Set off and Carry Forward of Losses

Mode of set off and carry forward. Inter-source and Inter-head set off, Carry-forward and set off of losses

Deduction from Gross Total Income

Basic Concepts, Deductions u/s 80C, 80CCC, 80CCD, 80CCF, 80D, 80DD, 80DDB, 80E, 80G, 80GG, 80GGA, 80U.

Computation of Tax Liability

Computation of Total Income and Tax Liability of an individual and firm

Note: The Assessment year immediately prior to the current Assessment year will be considered (e.g., if the examination is held in the year 2016-17, the Assessment year to be considered for the purpose of examination is 2015-16).

Suggested Readings:

- Direct Taxation: Law & Practice- Dr. V. K. Singhania Dr. Monica Singhania, Taxmann Publications,
- Direct Taxation: Problems & Solutions- Dr. V. K. Singhania& Dr. Monica Singhania, Taxmann
 Publications, New Delhi
- Direct Taxation: Law & Practice- Dr. Sujit Kumar Roy, ABS Publications, Kolkata
- Direct Taxation: Law & Practice- Dr. C. H. Sengupta, Dey Book Concern, Kolkata
- Direct Taxation: Law & Practice- B. B. Lai, Pearsons Higher Education, New Delhi

H6: Accounting Theory and Management Accounting

Full Marks=100 (Theory=80, Internal Assessment=20)

Course Objective:

The objective of this course is to provide a various theories of accounting and the use of accounting information from a practical standpoint. Accounting education because it provides a sense of "realness" to what one really does with accounting information. An anticipated outcome is that a student will gain more insight about the use of accounting and as a consequence, will be able to use this insight in two ways.

Learning Outcomes:

On successful completion of this course students will be able to:

- Understand various concepts, standards, terminology and principles of accounting.
- Apply knowledge of accounting techniques, concepts, principles and theories
- Apply a structured decision model to exercise judgment in the application of accounting standards and knowledge.
- Work in teams to design and undertake a research project.

UNIT-1

Accounting Theory: Definition, nature, functions, classification, advantages, limitations, need for the Study-Relation between Accounting Theory and Accounting Practice.

Accounting Principles: Explanation of different terms (Principles, Concepts, Postulates, Conventions; Doctrines)

Generally Accepted Accounting Principles (GAAP). Some important Accounting Concepts: Proprietory, entity, fund, money measurement, accounting period, going concern.

Some important Accounting Conventions: Disclosure, materiality, conservatism, consistency, historical cost.

Measurement of Accounting Income: Concepts of revenue, gain, cost, expenses, loss, revenue expenditure. Capital expenditure and deferred revenue expenditure- Difference between Accounting and Economic concepts of Income- Necessity' and methods of measuring Accounting Income-Importance of matching Concept.

UNIT-2

Capital: Concepts of Economic and Accounting Capital- Characteristics of Capital- Classification of Accounting Capital- Relation between Capital and Income- Reasons for differentiating between Capital and Income- Maintenance of Capital

Assets and Liabilities: Assets- Definition, classification, characteristics, recognition, need for valuation-Valuation of Tangible and Intangible Assets- Valuation of Current Assets.

Liabilities- Definition, characteristics, classification, need for valuation and measurement

Financial Statements: Meaning, nature, importance, limitations- Profit & Loss Account: characteristics, objectives, forms of presentation- Balance Sheet: meaning, different related views, forms of Presentation- Relation between Profit & Loss Account and Balance Sheet- Role of Financial Statements in exhibiting True and Fair View.

UNIT-3

Management Accounting

Introduction: Definition, nature, objectives, scope, functions, advantages, limitations, techniques and need - Comparison with Cost and Financial Accounting- Role of Management Accountant. Working Capital: Concept, composition, nature, importance and types of Working Capital- Different Sources of Working Capital- Working Capital Forecasting.

UNIT-4

Accounting Ratio Analysis: Meaning, utility, limitations; source-wise classification of Accounting Ratios,-computation of important Accounting Ratios (excluding detailed interpretation), Preparation of Financial Statements from the given Ratios

Funds Flow Analysis: Meaning, advantages and limitations; various sources and uses, Preparation of Funds Flow Statement.

- Accounting Theory- Dr. L. S. Porwal, McGraw-Hill Education, New Delhi
- Accounting Theory- Jawarlal, Himalaya Publishing House, New Delhi
- Accounting Theory & Management Accounting- Dr. Debasish Banerjee, Dey Book Concern, Kolkata
- Management Accounting- Ravi M. Kishore, Taxmann, New Delhi
- Management Accounting- M. Y. Khan & P. K. Jain, McGraw-Hill Education, New Delhi

C1P5: Information Technology & E-Commerce

Full Marks = 100 (Theory=80, Internal Assessment=20)

Course Objectives:

This course is designed to familiarize the students with the world of information Technology, its innovations and its impact on the business environment. A deep understanding of these technologies will enable the students to understand the important aspects and the practical details of e-commerce. This course will also include the fundamentals of IT, its components and their interrelationships. **Learning outcomes:**

- It will help the students to gain literacy in the underlying principles and concepts of Information Technology.
- Basic understanding of a computer system, its working, its peripheral devices and their functions.
- Able to analyse the concept of electronic market and market place.
- Able to understand the various e-commerce business models, business standards.

Unit -1

Introduction to Computers: Definition, Characteristics and limitations of computers- Elements of Computers - Hardware - CPU - Primary and Secondary memory Input and Output devices.

Modern communications (Concepts only): Communications - FAX, Voice mail, and information services - E Mail - Creation of email id - group communication - Tele conferencing - Video conferencing - File exchange - Bandwidth - Modem - Network Topologies - Network types LAN, MAN, WAN and their architecture - Dial up access.

Operating System and Windows: Operating Systems: Meaning. Definition, Functions and Types of Operating Systems - Booting process - Disk Operating System: Internal and External Commands - Wild Card Characters — Computer Virus, Cryptology. Windows operating system - Desktop, Start menu, Control panel, Windows accessories.

Unit - II

MS Word &Word Processing: Meaning and features of word processing - Advantages and applications of word processing - Parts of MS Word application window - Toolbars - Creating, Saving and closing a document - Opening and editing a document - Moving and copying text - Text and paragraph formatting, applying Bullets and Numbering - Find and Replace - Insertion of Objects, Date and Time, Headers, Footers and Page Breaks - Auto Correct -Spelling and Grammar checking - Graphics, Templates and wizards - Mail Merge: Meaning, purpose and advantages - creating merged letters, mailing labels, envelops and catalogs - Working with Tables - Format Painter.

MS EXCEL: Features of MS Excel - Spread sheet / worksheet, workbook, cell, cell pointer, cell address etc., - Parts of MS Excel window - Saving, Opening and Closing workbook - Insertion and deletion of worksheet - Entering and Editing data in worksheet - cell range - Formatting - Auto Fill -Formulas and its advantages - References: Relative, absolute and mixed - Functions: Meaning and Advantages of functions, different types of functions available in Excel - Templates - Charts - Graphs - Macros: Meaning and Advantages of macros, creation, editing and deletion of macros - Data Sorting, Filtering, validation. Consolidation, Grouping, Pivot Table and Pivot Chart Reports.

Unit - III

RDBS and MS Access Data, Information, Database, File, Record, Fields Features, advantages and limitations of MS Access - Application of MS Access - parts of MS Access window - Tables, Forms, Queries and Reports - Data validity checks.

MS **PowerPoint**: Features, advantages and application of MS Power point - Parts of MS Power point window - Menus and Tool bars - Creating presentations through Auto content wizard. Templates and manually - slide show - saving, opening and closing a Presentation - Inserting, editing and deleting slides -Types of slides - Slide Views - Formatting -Insertion of Objects and Charts in slides - Custom Animation and Transition.

Unit-IV

Internet & E commerce: Services available on internet - WWW - ISP; Protocols: Types, Virus, Firewall.

Ecommerce: Meaning, advantages and limitations, applications of E-commerce, E- commerce Models, Payment Gateways.

Unit - V

Financial Accounting Package and its Implementation: Introduction to Accounting Package, Preparation of various Reports, Invoicing & Inventory, Tax Accounting - TDS, Service Tax, VAT, CST, E Duty, TCS, Payroll
Suggested Readings:

- Introduction to Information Technology: Rajaraman, PHI
- Fundamentals of Computers 4/E: Rajaraman, PHI
- Fundamentals of Computers: P. Mohan, Himalaya Publishing House
- Information Technology: Dennis P. Curtin, McGraw Hill International
- E-Commerce, E-Business: C.S.Rayudu , Himalaya Publishing House
- Microsoft Office Excel 2003 step by step: Frye, PHI
- Fundamentals of Computers: AtulKahate, Tata McGraw Hill
- Fundamentals of Computers: V. Srinivas, Kalyani Publications
- Microsoft Office Word 2003 step by step: Online Training Solutions Inc PHI
- Microsoft Office Access 2003 step by step: Online Training Solutions Inc, PHI
- Microsoft Office Power Point 2003 step by step: Online Training Solutions Inc,PHI
- MS Office: Sanjay Saxsena
- MS Office: BPB Publications
- E commerce: CSV Murthy, Himayalaya Publishing House
- Raymond Green Law: Fundamentals of the Internet, Tata Me Graw Hill
- Fundamentals of Information Technology: Deepak Bharihanke, Excel
- Computer Applications in Business: K. Mohan Kumar, Dr. S. Rajkumar, Tata.
- Fundamentals of Information Technology: Dr.K.Kiran Kumar, Laysa.

C2P5: Marketing Management & Human Resource Management

Full Marks=100 (Theory=80, Internal Assessment=20)

Marketing Management

Course objective:

This course in marketing management has been designed to give insights into the subject so as to prepare the students about the various concepts related to it. The course has inputs about how marketing is integral to the overall business strategy of any firm.

Learning Outcomes:

 To acquaint the students with the nuances of marketing concepts, theories and techniques for analysing a variety of marketing situations.

- To understand the role and functions of marketing within a range of organizations.
- To understand the dynamic nature of the environment in which marketing decisions are taken and appreciate
 the implications for marketing strategy determination and implementation.
- Will be able to apply the introduced conceptual frameworks, theory and techniques to various marketing contexts.
- Able to synthesize ideas into a marketing plan.

UNIT-1

Marketing: Nature, scope, importance and objectives- Difference between Marketing and Selling- Marketing Environment.

Marketing: Planning, Organizing and Controlling

UNIT-2

Market Segmentation- Consumer Behaviour. Marketing Mix: Product, Price, Place, Promotion.

Emerging Issues in Marketing: e-Marketing, Green Marketing, Socially-responsible Marketing, Relationship Marketing (basic ideas).

Human Resource Management

Course Objectives:

This course in human resource management will give insights to the students so as to make them understand the concept underlying this subject. It will be helpful for them to develop a broad view of the subject.

Learning Outcomes:

- To acquaint the students with the basic and theories of human resource management.
- To understand various design of training program using a useful framework for evaluating training needs, designing a training program, and evaluating training results.
- To understand and able to interpret salary survey data and design a pay structure with appropriate pay grades and pay ranges.
- Able to demonstrate knowledge of employee benefit concepts, plan design, administrative considerations and regulations governing employee benefit practices.

UNIT-3

Human Resource Management: Meaning, relevance, role and functions- Human Resource Planning: Job-Description, Analysis and Evaluation, Recruitment & Selection. Human Resource Development: Performance Appraisal, Wage and Salary Administration.

UNIT-4

Industrial Relations: Objectives, Trade Union, Collective Bargaining, Welfare and Social Security Measures-Workers' Participation in Management-Indian Scenario.

- Marketing Management: A South Asian Perspective- Philip Kotler, Kevin Lane Keller, Abraham Koshy, MithileswarJha, Pearsons Higher Education, New Delhi
- Marketing Management: Planning, Implementation & Control V. S. Ramaswamy, S. Namakumari, Macmillan Business Books, New Delhi
- Marketing Management: In the Indian Background- C. N. Sontakki, Kalyani Publishers, Ludhiana
- Human Resource Management- V. S. P. Rao, Excel Books, New Delhi

Semester VI

H7: Indirect Taxation

Full Marks:=100

(Theory=80, Internal Assessment=20)

Course Objectives:

- 1. To provide an in-depth knowledge of the detailed procedure and documentation involved in tax management, both, direct and indirect.
- 2. To understand the basic concept of direct and indirect taxes in managerial decision making

Learning outcomes

- 1. The Syllabus aims to test the abilities of the students to compare and contrast the managerial decision with regards to taxation.
- 2.The students at the end of the course will be able to prepare tax planning for the business concerned as well as for the individuals.

Unit I

Service tax -concepts and general principles, Charge of service tax and taxable services,

Service Tax: Valuation of taxable services, Payment of service tax and filing of returns, Penalties, CENVAT Credit

Unit II

Tripura VAT, Concepts and general principles, Calculation of VAT Liability including input Tax Credits, Small Dealers and Composition Scheme, VAT .Procedures

Unit III

Central Excise: Central Excise Law in brief-Goods, Excisable goods, Manufacture and Manufacturer. Valuation, CENVAT, Basic procedures, Export, SSI, Job Work

Unit IV

Customs laws: Basic concepts of customs law, Territorial waters, high seas, Types of custom duties - Basic, Countervailing & Anti-Dumping Duty, Safeguard Duty, Valuation, Customs ■ Procedures, Import and Export Procedures, Baggage, Exemptions. *

- Singhania, Vinod K., and Singhania, Monica. Students' Guide to Indirect Taxes, Taxmann Publications Pvt. Ltd., Delhi.
- Datey, V.S. Indirect Tax Law and practice, Taxmann Publications Pvt. Ltd., Delhi, Latest edition.
- Kumar, Sanjeev. Systematic Approach to Indirect Taxes, Latest edition.
- Gupta, S. S. Service Tax -How to meet your obligation Taxmann Publications Pvt. Ltd., Delhi, Latest edition.
- Ahuja, Grish ., & Gupta, Ravi. Indirect Taxes, Flair Publication Pvt. Ltd.
- G. Ahuja and R Gupta. Practical Approach to Direct and Indirect Tax. Bharat Law House Pvt. Ltd.

H8: Financial Management

Full Marks: 100

(Theory=80, Internal Assessment=20)

Courses Objectives:

This course in financial management has been designed keeping in mind the factor that the students should develop a basic understanding about financial management and the role it plays in the overall performance of a firm. This course will help them in grasping the nuances of the subject.

Learning Outcomes:

- Understand both the theoretical and practical role of Financial Management in business corporations
- Able to analyze the finances of individual corporations both in terms of their performance and capital requirements
- To acquaint the students with the basics of the field of financial management
- To develop skill to access financial information from a wide variety of sources and use thisinformation to research and assess corporations.
- To make them understand the concepts such as cost of capital and investment decisions etc.

To make them aware of the fundamentals of working capital management

Unit I:

Introduction: Nature. scope and objectives of financial management -concept, Time value of money, Risk and Return, Meaning & concept of capital Budgeting process. Cash Flow Estimation, Payback Period Method, Discounted Payback Period Method. Accounting Rate of Return, Net Present Value (NPV), Net Terminal Value, Internal Rate of Return (IRR)

Unit-II

Cost of capital and Financing Decision: Sources of long-term financing, Estimation of components of cost of capital, Methods for calculating cost of Equity, Cost of Retained Earnings, Cost of Debt and cost of Preference Capital. Theories of Capital Structure (Net Income. Net Operating Income, MM Hypothesis, Traditional Approach) Operating and Financial leverage. Determinants of capital structure.

Unit III:

Dividend Decision: Theories for Relevance and irrelevance of dividend decision for corporate valuation - Walter's Model, Gordon's Model, MM Theory and Determinants of Dividend.

Unit IV:

Working Capital Decisions: Concepts of Working Capital, Operating & Cash Cycles, sources of short term finance, cash management, receivables management, inventory management with simple problem.

- Khan.M.Y. and P.K. Jain , Financial Management :Text and Problems, Tata McGravv Hill. B.Com(Hons.)CBCS 60 Department of Commerce, University of Delhi. Delhi
- Srivastava, Rajiv, and Anil Mishra, Financial Management, Oxford University Press, UK 5. Singh.
 Preeti, Financial Management, Ane Books Pvt. Ltd, New Delhi
- 3.Singh. Surender and Kaur Rajeev. Fundamentals of financial Management, Mayur Paper Book Noida

- Rustagi,R.P.. Financial management, Galgotia Publications Company.
- Pandey. 1 M. Financial Management, Vikas Publications UNCTAD Reports.
- Chandra, P.. Financial Management-Theory and Practice. Tata McGraw Hill
- Bhalia, VK.. Financial Management & Policy , Anmol Publications, Delhi
- Banerjee .B. Fundamentals of Financial Management. PHI, New Delhi

Optional Group- III : Banking & Insurance Group Banking Laws and Practice

Course objective:

The course attempts to provide a conceptual view and comprehensive insights into the basics of Banking services along with its fundamental ways of operation.

Learning Outcomes:

After going through this course, students will be able to understand the roles of Banking Sector, identify the features of banking and its services, to differentiate the various operations of banking and will be able to identify the role of Banks in the development of the economy.

Unit-1

Introduction to Banking: Origin of Banking, Meaning and Definition of Banks, Features of Banks. Types of Banks. History of Indian Banking Industry, Structure of Commercial Banks in India

Sources of Bank's Income, Annual Report and Balance Sheet of a Bank.

Banking Sector Reforms in India

Unit-II

Central Banking: Introduction, Genesis, the Indian Experience, Reserve Bank of India, Functions of RBI, Credit Control by RBI.

Negotiable Instrument Act: Meaning of Bills of Exchange, Promissory Notes, Cheques; differences between them, types of crossing of cheque, payment of cheque, reasons for dishonour of cheque and its consequences.

Unit-III

Banker and Customer Relationship: Banker and customer definition and their relationship, types of customers and modes of, operations.

-Deposit Products: Procedure and precaution for opening an account, pass book & its features; Types of Deposit Products; Rights, Duties and obligations of the banker.

Loans and Advances: Types of loans and advances - Principles of sound lending policies - Credit appraisals of various forms of loans and advances - Modes of creating charges -Lien, pledge, mortgage and hypothecation.

Electronic Banking: Meaning, Types; ATM, Internet Banking, Electronic Clearing Services, Electronic Funds Transfer, Credit Cards, Debit Cards, Telebanking

Suggested Readings:

- S.N, Maheshwari and S.K. Maheshwari
- P.N. Vashnev
- R.K. Gupta
- Mohanlal Tannan

Principles and Practices of Insurance

Course Objective:

The course attempts to provide a conceptual view and comprehensive insights into the basics of Insurance services in India.

Learning Outcomes:

After going through this course, students will be able to understand the roles Insurance Sector, will be able to identify the features and its services, along with various insurance products, in the development of the economy.

Unit -I

Introduction to Insurance: Purpose and need of insurance, Insurance as a social security tool; Insurance and economic development, Fundamentals/ Principles of Insurance; Contract of Insurance.

Unit -II

Life Insurance - Principles and practice of life assurance. Life assurance contracts, their nature and characteristics, Parties to the contract and their rights and duties; Conditions and terms of policy and effects of non-compliance thereof; Nominations and Assignment Practice in connection with collection of premium, revivals, loans, surrenders, claims, bonuses and annuity payments; Mortality Table, Present structure & growth of Life insurance in India. -

Unit -III

Fire Insurance - The basic principles of Fire Insurance contracts; Fire Policy, conditions, Assignment of Policy; Claims.

Marine Insurance - General Principles - Insurable interest and value disclosure Marine Policy and their conditions, Premium; double insurance; assignment of policy' warranties' the voyage. Loss and abandonment; partial losses and particular charges; salvage; total losses and measures of indemnity; Subrogation.

Insurance Intermediaries - Agents and Procedure for Becoming an Agent; Pre requisite for obtaining a license; Duration of license; Cancellation of license; Revocation of suspension/termination of agent appointment; Code of conduct; unfair practices; Procedure regarding settlement of policy claims.

Suggested Readings:

- Insurance Principles And Practice, M N Mishra & S B Mishra, S. Chand
- Insurance Law and Practice, C. L. Tyagi, Madhu Tyagi, Atlantic
- INSURANCE Fundamentals, Environment and Procedures, B.S.Bodla, M.C.Garg&K.P.Singh

Project

Full Marks=100 Marks (Written Report=80, Viva=20)

Guidelines:



TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar-799022

Syllabus

OF

Political Science

Major & General – Semester – I (Rectified)

BA Major/ Honours

Semester- I: Political Theory (Paper- I)

Unit - I

• Meaning of Politics and Political Theory: Present state of Political Theory; Empirical-Systems Analysis, Structural-Functionalism, Liberal.

1

- Different approaches to the study of Politics: Normative, Behavioural and Post Behavioural, Marxist Approach.
- · Feminist views of Politics.
- Theories of State (Origin, Nature and Functions), Idealist, Liberal, Neo-liberal, Marxist and Gandhian.

Unit - II

- Concept of State Sovereignty: Monistic, Pluralistic and Popular: Changing Concept of Sovereignty in the context of Globalisation.
- Democratic Theories: David Held's classification.
- Liberty, Equality, Rights and Law Concepts and their interrelationship.
- Justice: Theory of Rawls, Distributive Justice; Multiculturalism and Social Justice.

Unit - III

- Dialectical Materialism and Historical Materialism Concept of Class and Class Struggle – Theory of Surplus Value.
- Rise and development of Capitalism and its contradictions.
- · Gandhian concept of Sarvodaya and Satyagraha.

Unit-IV

- Theories of Social change Fabian theory of Evolution Marxian theory of Revolution; Socialist and Non Socialist Revolution- Violence and Revolution.
- Theories of Change: Lenin, Mao and Gandhi.

- Barker, Earnest, Greek Political Theory: Plato and his Predecessors, Surject Publications, New Delhi. 2006
- David Boucher & Paul Kelly (eds.), *Political Thinkers: From Socrates to the Present*, Oxford University Press, Oxford, 2003.

- Maclleland, J.S, Political Thought, Routledge, London, 1996.
- Mukhopadhaya, Amal, Western Political Thought from Plato to Marx, K.P Bagchi,
 Calcutta. 1988
- Machiavelli, Niccolo, Ine Prince (Translated and Latter of Technical With Williams) Williams Norton and Company, New York, 1992.
- Norberto, Bobbio, Thomas Hobbes and the Natural Law Tradition, The University of Chicago Press, Chicago, 1993.
- Ramaswamy, S. & Mukherjee, S, Western Political Thought, Prentice Hall, New Delhi, 1999.
- Sabine, G.H., A History of Political Theories, Oxford IBH Publishing House, New Delhi, 1973.
- Wolf, Jonathan, Why Read Marx Today? Oxford University Press, Oxford, 2002.
- Rajeev, Bhargava & Acharya, Ashok, *Political Theory : An Introduction*, Pearson Longman, Delhi 2008.
- Bhagwan, Vishnoo and Bhushan, Vidya, 'Principles and Concepts of Political Theory', Kalyani Publishers, New Delhi, 2009.
- Roy, Amalandu, Bhattacharya, Mohit, *Political Theory: Ideas and Institutions*, World Press, 'Kolkata, 2005.
- Gauba, O.P., *Political Ideas and Ideologies*, Macmilan Publishers India Ltd, New Delhi, 2010.
- Gauba, O.P., Introduction to Political Theory, Macmilan Publishers India Ltd, New Delhi, 2010.
- Heywood, Andrew, Political Theory: An Introduction, Macmilan Publishers, New York, 1999.
- Ghai, K.K, Political Theory, Kalyani Publishers, New Delhi, 2007.

BA General Course

Semester- I: Political Theory (Paper- I)

UNIT-I

- 1. Nature and Scope of Political Science; Approaches to the study of Political Science-Traditional and Modern Approaches.
- 2. Theories of State: Social Contract Theory, Idealist Theory of State, Liberal and Neo-Liberal Theory of State, Marxist Theory of State, Gandhian Theory of State.

UNIT-II

- 1. Sovereignty of the State: Kinds of Sovereignty- Monistic, Pluralistic Theories; Popular, Sovereignty in the age of Globalisation.
- 2. Some Representative Concepts: Meaning and Features- Democracy, Nationalism, Internationalism.

UNIT-III

- 1. Law, Liberty, Rights and Equality
- 2. Political Parties, Pressure Groups: Functions, Role in Modern State.

UNIT- IV

- 1. Theories regarding State Functions: Individualism, Socialism, Welfare State and Democratic Socialism.
- 2. Marxism: Dialectical Materialism, Historical Materialism, Class and Class Struggle, Revolution.
- 3. Lenin: Concept of Imperialism, Contribution to Marxism.

- Levine, Andrew, Engaging Political Science: From Hobbes to Rawls, Blackwell, Massachusetts, 2002.
- Barker, Earnest, *Greek Political Theory: Plato and his Predecessors*, Surject Publications, New Delhi, 2006.
- Boucher, David & Kelly, Paul (eds.), *Political Thinkers: From Socrates to the Present*, Oxford University Press, Oxford, 2003.
- Maclleland, J.S, A History of Western Political Thought, Routledge, London, 1996.
- Mukhopadhaya, Amal, Western Political Thought, K.P Bagchi, Calcutta, 1980.
- Machiavelli, Niccolo, The Prince (Translated and Edited by Robert M. Adams) W W Norton and Company, New York, 1992.
- Norberto, Bobbio, *Thomas Hobbes and the Natural Law Tradition*, University of Chicago Press, Chicago, 1993.
- Ramaswamy, S. & Mukherjee, S, Western Political Thought, Prentice Hall of India, New Delhi, 2006.
- Sabine, G.H., A History of Political Theories, Oxford IBH Publishing House, London, 1973.
- Wolf, Jonathan, Why Read Marx Today? Oxford University Press, Oxford, 2002.
- Rajeev, Bhargava & Acharya, Ashok, *Political Theory: An Introduction*, Pearson Longman, Delhi 2008.
- Wolf, Jonathan, Why Read Marx Today? Oxford University Press, Oxford, 2002.
- Bhagwan, Vishnoo and Bhushan, Vidya, Principles and Concepts of Political Theory, Kalyani Publishers, New Delhi, 2009.
- Roy, Amal and, Bhattacharya, Mohit, *Political Theory: Ideas and Institutions*, World Press, Kolkata, 2005.
- Gauba, O.P., *Political Ideas and Ideologies*, Macmilan Publishers India Ltd, New Delhi, 2010.
- Gauba, O.P., Introduction to Political Theory, Macmilan Publishers India Ltd, New Delhi, 2010.
- Heywood, Andrew, Political Theory: An Introduction, Macmilan Publishers, New York, 1999.
- Ghai, K.K., Political Theory, Kalyani Publishers, New Delhi, 2007.



TRIPURA UNIVERSITY

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Syllabus

For

Semester - II

Political Science (Major/General)

Year 2014

Honours Course

Semester-I	Political Theory	Paper I
Semester-II	Western Political Theory	Paper II
Semester-III	Indian government & Politics	Paper III
Semester-IV	Public Administration	Paper IV
Semester-V	1) Indian Political Thought	Paper V
	2) Comparative Government and Politics	Paper VI
Semester-VI	1) International Relation	Paper VII
	2) Political Sociology	Paper VIII

Pass Course

Semester I	Political Theory	Paper I
Semester II	Political Thought	Paper II
Semester III	Indian Government & Politics	Paper III
Semester IV	Comparative Government & Politics	Paper IV
Semester V	International Relations & Organisations	Paper V

Compulsory Paper for U. G. Course

Public Administration (For 5th Semester)

BA Major/ Honours

Semester- II: Western Political Thought (Paper- II)

Unit-I

- General Features of Greek Political Institutions Search for harmony in Plato's concept of Justice- Plato's Communism vs. Modern Communism- Aristotle's concept of State, Slavery and Revolution.
- · Roman Theory of Law.
- General features of Medieval Political Thought, Conflict between Church and the State, St. Augustine and Marsiglio of Padua.
- Machiavelli and Secularisation of Politics- his contribution to Political Thought.
- Political Implications of the Reformation Movement, Political Implications of the Puritan Revolution.

Unit- II

- · Jean Bodin's concept of Sovereignty, the theoretical foundation of Nation State.
- · Hobbes: Founder of materialistic politics.
- Locke: Theorist of the Glorious Revolution, Socio-Political elements of Locke's Political Thought, Theories of Rights, Resistance and Consent.
- Rousseau's General Will: Philosophical Solutions to the problem of reconciliation between Liberty and Authority.

Unit- III

- Impact of Twin Revolutions on the development of Political Thought- Industrial and the French Revolution- Development of Liberalism in England.
- · Benthamite Utilitarianism, J. S. Mill's concept of Individual Liberty.
- · Hegel's concept of State, T. H. Green's theory of State.

Unit- IV

- · Political Ideas of Utopian Socialist, Scientific Socialism.
- · Democratic Socialism.
- Lenin's Contribution to Marxism, Lenin's Theory of Proletarian Revolution, Dictatorship of Proletariat.
- · Anarchist Theory of Society.

Suggested Readings:

- Rao, Venkata V., Ancient Political Thought, S Chand and Company Ltd, New Delhi, 2002.
- Dhariwal, Umesh K., Western Political Thought, Arise Publishers and Distributors, 2008.
- Nelson, Brian R., Western Political Thought: From Socrates to the Age of Ideology, Pearson Education, Delhi, 1996
- Sharma, Urmila and S. K. Sharma, Western Political Thought, Atlantic Publishers and Distributors, Delhi, 2006.
- Jayapalan, N, Comprehensive History of Political Thought, Atlantic Publishers and Distributors, Delhi, 2001.
- Das, P. G., History of Political Thought, New Central Book Agency Pvt Ltd, Kolkata, 2011
- Arora, Prem & Brij Grover, Selected Western and Indian Political Thought, Cosmos Bookhive (P) Ltd, 2013.

BA General Course

Semester- II: Political Thought (Paper- II)

Unit-1

- 1. Plato: Concept of Justice, Communism and Ideal State
- 2. Aristotle: Concept of State, Slavery, Revolution; Classification of Government.
- 3. Machiavelli: Power, Prince, Secularism.

Unit-2

- 1. Bentham: Utilitarianism.
- 2. J. S. Mill: On Liberty, Concept of Government.
- 3. Lenin: Dictatorship of Proletariat, Contribution to Marxism.
- 4. Neo Marxism, Scientific Socialism

Unit-3

- 1. Ram Mohan: Social Reform, Liberalism.
- 2. Bankim Chandra: Nationalism, Equality.
- 3. Vivekananda: Nationalism, Socialism.

Unit-4

- 1. Gandhi: Non-Violence, Satyagraha and Sarvodaya.
- 2. M.N.Roy: New Humanism.
- 3. B.R. Ambedkar: Social Justice, Political Ideas.
- 4. Nehru: Socialism, Model of Development.

Readings:

- Mukhopadhaya, Amal, Western Political Thought, K.P Bagchi, Calcutta, 1980.
- Ramaswamy, S. & Mukherjee, S. Western Political Thought, Prentice Hall of India, New Delhi, 2006.
- Sabine, G.H., A History of Political Theories, Oxford IBH Publishing House, London, 1973
- Nanda, B.R., Gandhi and his Critics, Oxford Paperbacks (OUP India), England, 1994.
- Nehru, J., Discovery of India, Oxford University Press, England, 1989.
- Chakraborty, Bidyut, Indian Political Thought, SAGE Publications, Delhi, 2013.
- Pantham, Thomas and Deutsch, Kenneth L., Political Thought in Modern India, SAGE
 Publications, Delhi, 2013.
- Singh, Akash and Mahapatra, Silika (Ed), Indian Political Thought, Routledge, London.
 2010.
- Chakraborty, Debasis, BaratiyaRastrachintarDhara, Central Book Publishers, Kolkata,
- Mahapatra, Anadi Kumar, Bharatiya RastraDharsan, Suhrid Publication, Kolkata.
- Sarkar, Sumit, Adhunik Bharat, K.P Bagchi and Company, 1993.
- Chakraborty, Satyabrata (Ed.), BharatborsaRastraBhavna, Ekushe Dhaka, 2001.

TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar-799022

Syllabus OF

Political Science (Major & General)

Semester - III

2014

BA Major/ Honours

Semester- III: Indian Government of Politics (Paper- III)

Unit- I

- Framing of the Indian Constitution: Role of the Constituent Assembly.
- Preamble to the Indian Constitution- Fundamental Rights and Duties and Directive Principles of State Policy.
- Nature of Indian Federation- Amendment to the Constitution.
- Centre- State Relations: Legislative, Administrative and Financial.

Unit- II

- Union Executive: President Position and functions Prime Minister, Council of Ministers.
 - State Executive: Chief Minister, Governor-Functions and position.
- Union and State Legislature- composition and functions, Law making process.
- Provisions for official language and National Integration.

Unit - III

- Composition and functions of the Supreme Court and High Court in India- Lokpal, Judicial Activism.
- Constitutional Provisions for Scheduled Castes and Scheduled Tribes.
- Election Process: Election Commission: Composition, functions and role, Electoral Reforms.
- Public Service Commission- Union and State.

Unit- IV

- Some issues in Indian Politics: Caste, Tribe, Women's Political Participation, Identity Politics.
- Political Parties and Interest Groups.
- Local self governments in Tripura.
- Panchayat (b) Municipality (c) Tripura Tribal Areas Autonomous District Council (TTAADC).

Suggested Readings:

- Mohanty, Manoranjan., (ed.) Class, Class, Gender, Sage Publications, New Delhi, 2004.
- Mehra, Ajay K. and Khanna, D.D. (eds.) *Political Parties and Party Systems*, Sage Publications, New Delhi, 2003.
- Vora, Rajendra and Palshikar Suhas (eds.) *Indian Democracy*, Sage Publications, New Delhi, 2004.
- Kumar, B.B. Small State Syndrome in India, Concept Publishing Company (P) Ltd., New Delhi, 1998.
- Singha, Komol. (ed.) Rural Development in India, Concept Publishing Company (P) Ltd., New Delhi, 2010.
- Datta, Prabhat & Sen Payel, Good Governance and Development: Contexts and Concerns, Progressive Publishers, Kolkata, 2009.
- Johari, J.C., Indian Government and Politics, Sterling Publishers, 2011.
- Ghai, K.K., Indian Government and Politics, Kalyani Publishers, New Delhi, 2011.
- Das, Nityananda, *Grassroot Democracy and Panchayati Raj in Tripura*, Progressive publications, Kolkatta, 2012.

BA General Course

Semester- III: Indian Government and Politics (Paper- III)

Unit- I

- 1. Framing of the Indian Constitution, salient features.
- 2. Preamble- its significance.
- 3. Fundamental Rights and Duties of the citizens.
- 4. Directive principles of State policy- their significance.

Unit- II

- 1. Nature of Indian Federal system.
- 2. Legislative, Administrative and financial relations between the union and the statesrecent trends.
- 3. Amendment to the constitution.

$\mathbb{U}_{\overline{mi}} - \mathbb{H}$

- 1. Union and State Executive: The President, The Prime Minister, The Governor, The Chief Minister, Union and State Council of Ministers.
- 2. Union and State Legislature- composition and functions, Law making process, nature of Parliamentary privileges.

Unit-IV

- 1. Supreme Court and High Courts- Composition, functions, Lokpal.
- 2. Election Commission- Composition, functions and role.
- 3. Public Service Commission (Union and State)-Composition, functions and role.
- 4. Provisions for Scheduled Castes and Scheduled Tribes.
- 5. Local Government in Tripura: Panchayat, Municipality and Tripura Tribal Areas Autonomous District Council (TTAADC).

Readings:

- Mohanty, Manoranjan(ed.), Class, Class, Gender, Sage Publications, New Delhi,
 2004.
- Mehra, Ajay. K., and Khanna, D.D. (ed.) Political Parties and Party Systems,
 Sage Publications, New Delhi, 2003.
- Vora, Rajendra., & Palshikar Suhas, (ed.) Indian Democracy, Sage Publications,
 New Delhi, 2004.
- Kumar, B.B., *Small State Syndrome in India*, Concept Publishing Company (P) LTD., New Delhi, 1998.
- Singha, Komol (ed.), *Rural Development in India*, Concept Publishing company (P) LTD., New Delhi, 2010.
- Datta, Prabhat & Sen Payel, Good Governance and Development: Contexts and Concerns, Progressive Publishers, Kolkatta, 2009.
- Johari, J.C., Indian Government and Politics, Vishal Publications, New Delhi, 1976.
- Ghai, K.K., Indian Government and Politics, Kalyani Publishers, New Delhi, 2011.
- Das, Nityananda, *Grassroot Democracy and Panchayati Raj in Tripura*, Progressive publications, Kolkatta, 2012.



TRIPURA UNIVERSITY

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Suryamaninagar-799022

Syllabus

OF

Political Science (Major & General)

Semester - IV

2014

BA General Course

Semester IV: Comperative Government and Foliates (2 aper- 1);

Unit-1: United Kingdom

- 1. Sources and features of the Constitution, Conventions, Rule of the Law.
- 2. Position and power of the Crown.
- 3. Prime Minister: UK.
- 4. Parliament- Composition and functions.
- 5. A comparative study: UK Cabinet with US Cabinet.

Unit-2: United States of America

- 1. Salient features of the Constitution.
- 2. President- Powers and position.
- 3. Congress- Composition and functions.
- 4. Supreme Court- its Composition, Jurisdiction and Role.
- 5. A Comparative Study: a) US President with UK Prime Minister. b) US Speaker with

Unit-3. France Republic (5th)

- 1) Salient features of the Constitution.
- 2) President- election, power and role.
- 3) Prime Minister- functions and role- Council of Ministers.
- 4) Parliament- Composition and Functions.
- 5) A Comparative study: U.S President with French President.

Unit-4 People's Republic of China (Constitution of 1982)

- 1) Features of the Constitution, General Principles of the Constitution.
- 2) Fundamental Rights and Duties.
- 3) National People's Congress- Composition and Functions- Standing Committee.
- 4) State Council- Composition, Functions and Role.
- 5) Role of the Communist Party.
- 6) A Comparative Study: Unitary and Federal Form of Government with special reference to U.K, U.S.A and P.R.C.

Readings:

CONTROL OF THE PARTY OF THE PAR

- Alimondi. C. edeli Computania. Folinica Toda, de l'occus cum, reursti eddocti. New Delhi, 2009.
- Klag, A., The New American Political System, A±: Press, Wichigan 1996.
- Lijphart, A. (ed).. Parliamentary Versus Presidential Government: Oxford Readings in Folities and Government, Oxford University Press, United Kingdom, 1992.
- Drogus, Carol Ann & Orvis, Stephen, Introducing Comparatives Politics, Sage Publications, 2011.
- Roberts. William et. Al., Principles of Comparative Politics, Sage Publications, 2012.
- Ghai, K.K., Major Governments, Kalyani Publishers, New Delhi, 2011.
- Finer, H., Theory and Practice of Modern Government, H. Holt, 1949.
- Roberts, G. K., An Introduction to Comparative Politics, Arnold, London, 1986.

Ba Negar/Room

Semestos-IV: Public Administration of area-EU;

Unit-I

- · Definition, Nature, Scope and Evolution of Public Administration.
- · Public and Private Administration.
- Different theories of Administration: Scientific Management Theory. Classical Theory of Management, Human Relations Theory. NPA (New Public Administration).

Unit- 2

- Principles of Formal Organization: Hierarchy, Span of Control, Unity of Command. Centralization and Decentralization, Staff and Line.
- Administrative Behaviour: Authority and Supervision, Leadership, Accountability, Delegation, Communication, Decision Making-Herbert Simon's Behaviour Alternative Model.
- · Policy Making in Government, Policy Making Models, Need for Policy Analysis

Unit-3

- Bureaucracy: Max Weber and Karl Marx on Bureaucracy.
- Comparative Public Administration and Development Administration- The Riggsian Model.
- Basic Principles of Socialist Management- Lenin's concept of Building Socialism.
- · Capitalist Management vs. Socialist Management.
- Public Administration in the age of Globalization.

Unit: 4

- Evolution of Public Administration in India.
- District Administration in India.
- Public Accounts Committee, Estimates Committee, Planning Commission and National Development Council of India-Their composition, functions and role.
- Lokpal, Lokayukta.

Suggested Readings:

• Self, Peter, Administrative Theories and Politics: An Enquiry into the Structure and Processes of Modern Government, Allen & Unwin, Michigan, 1977.

- Bhatannarjos, Nichit. Public Administration Sense on Forestein en Rebuch on a certif Pres. Prime Ltd., Chicama. 2007.
- Vonance, E. Socians, Management: The Lentus concept Fugues E. Alexado. 1997.
- Sharma, W.F., Public Administration in Theory & Preside Ultab Monal, a typeson 2010
- Maheswari, S. R., Administrative Theory, Macmillan India Ltd. New Delhi, 2003.
- Sapru, R.K., Development Administration, Sterling Publishers Pvt. Ltd., New Delail, 2012.
- Nigro, F. A. and Nigro, L.G., Modern Public Administration. Harper Collins Publishers, 1988.
- Jain, R. B., Contemporary Issues in Indian Administration, Vishal Publications, New Delhi, 1976.
- Singh, H and M. Singh, *Public Administration in India: Theory and Practice*, Sterling Publishers Pvt. Ltd., New Delhi, 1993.
- Bhambri, C. P., Administrators in a Changing Society, Bureaucracy and Politics in India, Vikas Publications, New Delhi, 1971.
- Dey, B. K., Personnel Administration in India: Retrospective Issues and Perspective thoughts, Uppal Publishing House, New Delhi, 1991.
- Bhattacharya, Mohit, Bureaucracy and Development Administration. Uppal Publications, New Delhi. 1979.
- Maheswari, S.R., Indian Administration, Orient Blackswan Pvt Ltd, New Delhi. 2000.
- Arora, Ramesh, Public Administration in India, Rajat Publications, New Delhi, 2008.
- Fadia, B.L. and & Kuldeep Fadia, *Public Administration: Administrative Theories and Concepts*, Sahitya Bhawan, Agra, 2009.



TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar-799022

Syllabus

OF

Political Science (General - Vth Semester & Major - Vth & VIth Semester)

BA General Course

Semester- V: International Relations and Organizations (Paper- V)

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the of International Relations.

Exercational society- The State and the Non-State Actors- their role in **politics**- crisis in territorial states.

at National Power- Elements of national power

- 1) Definition of foreign policy- Various factors in shaping the foreign policy. Determinants of Foreign Policy: a) Legislature b) Public Opinion c) Civil Services.
- 2) National Interest- role of National interest in the formulation of foreign policy of a country.
- 3) Instruments and techniques of state interaction- a) Propaganda,b) Diplomacy.
- 4) Foreign Policy: India, UK, USA and China.

Unit- III

- 1) Post-Cold War politics, Neocolonialism.
- 2) Emergence of the Third World / Nature and Problems of the Third World Countries..
- 3) Non-Aligned Movement, Universal declaration of Human Rights.

Unit- IV

- 1) The League Covenant and the United Nations Charter Compared.
- 2) Purposes and Principles of the UNO, UN charter, Principal organs of the UNO.
- 3) International Organizations- SAARC, OPEC, WTO, IMF.

Readings:

- Frankel, Joseph, International Relations in a Changing World, Oxford University
 Press, Michigan, 1988.
- Calvocoressi, Peter, World Politics since 1945, Longman Publications Group, New Delhi, 2009.
- Palmer, N.D. and H.C. Perkins, International Relations: The World Community in Transition, Houghton Mifflin Publishers, Michigan, 1957.
- Organsky, A.F.K., World Politics, Knopf, California, 1968.
- Friedmann, W. G., An Introduction to World Politics, Macmillan, New York, 1968.
- Goodrich, L.M., The UN in a Changing World, Manchester University Press, Manchester, 1969.
- Worsly, Peter, Third World. University of Chicago Press, Chicago, 1977.
- · Ghai, K.K., International Relations, Kalyani Publishers, New Delhi, 2011:
- Mukherjee, Shakti and IndraniMukherjee, International Relations and Organisations, World Press, Kolkata, 2011.
- Robert Jackson, Introduction to International Relations: Theories and Approaches, Oxford University Press, United Kingdom, 2010.
- A.J. Bellamy (ed.), International Society and its Critics, Oxford University Press. United Kingdom, 2005.
- Tin Dunneet.al., International Relations Theories: Discipline and Diversity, Oxford University Press, United Kingdom, 2013.
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TRIPURA UNIVERSITY

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Suryamaninagar-799022

Syllabus

OF

Political Science

Major – V & VI Semester

2014

BA Major/ Honours

Semester- V: Indian Political Thought (Paper- V)

Unit - I

- Sources and salient features of Ancient Indian Political Ideas.
- Theory of kingship: Manu and Sukra.
- Kautilya: Views on King, Concept of State and Foreign Policy.
 - Salient features of Medieval Indian Political Ideas.

Unit - II

- Rammohan Roy His contribution to Indian Liberalism and Socio-economic reforms.
- Ideas of Nationalism: Bankim Chandra, Aurobinda and Rabindranath Tagore.
- Syed Ahmed Khan: Colonial role and Modernization.

Unit-III

- · Vivekanand Views on Socialism.
- S.C. Bose- Concept of Socialism.
- J. Nehru Concept of Socialism.
- M. K. Gandhi- Concept of State.
- M.N Roy- Concept of Neo-Humanism.
- · Gokhle's Economic Ideas.
 - Aurobinda- Concept of Passive Resistance.

Unit- IV

- Naraedra Deva Socialism.
- Jay Prakash Narayan Partyless Democracy and Social Revolution.
- B.R. Ambdedkar Social Justice, Democracy and Constitutionalism.

Suggested Readings:

- Sharma, R.S., Aspects of Political Ideas and Institutions in Ancient India, Motilal Banarsi Dass Publishers Pvt. Ltd., Delhi, 1991.
- Ghoshal, U.N., *A History of Hindu Political Theories*, Hard Press Publications, Lenox, Massachusetts, 2012.
- Kosambi, D. D., Ancient India, Pantheon Books, New York, United States, 1966
- Sharma, V. P., Hindu Political Theory, Motilal Banarsi Dass, Delhi, 1974.
- Nanda, B.R., Gandhi and his Critics, Oxford Paperbacks (OUP India), England, 1994.
- Nehru, J., Discovery of India, Oxford University Press, England, 1989.
- Chakraborty, Bidyut, Indian Political Thought, SAGE Publications, Delhi, 2013.
- Pantham, Thomas and Kenneth L. Deutsch, Political Thought in Modern India, SAGE Publications, Delhi, 2013.
- Singh, Akash and Silika Mahapatra, (Eds), *Indian Political Thought*, Routledge, London. 2010.
- Chakraborty, Debasis, Baratiya Rastrachintar Dhara, Central Book Publishers,

Kolkata,

- Mahapatra, Anadi Kumar, Bharatiya Rastra Dharsan, Suhrid Publication, Kolkata.
- Sarkar, Sumit, Adhunik Bharat, K.P Bagchi and Company, 1993.
- Chakraborty, Satyabrata (Ed.), Bharatborsa Rastra Bhavna, Ekushe Dhaka, 2001.

BA Major/ Honours

Semester- V: Comparative Government and Politics (Paper- VI)

Unit-1

- What is Comparative politics? Distinction between Comparative Government and Comparative Politics.
- Scope, Purpose and Methods of Comparison.
- Nature of Liberal and Authoritarian Political Systems, Parliamentary Sovereignty (U.K.), Separation of Powers, Checks and Balances, Democratic centralism and Methods of Direct Democracy.

Unit-2

- Federal and Unitary systems: Federalism in USA and Switzerland, nature of unitarism in U.K. and People's Republic in China.
- Parliamentary and Presidential Systems-Comparative study of British and American practicing, unique position of People's Republic in China.
- Parliamentary Democracy-U.K. and Switzerland.

Unit-3

- Political Parties: features and role of Party system in U.K. and U.S.A. and PRC.
- Interest Groups: Their role and Performance in U.K. and U.S.A.
- Rights and Duties of U.K., U.S.A. and P.R.C.- a comparative study.
 - Judiciary in U.K., U.S.A. and P.R.C (with special reference to Procuratorial Organ).

Unit-4

Executive and Legislature

- UK Prime Minister vs. US President.
- U K Cabinet vs. US Cabinet.
- PRC State Council vs. U K Council of Ministers.
- Swiss Federal Assembly vs. UK Parliament.
- UK Speaker vs. US Speaker.

Suggested Readings:

- Almond, G. et.al, Comparative Politics Today: A World View, Pearson Education, New Delhi, 2009.
- King, A., The New American Political System, AEI Press, Michigan 1990.
- Lijphart, A. (ed)., Parliamentary Versus Presidential Government: <u>Oxford Readings in Politics and Government</u>, Oxford University Press, United Kingdom, 1992.
- Drogus, Carol Ann & Orvis, Stephen, Introducing Comparatives Politics, Sage Publications, 2011.
- Roberts, William et. Al., Principles of Comparative Politics, Sage Publications, 2012.
- Ghai, K.K., Major Governments, Kalyani Publishers, New Delhi, 2011.
- Finer, H., Theory and Practice of Modern Government, H. Holt, 1949.
- Roberts, G. K., An Introduction to Comparative Politics, Arnold, London, 1986.

BA Major/ Honours

Semester- VI: International Relations (Paper- VII)

Unit-I

- Nature and Scope of International Relations- Whether a separate branch of academic discipline?
- Units of Internationals Society- The State and the Non-State Units- their role in International politics- crisis in Territorial State.
- Concept of National Power- Elements of National Power- Struggle for power-Balance of power.

Unit-II

- Definition of Foreign Policy- Various factors in shaping the Foreign Policy.
- National interest- role of National interest in the formulation of foreign policy of a country.
- Instruments and techniques of state interaction- a) Propaganda, b) Diplomacy.

Unit- III

- Post-Cold War Politics, Imperialism, Neo-colonialism.
- Globalization- Its meaning and implications.
- Emergence of the Third World- Problems of the Third World Countries.
- Non-Aligned Movement.
- Human Rights- Universal Declaration.

Unit- IV

- Purposes and Principles of the UNO, UN charter, Principal Organs of the UNO, specialized agencies- A critical evaluation of their role.
- Peace keeping role of the UN- Cuba, Afghanistan, Iraq and Korea.
- Regional Organizations- NATO, OPEC, ASEAN, SAARC.

Suggested Readings:-

- Frankel, Joseph, *International Relations in a Changing World*, Oxford University Press, Michigan, 1988.
- Calvocoressi, Peter, World Politics since 1945, Longman Publications Group, New Delhi, 2009.

1

- Palmer, N.D. and H.C. Perkins, *International Relations: The World Community in Transition*, Houghton Mifflin Publishers, Michigan, 1957.
- Organsky, A.F.K., World Politics, Knopf, California, 1968.
- Friedmann, W. G., An Introduction to World Politics, Macmillan, New York, 1968.
- Goodrich, L. M., *The UN in a Changing World*, Manchester University Press, Manchester, 1969.
- Worsly, Peter, Third World. University of Chicago Press, Chicago, 1977.
- Ghai, K. K., International Relations, Kalyani Publishers, New Delhi, 2011.
- Mukherjee, Shakti and Indrani Mukherjee, International Relations and Organisations, World Press, Kolkata, 2011.
- Robert Jackson, *Introduction to International Relations: Theories and Approaches*, Oxford University Press, United Kingdom, 2010.
- A.J. Bellamy (ed.), *International Society and its Critics*, Oxford University Press. United Kingdom, 2005.
- Tin Dunne et.al., *International Relations Theories: Discipline and Diversity*, Oxford University Press, United Kingdom, 2013.
- Eric B. Shiraev, Vladislav M. Zubak, *International Relations*, Oxford University Press, New York, 2013.
- Nicolas, H.G., *The United Nations as a Political System*, Oxford University Press, Oxford, 1959.

BA Major/ Honours

Semester- VI: Political Sociology (Paper- VIII)

Unit-I

- Political Sociology: Meaning, Nature and Scope.
- Social bases of politics: Inter-relation of society, State and Politics.
- Social Stratification and politics: Caste, Class and Elites.

Unit-II

- Power and Authority: Concept of Power, nature and types of Authority, Authority and Legitimacy.
- Religion, Society and Politics: Religion in society.
- Political Culture and Political Socialization: Nature, types and agencies.

Unit-III

- Political Participation: Concept and types.
- Electoral Behaviour: Importance and determinants with special reference to India.
- Political Communication: Concepts and structures.
- Gender and Politics: Basic issues.

Unit- IV

- Military and Politics: Condition and mode of intervention.
- Types of states: Autocracy, Dictatorship, Democracy.
- Political Development and Social Change- Role of Tradition and Modernity.

Suggested Readings

- Bottomore, Tom, *Political Sociology*, Pluto Press, London, 1993.
- Mukhopadhay, Amal Kr., Political Sociology, K.P Bagchi and Company, Culcutta, 1977.
- Chatterjee, Rakhahari (ed), *Religion, Politics and Communism*, South Asian Pub, New Delhi, 1994.
- Bendix, R., State and Society, Little, Brown and Company, Boston, 1968.

- Goulbourne, H., Politics and State in the Third World, Palgrave Macmillan, London, 1979.
- Evans, M. (ed), The Women Question, Sage Publications, 1994.
- Almond, G. A. & S. Verba, The Civic Culture, Sage Publications, 1989.
- Pye, Lucian, Aspects of Political Development, Little, Brown and Company, Boston, 1966.
- Weiner, Myron, Political Scarcity, University of Chicago Press, Chicago, 1962.
- Lefevre, H., The Sociology of Marx, Columbia University Press, New York, 1982.
- Duverger, M., Political Parties, Wiley Publishers, Hoboken, 1963.
- Wiseman, H.V., *Political System: Some Sociological Approaches*, Routledge and Kegan Paul, 1971.
- Dasgupta, Samir (Ed), Political Sociology, Pearson Education India, 2011.
- Kumar, Anand, Readings in Indian Sociology, Vol- VIII Political Sociology of India, SAGE, 2013.
- Jayapalan, N., Political Sociology, Atlantic Publishers & Distributors (P) Limited, New Delhi, 2000.
- Chakraborty, Satyabrata, Political Sociology, Macmillan India Limited, 2005.

B.ED SYLLABUS 2015

UNIFORM CURRICULUM STRUCTURE AND EXAMINATION PATTERN FOR 2 YEARS B.ED. COURSE IN TRIPURA FOLLOWING NCTE REGULATIONS, 2015.

Course &	Course Name	Theory		Credit	Practicum Marks	Credit	Period per week (Exam Hours for
Code		External Marks	Internal Marks		(Internal)		Theory: Marks
			SEM	ESTER - I			
C1	Child and Growing Up	70	30	4	25	1	May be adjusted
C2	Contemporary India & Education	70	30	4	25	1	do
C4	Language across the Curriculum	35	15	2	50	2	do
C 5	Understanding Disciplines & subjects	35	15	2	50	2	do
EPC-1	Reading & Reflecting on Texts		25	1	25	1	do
		'	115		175	Full Ma	rks: 500, Credit = 20

					1/3	Full IVI	arks. 300, Credit = 20
			SEM	ESTER - II			
C3	Learning & Teaching	70	30	4	25	1	May be adjusted
C7a	Pedagogy of a School Subject – Part - I	35	15	2	50	2	do
C8a	Knowledge & Curriculum – Part – I	35	15	2	25	1	do
C9	Assessment for learning	70	30	4	50	2	do
EPC-2	Drama & Art in Education		25	1	25	1	do
			SEMI	ESTER – III	F	ull Marks:	500, Credit = 20
C7b	Pedagogy of a School Subject – Part – II	35	15	2	100	4	May be adjusted
	School Internship _20 weeks (04 weeks at semester II and 16 weeks at semester III)					14	

External = 175)

Full Marks: 500, Credit = 20

S	Gender, School and	35					
	Society	55	15	2	25	1	May be adjusted
	(nowledge & Curriculum – Part –II	35	15	2	25	1	do
	Creating an Inclusive	35	1 5	2	25	1	do
C11 *	Optional Course	35	15	2	25	1	do
	Critical Understanding of ICT		50	2	50	2	do
EPC-4 L	Understanding the Self		50	2	50	2	do
						Full M	arks: 500, Credit = 20

Note:

 ^{*} Optional Course can be from among the following - Guidance and Counselling and Educational Administration and Management Peace Education, Vocational Education, Woman Education, Yoga Education.

TRIPURA UNIVERSITY

(A Central University)

History (General)

Semester I

Paper - 1: History of India - Up to 1206 AD

Unit -1

- 1. Sources of Ancient Indian History: Literary and Archaeological
- Indus Valley Civilization and Vedic Civilization: Features of Indus Valley, Causes of decline; Early and Later Vedic period.
- 3. Protest Movements: Causes, Jainism and Buddhism.
- 4. The Mauryan Empire: Administration, Asoka's Dhamma.

Unit - 2

- 1. Kushanas: Kanishka and his Contributions.
- 2. Satavahanas: Gautamiputra Satkarni and his Achievements.
- 3. The Gupta Age: Administration and the downfall of the Guptas, Socio-economic and Cultural conditions.
- 4. Education and Educational Institution in Ancient India: Vikramsila and Nalanda.

Unit - 3

- 1. History of Bengal: Rise of Gaud under Sasanka.
- 2. Harsha: Achievements.
- 3. The History of Palas, Kaivarta Revolt.
- 4. Socio-economic and cultural conditions in the Pala and Sena Age.

<u>Unit - 4</u>

- 1. The Pallavas: Contribution to art and culture.
- 2. The Cholas: Administration, Maritime activities.
- 3. The Chalukyas: With special reference to Pulakesin-II.
- 4. The advent of the Arabs : Impact; Ghaznavids and Ghurids.

B.A. 2nd Semester (General Course)

Sub: HISTORY

PAPER-II History of India 1206-1757AD

Unit I

- 1. Sources of the Medieval Indian History
- 2. Delhi Sultanate: Iltutmish, Razia, Balban
- 3. Alauddin Khilji, Md bin Tughlaq and Feroze Shah Tughlaq- Reforms and Assesment
- 4. North West frontier policy- Balban, Alauddin Khilji

Unit II

- 1. Decline of Delhi Sultanate- causes
- 2. Rise of Provincial Kingdoms- Vijayanagar and Bahamani
- 3. Bhakti and Sufi Movements- Origin and Features
- 4. Sher Shah- emergence, reforms, & achievements.

Unit III

- Consolidation of Mughal Rule and Akbar: Conquest, Administration & Revenue reforms
- 2. Rajput and Religious Policy-Akbar & Aurangzeb
- 3. Cultural Development under the Mughals-Art, Architecture, Literature
- 4. Fall of the Mughal Empire

Unit IV

- 1. Rise of the Sikhs-Mughal -Sikh relations till 1720
- 2. Rise of Shivaji- Mughal Maratha relations till 1707
- 3. Murshid Quli Khan-Land revenue & Administration
- 4. English East India Company's relation with Alivardi Khan & Siraj-ud-daula Battle of Plassey

Suggested readings:

Books in Bengali;

- 1. Provatanshu maiti: Bharat Itihas Parikrama (Sreedhar)
- 2. Jiban Kumar Mukhopadhyay : Bharater Itihas, relevant volume (Sreedhar)
- Subodh Kumar Mukhopadhyay : Adi madhya O MadhyaJuger Bharat (Progressive)
- 4. Subodh Kumar Mukhopadhyay: Moghal samrajya theke British raj (Progressive)
- 5. Teslim Choudhury: Madhya Juger Bharat (Progressive)
- 6. Gourisankar Dey: Bharater Itihas: Turko Afghan Jug (Progressive)
- 7. Soumitra Srimani; Sultani rajatyakale Bharat (Central)
- 8. Satish Chandra: Madhyajuger Bharat

TRIPURA UNIVERSITY

(A Central University)

History (Major)

Semester I

Paper - 1: History of India up to c. A.D. 650

Unit: I: Pre-History and Proto-History

- a. General background: Physiography, environment, unity in diversity, people and language.
- b. Sources: Literary and archaeological.
- c. Pre-history: Palaeolithic, Mesolithic, Chalcolithic cultures features and geographical distribution.
- d. Proto-history: Harappan Civilization origin, distribution, features, decline.

Unit: II: Emergence of early Historic India

- a. Aryan Problem; Society, economy, polity, and religion as reflected in early and later Vedic Literature.
- b. Jainism, Buddhism and Ajivikas background and features.
- c. Rise of Janapadas and Mahajanapades expansion of urbanisation
- d. Iranian and Macedonian invasions causes and impact.

Unit:III: Mauryan India

- a. Rise of Magadha and MauryanEmpire material background.
- b. Mauryan expansion and administration from Chandragupta Maurya to Asoka, economy
- c. Asoka's Dhamma, Mauryan Art and Architecture.
- d. Decline of the Mauryan state.

Unit - IV: Post Mauryan development up to Harshavardhana

- a. The Kushanas Kanishka, their economy and culture; Satavahanas GautamiputraSatkarni.
- b. Sangam Age: society, language and literature.
- c. Administrative, economy and cultural life in the Gupta age.
- d. Harshavardhana: emergence and estimate; beginning of feudalism.

Recommended Readings:-

- 1. R.C. Majumdar (ed.): History and Culture of the Indian People, Relevant volumes (BharatiyaVidyaBhavan)
- 2. R.C. Majumdar, et.al., : An Advanced History of India (Macmillan)
- 3. R.C. Majumdar: Ancient India (MotilalBanarasidass)
- 4. Vincent Smith: Oxford History of India (OUP)
- 5. RomilaThapar: Early India (Penguin)
- 6. RomilaThapar: Ashoka and the Decline of the Mauryas (OUP)
- 7. RomilaThapar: Recent Perspectives of Early Indian History (Popular Prakashan)
- 8. D.N. Jha: Early India: A Concise History (Manohar)
- 9. Hermann Kulke and DietmarRothurmund: A History of India (Routledge and Manohar)
- 10. R.S. Sharma: India's Ancient Past (OUP)
- 11. R.S. Sharma: Aspects of Political Ideas and Institutions in Ancient India (MotilalBanarasidass)
- 12. A.L. Basham: The wonder that was India(Rupa) (Also in Bengali Version)
- 13. A.L. Basham: A Cultural History of India (OUP)
- 14. Upindar Singh: A History of Ancient and Early Medieval India (Pearson)
- 15. Ranabir Chakraborty: Exploring Early India (Macmillan)
- 16. ShereenRatnagar: Understanding Harappa (Tulika)
- 17. A.S. Altekar: State and Government In Ancient India (MotilalBanarasidass)
- 18. Allchin & Allchin: The Rise of Civilization in India and Pakistan (Cambridge India Foundation Books)
- 19. D.D. Kosambi: The Culture and Civilization of Ancient India in Historical Outline (Vikas)
- 20. D.D. Kosambi: An Introduction to the study of Indian History (Popular Prakashan)
- 21. Romila Thapar: History of India Vol-I (Penguin) (Also in Bengali version)
- 22. Irfan Habib: Pre History (Tulika) (Also in Bengali Version)
- 23. Irfan Habib: Indus Valley Civilisation (Tulika) (Also in Bengali version)
- 24. Irfan Habib & Vijay Kumar Thakur: The Vedic Age (Tulika) (Also in Bengali Version)
- 25. K M Shrimali: The Age of Iron and the Religious Revolution (Tulika)

Books in Bengali:-

- 1. Gopal Ch. Sinha Bharatbarsher Itihas, Adi Jug (Progressive Publishers)
- 2. Gopal Chandra Sinha: Bharatbarsher Itihas: Adi Madhya Jug (Progressive Publishers)
- 3. Sunil Chattopadhyay Prachin Bharater Itihas, 2 Vols. (Paschim Banga rajya Pustak Parshad)
- 4. P. Maiti Bharat Itihas Parikrama (Sridhar)
- 5. Shirin Ratnagar Harappa Sabhayatar Sandhaney
- 6. Sukumari Bhattacharjee Prachin Bharat: Samaj O Sahitya (Ananda)
- 7. Narendranath Bhattacharya : Dharma O Sanskriti: Prachin Bharatiya Prekhapat (Ananda)
- 8. Ranabir Chakravarti : Bharater Itihaser Adi Parva (Orient Blackswan)

History (Elective)

The following elective papers in History as approved by the Board of Under Graduate Studies, History, Tripura University will be taught in Six semesters spanning a period of Three years:

Paper-I: History of India upto 1206 A.D. (First Semester)

Paper-II: History of India: 1206 AD-1757A.D. (Second Semester)

Paper-III: History of India: 1757 AD – 1947A.D. (Third Semester)

Paper-IV: Tripura and Assam: Mid 18th century to 1949 A.D. (Fourth Semester)

Paper-V: History of Europe and World (1760 - 1871) (Fifth Semester)

Paper-VI: History of Europe and World (1871 – 1945) (Sixth Semester)

History (Honours)

The following Honours papers in History as approved by the Board of Under Graduate Studies, History, Tripura University will be taught in Six semesters spanning a period of Three years:

Paper-I: History of India up to c. A.D. 650 (First Semester)

Paper-II: History of India c. A.D 650- A.D 1550(Second Semester)

Paper-III: History of India c. A.D 1550- A.D. 1818 (Third Semester)

Paper-IV: History of India, 1818 AD-1947 AD (Fourth Semester)

Paper-V: Rise of the Modern West: Mid 15th to late 18th centuries (Fifth Semester)

Paper-VI: Modern Europe and the World: c. 1780- 1939 (Fifth Semester)

Paper-VII: History of North -East India, 1826 AD-1949 AD(Sixth Semester)

Paper-VIII: History of China & Japan (1840 AD-1949AD) (Sixth Semester)

B.A. 2nd Semester (Major Course)

Sub: HISTORY

PAPER-II History of India c 650-c 1550 AD (Honours)

Unit I c 650-1200AD (I)

- 1. Sources-early medieval & sultanate period: epigraphy, numismatics & literature
- 2. Arab Invasion: Causes & Impact
- 3. Regional Polities: Palas & Cholas
- Tripartite Struggle

Unit II c 650-c 1200AD (II)

- 1. Economy: land grants and agrarian expansion; feudal relations
- Economy: urban centres, trade & commerce
- Rise & growth of regional languages with special reference to Bengali, Tamil & Marathi
- Socio-Cultural developments: Shankara & Bhakti philosophy; transformation of Buddhism-influences of tantric practices, art & architecture of the Pallavas & the Cholas

Unit III c 1200-c 1550AD (I)

- Establishment & consolidation of Delhi Sultanate: Iltutmish, Razia, Balban-Role & assessment
- Alauddin Khilji, Mahammad bin Tughlaq, Feroze Tughlaq- Reforms, Foreign policies, assessment
- Central, Provincial & Military organization under the Delhi Sultanate; ideas of kingship-Balban & Alauddin Khilji
- 4. Timur's invasion & decline of Delhi Sultanate

Unit IV c 1200- c 1550AD (II)

- Rise of provincial kingdoms- Vijayanagar & Bahamani
- 2. Bhakti & Sufi Movements-Origin, Features & Impact
- 3. Art & Architecture of the Sultanate period
- 4. Economy of the Delhi Sultanate: Agriculture & Revenue System; Urbanization; trade & commerce

Suggested readings:

Books in English:

- 1. R.C. Majumdar (ed.): History and Culture of the Indian People, Relevant volumes (Bharatiya Vidyabhavan)
- 2. R.C. Majumdar: An Advanced History of India (Macmillan)
- 3. R.C. Majumdar : Ancient India (Motilal Banarasidass)
- 4. R.C. Majumdar : History of Bengal , Vol- I (Tulshi Prakashani)
- Romila Thapar (ed.): Recent Perspectives of Early Indian History (Popular Prakashan)
- 6. D.N. Jha: Early India: A Concise History (Manohar)
- Herman Kulke and Dietmar Rothurmund : A History of India (Routledge and Manohar)
- 8. A.L. Basham: The Wonder that was India, Vol -l(Rupa)
- 9. S.A.A. Rizvi: The Wonder that was India, Vol-II (Rupa)
- 10. Upindar Singh: A History of Ancient and Early Medieval India (Pearson)
- 11. B.D. Chattopadhyay: The Making of Early Medieval India (OUP)
- 12. Satish Chandra: Medieval India, From Sultanat to the Mughals, Part- I (Har Anand)
- 13. Satish Chandra: History of Medieval India (Orient Blackswan)
- 14. K.A. Nilkantha Shastri : A History of South India (OUP)
- 15. K. Veluthat: The Early Medieval in South India (OUP)
- 16. Ranabir Chakravarti : Exploring Early India upto A.D. 1300 (Macmillan)
- 17. R.S. Sharma: Indian Feudalism (Macmillan)
- 18. R.S. Sharma: Early Medieval Indian Society (Orient Blackswan)
- 19. P. Jackson: The Delhi Sultanate (Cambridge, Foundation Books)
- 20. K.A. Nizami: Religion and Politics in the Thirteenth Century (Aligarh)
- Mohammed habib: Politics and Society in Early Medieval Period, Vols I & II (PPH)
- 22. Vipul Singh: Interpreting Medieval India, Vol. I (Macmillan)
- 23. Provatanshu Maiti: Studies in Ancient India (Sreedhar)

Books in Bengali:

- 1. Subodh Kumar Mukhopadhyay : Adi madhya O Madhya Juger Bharat (Progressive)
- 2. Subodh Kumar Mukhopadhyay : madhyajuge Bharater Arthanaitik Jiban 1200-1750.
- 3. Gourisankar Dey : Bharater Itihas: Turko Afghan Jug (Progressive)
- 4. Soumitra Srimani: Sultani rajatyakale Bharat (Central)
- 5. Satish Chandra: Madhyajuger Bharat
- 6. Anirudhha Roy: Madhyajuger Bharatiya Sahar (Ananda)
- 7. Anirudhha Roy: Madhyajuger Bharater Itihas-Sulatani Amal
- 8. Anirudhha Roy: Sultani Amaler Arthanaitik Itihas
- 9. Ranabir Chakrabarti: Bharat Itihaser Adi parva (Orient Blackswan)
- 10. Ranabir Chakrabarti : Prachin Bharater Arthanaitik Itihaser sandhane (Ananda)
- Irfan habib: madhyakalin Bharat
- 12. Irfan habib: madhyajuger Arthanaitik Itihas
- 13. Gopal Chandra Sinha: Adi madhyajuge Bharater Itihas (Progressive)
- 14. Bhaskar Chattopadhyay: Prachin Bharater sanskriti (Progressive)
- 15. R.S. Sharma: Bharater Samntatantra
- 16. Teslim Choudhury: Adi Madhyajug o Sultanijuger Itihas (Progressive)

B.A. Semester-III

History (Major)

Paper-III: History of India (A.D. 1550- A.D. 1818)

Unit-l

- 1. Sources and Historiography of Mughal History
- 2. Mughal- Afghan contest for supremacy
- 3. Sher Sha's administrative reforms
- 4. Establishment of Mughal rule: Babur and Humayun

Unit-II

- 1. Religious and Rajput Policies of Mughals: from Akbar to Aurangzeb
- 2. Administration under the Mughals: from Akbar to Aurangzeb
- 3. Revenue Reforms under the Mughals : from Akbar to Aurangzeb
- 4. Central Asian and Deccan Policy of the Mughals: from Akbar to Aurangzeb

Unit-III

- 1. Art and Architecture under the Mughals
- 2. Music, literature and society under the Mughals
- 3. Religious Developments: Sufi and Bhakti traditions, Sikhism
- 4. Decline of Mughal power: major debates

Unit-IV

- Colonialist and Nationalist perceptions of 18th century India
- Expansion and Consolidation of British power (1740s-1818): military expansions and commercial interests
- 3. British administration in India: Clive, Warren Hastings, Cornwallis, Wellesley
- 4. Impact of colonial policies: Bengal famine of 1770; Sannyasi and Fakir uprisings

commended readings:

- 1. R.C. Majumdar (ed.): History and Culture of the Indian People. Relevant volumes (Bharatiya Vidyabhavan)
- 2. R.C. Majumdar, et al., : An Advanced History of India (Macmillan)
- 3. Satish Chandra: Medieval India, Part -II: Mughal Empire (Har Anand Publications)
- 4. Satish Chandra: Medieval India (Orient Blackswan) Bengali translation vailable.
- 5. Anil Chandra Bannrjee: A New History of Medieval India (S. Chand)
- 6. Muzaffar Alam and Sanjay Subrahmanyam (eds.): The Mughal State (OUP)
- 7. S.A.A. Rizvi: The Wonder that was India Vol: II (Rupa)
- 8. Eugenia Vanina: Ideas and Society: India between the 16th and 18th centuries (OUP)
- 9. John F. Richards: The Mughal Empire (Cambridge: Foundation Books)
- 10. Stewart Gordon: The Marathas (Cambridge: Foundation Books)
- 11. J.S Grewal: The Sikhs (Cambridge: Foundation Books)
- 12. Irfan Habib: The Agrarian System of Mughal India (OUP)
- 13. Michael Fisher(ed.): The Politics of British Annexation in India (OUP)
- 14. P.J. Marshall: Bengal, the British Bridgehead, Eastern India, 1740-1828 (Cambridge)
- 15. Bipan Chandra: Modern India (Orient Blackswan) Bengali translation available
- 16. Vincent Smith: Oxford History of India (OUP)
- 17. Sekhar Bandyopadhyay : From Plassey to Partition: A History of Modern India (
 Orient Blackswan) Bengali translation available
- 18. Lakshmi Subrahmaniyam: A history of India, 1757-1857 (Orient Blackswan)

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- 19. Seema Alavi: The Eighteenth Century in India (OUP)
- 20. Gautam Bhadra: Mughal Juge Krishi Arthaniti O Krishak Bidroha
- 21. P. Maiti: Bharat Itihas Parikrama
- 22. Telslim Choudhury: Bharater Itihas (1556-1818)
- 23. Subodh Mukhopadhyay: Mughal Jug theke British raj (1556-1818)
- 24. Jiban Mukhopadhyay: Bharater Itihas, relevant volumes.



TRIPURA UNIVERSITY

(A Central University)
Suryamaninagar-799022

Syllabus

OF

History (Major & General)

Semester - IV to VI

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FOURTH SEMESTER

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HISTORY OF PIDIA, 1818 A.D. 1921 A.D.

UNIT-1 Colonial Polity and Popular Resistance

- Expansion and consolidation of British power in India (1818-1856); Charter Acts of 1813 and 1833.
- 2. Ideology of Expansion-Mercantilism. Orientalism.
- 3. Popular resistance to colonial rule: a) Santhal -causes, nature and impact; b) Revolt of 1857- causes, nature, impact and historiography.
- 4. Major constitutional reforms since 1909 to 1935.

UNIT-2: Colonial Society and Economy

- 1. Spread of western education, growth of press; Debate on nineteenth century 'Bengal Renaissance'.
- Socio- religious reform movements: Young Bengal, Rammohun Roy. Arya Samaj.
 Vidyasagar, Vivekananda and Sir Syed Ahmed Khan.
- 3. Agriculture and Land Revenue Settlements: Ryotwari, Mahalwari and commercialisation of Agriculture.
- 4. Drain of Wealth and Deindustrialisation of traditional industries; emergence of modern industries and transportation facilities- cotton, Steel and Railways.

UNIT-3: NATIONAL MOVEMENT (I)

- 1. Formation of Indian National Congress-background; Moderates and Extremists-their activities.
- 2. Partition of Bengal and Swadeshi Movement; Revolutionaries and their activities: Bengal, Punjab and Maharashtra
- 3. Gandhian Movements: Non-cooperation, Civil Disobedience, Quit India Movements; womens' participation
- 4. Subhash Chandra Bose and his role; INA, RIN Mutiny

UNIT-4: NATIONAL MOVEMENT (II)

- 1. Rise of Left wing and their role; Telengana uprising
- 2. Depressed caste movements: Phule and Ambedkar
- 3. Growth of Communalism: Muslim League and demand for Pakistan
- 4. Circumstances leading to the partition of India: Cripps Mission to Mountbatten Plan

Recommended Assamps: (Raban HV: Major Course)

- 1 R.C. Majumdar(ed.): History and Culture of the Indian People. Relevant Volumes (Engrative Vidyabhaban)
- 2. R.C. Majumdar , et al., : An Advanced History of India (Macmillan)
- 3. Michael Fisher (ed.): The Politics of British Annexation in India (OUF)
- 4. Bipan Chandra: Modern India (Orient Blackswan) Bengoli version available
- 5. Bipan Chandra et.al., : India's Struggle for Independence (Penguin) Bengali version available
- 6. Bipan Chandra, Barun De, Amalesh Tripathi: Freedom Struggle (NBT) <u>Bengali version</u> available
- 7. Percival Spear : Oxford History of Modern India (OUP)
- 8. Sekhar Bandyopadhyay : From Plassey to Partition : A History of Modern India (Orient Black swan) <u>Bengali version available</u>
- 9. Sumit Sarkar : Modern India (Macmillan) Bengali version available
- 10. Ranjan Chakraborty: Random Notes on Modern Indian History(Readers' Service)
- 11. Kenneth Jones: Socio- religious Reform Movements in British India (Cambridge India)
- 12. Tirthankar Roy: The Economic History of India 1857-1947 (OUP)
- 13. Suranjan Chatterjee and Siddhartha Guha Roy: History of Modern India (Progressive Publishers) <u>Bengali version available</u>
- 14. Anthoney Copley: Gandhi (OUP)
- 15. Judith M. Brown: Gandhi: Prisoner of Hope (Yale University Press)
- 16. A.R. Desai: Social Background of Indian Nationalism (Popular Prakashan) <u>Bengali version</u> <u>available</u>
- 17. Amalesh Tripathi: Swadhinata Samgrame Bharater Jatiya Congress (Ananda)
- 18. Samar Kumar Mallik: Adhunik Bharater Dersho Bochhor(West Bengal Publishers)
- 19. SamarKumar Mallik: Adhunik Bharater Rupantar (West Bengal Publishers)
- 20. Saktisadhan Mukhopadhyay: Italio Renaissancer Aloke Banglar Renaissance (Progressive)
- 21. Suprakash Roy: Bharater Krishak Bidroho o Ganatantrik Samgram
- 22. Subodh Kumar Mukhopadhyay : British Raj Theke Purna Swaraj (Progressive)
- 23. Provatanshu Maiti: Bharat Itihas Parikrama, Vol-II (Sridhar)
- 24. Pranab Kumar Chattopadhyay : Adhunik Bharat, Vols-1 & 2 (Paschimbanga Rajya Pustak Parshad)
- 25. Jiban Mukhopadhyay : Adhunik Bharat o Biswer Itihas (Sridhar)

EISTORY (NIZUÓI).

FIFTH SEMESTER

PAPER-V

RISE OF THE MODERN WEST, MID 15TH TO LATE 18TH CENTURJES

UNIT-1:

- 1. Crisis and decline of Feudalism in western Europe and forms of survival in eastern Europe.
- 2. Rise of absolute monarchies in England, France and Spain: reasons
- 3. Thirty Years' War and Treaty of Westphalia- causes and significance.
- 4. Economic origins of modern western society: Mercantilism, Commercial Revolution

UNIT-2:

- 1. Renaissance: Meaning, causes, nature, spread, limitations; growth of Humanism.
- .2. Reformation: origin, varieties , significance; Counter Reformation
- 3. Modern Science and Technology: Leonardo Da Vinci, Copernicus, Galileo and Newton: their contribution; Printing Revolution—impact
- 4. Geographical Explorations: motives and early voyages and beginnings of colonialism with special reference to Spain, Portugal and England.

UNIT-3:

- 1. Price Revolution: causes, nature and impact; Enclosure Movement
- 2. Industrial Revolution in England: background and features.
- 3. Challenge to colonialism: American War of Independence- causes and significance.
- 4. Debate on transition from feudalism to capitalism: Dobb-Sweezy debate

UNIT-4:

- Political patterns- I: conflict between parliament and Crown in England in the 17th century: Long parliament and civil war; Glorious Revolution of 1688, growth of liberalism
- 2. Political patterns-II: Royal Absolutism in France, Louis XIV and his policies.
- 3. Eighteenth century as Age of Enlightenment: Features and impact on society and polity
- 4. French Revolution: background, nature, and impact.

Paul mitended Restlings: (Faper 4V: Major Course)

- 1 Rodney Hilton: Transition from Feddelism to Capitalism, 48 (4) 1010
- 2. J.D. Bernall Science in History <u>Bengall Translation available</u>
- 3. Euan Cameron (sul): Early Modern Europs: An Oyford History (OUF Indian edition)
- Eugene F. Rice and Anthony Grafton: The Foundations of Early Modern Europe 1460-1555 (WW Norton & Company, Indian Edition)
- 5. Richard Dunn: The Age of Religious Wars, 1559-1715 (WW Norton & Company, Indian Edition)
- 6. Arvind Sinha: Europe in Transition: From Feudalism to Industrialism (Manohar)
- 7. Rila Mukherjee: Europe Transformed (Progressive)
- 8. Meenakshi Phukan : Rise of Modern West (Macmillan)
- 9. P. Deane: The First Industrial Revolution (Cambridge, Indian edition)
- 10. B.V. Rao: History of Europe, 1453-1815 (Sterling)
- 11. L. Mukherjee: A Study of European History 1453-1815 (J.N. Ghosh and Sons, Kolkata)
- 12. C.J. H. Hayes: Modern Europe to 1870 (Surject Publications)
- 13. Perry Anderson : Lineages of the Absolutist States(Verso)
- 14. K.C. Choudhury: British History (New Central Book Agency)
- * 15. J.R. Tanner: English Constitutional Conflicts of the Seventeenth century (Cambridge)
 - 16. Henry Bamford Parkes: A History of United States of America (Khosla Publishing House)
 - 17. Nirmal Chandra Datta: madhyajug Theke Europer Adhunikatar Uttaran (Mitram)
 - 18. Pulakesh Roy & Sayantan Das, Uttaraner pathe Europe (Progressive)
 - 19. Rila Mulherjee : Rupantarita Europe(Progressive)
 - 20. Bhaskar Chakaravarti, Subhash Ranjan Chakravarti & Kinshuk Chatterjee: Europe Yugantar (Naba Bharati Prakashani)
 - 21. Samarendra Nath Sen : Bigyaner Itihas (Saibya Prakashani)

HISTORY (MAJOR

FIFTH SEMESTER

PAPER-VI

MODERN EUROPE AND THE WORLD: C. 1800 A.D. 1935 A.D.

UNIT-1:

- 1. Napoleon Bonaparte: Rise, Reforms, downfall and assessment.
- 2. Politics of Conservatism : Congress of Vienna, Concert of Europe . Metternich
- 3. The July Revolution of 1830: causes and results; The February Revolution of 1848: causes and results
- 4. France under Third Republic: work of Reconstruction and challenges: the Commune of 1871.

UNIT-2:

- 1. Nationalism in Europe: Unification of Italy- Mazzini, Garibaldi and Cavour. Unification of Germany-Role of Bismarck.
- 2. The Eastern Question: background; the Crimean War; the Berlin Congress; Balkan Wars
- 3. Russia: Modernisation under Alexander II and his criticism; the Russian Revolution of 1917: Background and Impact.
- 4. American Civil War: causes, impact; Role of Abraham Lincoln

UNIT-3:

- 1. First World War: background, impact; Versailles Settlement- assessment
- 2. Post War Crisis I- Economic Depression of 1929: causes and impact; Rise of totalitarian regimes in Germany, Italy and Japan
- 3. Post war crisis II-League of Nations: Formation and Performance.
- 4. Origins of Second World war

UNIT-4:

- 1. Industrialisation in Europe: Differences between England and the Continent.
- 2. Utopian and Marxian Socialism.
- 3. Chartist and Luddite Movements in England
- 4. Rise of new Imperialism: causes; scramble and partition of Africa

Recommended Readings: (Paper - Vi: Major Course)

- 1. David Thomson: Europe Since Napoleon (Penguin), Bengali Translation evallabia
- 2. E. Lipson: Europe in the 19th and 20th Centuries (Allied Publishers)
- 3. A.J.P. Taylor: The Struggle for Mastery in Europe (OUP)
- 4. A.J. P. Taylor: Origins of the Second World War
- 5. Georges Lefebvre : The Coming of the French Revolution (Routledge India)
- 6. E.H. Carr: International Relations between the Two World wars,1919-1939 (Paigrave)
- 7. David S. Mason: A Concise History of Modern Europe (Orient Blackswan)
- 8. L. Mukherjee: A Study of modern Europe and the World (J.N. Ghosh and Sons)
- 9. Ranjan Chakraborty: A History of the Modern World, An Outline (Primus Books)
- 10. B.V. Rao : History of Modern Europe,1789-2010 (Sterling)
- 11. James Joll: Europe Since 1870 (Penguin)
- 12. C.J. Hayes: Modern Europe to 1870 (Surject Publications)
- 13. C.J. Hayes: Modern Europe since 1870 (Surject Publications)
- •14. Henry Bamford Parkes: A History of United States of America (Khosla Publishing House)
- 15. Provatanshu Maiti: Europer Itihaser Ruparekha (1789-1950), (Sridhar)
- 16. Subodh Kumar Mukhopadhyay: Adhunik Europe: Farashi Biplab Theke Dwitiya Biswajuddha (Mitram)
- 17. Chitra Adhikari : Adhunik Europe, Binyas o Bibartan (Progressive)
- 18. Atul Chandra Roy: Adhunik Europer Itihas, 1789-1939 (Moulik Library)
- 19. Jiban Mukhopadhyay: Adhunik Europe (Sridhar)
- 20. Samar Kumar Mallik : Europe Biplaber Kal (West Bengal Publishers)
- 21. Samar Kumar Mallik : Nabarupe Europe (West Bengal Publishers)

HISTORY (MILIOR)

SINTH SEMESTER

PAPER-MIL

HISTORY OF NORTH-EAST INDIA, 1825 A.E.-1949 A.D.

UNIT-1: NORTH-EAST INDIA-1

- 1. First Anglo- Burmese war and the treaty of Yandaboo: Annexation of Upper and Lower Assam: Decline of Ahom kingdom-causes.
- 2. British annexation of Cachar, Jaintia, Khasi, Naga and Lushai Hills.
- 3. British relation with Manipur till 1891
- 4. Economic Changes under British rule: Tea Plantation, Coal and Petroleum mining and Railways.

UNIT-2: NORTH-EAST INDIA-II

- Spread of western education and cultural awakening in Assam-press. literature and organisations.
- 2. Revolt of 1857 and Assam; National Movement and Assam: Role of Assam Association.
- 3. Non-Cooperation, Civil Disobedience and Quit India Movements in Assam.
- 4. Cabinet Mission and Independence; Integration of Manipur and Khasi States into the Indian Union.

UNIT-3: TRIPURA-I

- 1. Princely Tripura: social, political and economic conditions before the accession of Birchandra Manikya.
- British relation with Chakla Roshanabad and Hill Tripura; appointment of Political Agent.
- 3. Resistance Movements in the 19th century- Tipra (1850), Kuki (1860-61), Jamatia (1863).
- 4. Revolt of 1857 and Tripura.

UNIT-4: TRIPURA-II

- Era of modernisation and reformative measures Birchandra Manikya to Bir Bikram Kishore Manikya.
- 2. Social and political movements in Tripura (1935-1949)., Janamangal Samiti, Reang uprising, Janashiksha movement, Prajamandal Samiti, Gana Mukti Parishad
- 3. Rabindranath Tagore and Tripura; Contribution of Princely Court towards development of Bengali language and literature.
- 1. World war I & II and Tripura; integration of Tripura to Indian Union

Recommended Readings: (Paper –VII: Major Course)

- 1. Edward Gait: A History of Assam (Eastern Book House)
- 2. Priyam Goswami : A History of Assam(Orient Blackswan)
- 3. H.K. Barpujari: Assam in the Days of the Comapany (NEHU)
- 4. H.K. Barpujari : Political History of Assam Vol-I (Assam Publication Board)
- 5. A.C. Bhuyan: Political History of Assam, Vols II and III (Assam Publication Board)
- 6. R. M. Lahiri: Annexation of Assam (Firma KLM)
- 7. Amalendu Guha : Planter Raj to Swaraj (Tulika)
- 8. Jyotirmoy Roy: A History of Manipur (Firma KLM)
- 9. David Sylemlieh: British Adminisaration in Meghalaya (Heritage)
- 10. Piketo Sema: British Policy and Administaration in Naagaland (Scholar)
- 11. C. Nunthra: Mizoram: Society and Polity (Indus)
- 12. N.R. Roychudhury: Tripura Through the Ages (Sterling)
- 13. H.K. Sur: British Relations with the State of Tripura (Naba Chandana)
- 14. Banikantha Bhattacharjee: Tripura Administration (Mittal)
- 15. Dipak Kumar Choudhury: Political Agents and native Raj (Mittal)
- 16. Ranjit Kumar De : Scio-political Movement in India: A Historical Study of Tripura (Mittal)
- 17. Mahadev Chakravarti : Assamer Itihas (Progressive)
- 18. Kailash Chandra Singha : Rajmala (Akshar)
- 19. Nalini Ranjan Choudhury: Manikya Sasanadhin Tripurar Itihas (∃y≩n Bichitra)
- 20. Dipak Choudhury: Political Agent O Desiya Rajya (Progressive)
- 21. Dipak Choudhury: Tripurar Arthanaitik Itihas (Jyan Bichitra)

HISTOPPONIED NE

SEMITH SEMESTED

B-RMB-NO

HISTORY OF CHINA AND JAPAN, 1839 A.D., 1949 A.D.

UNIT-1: CHINA-I

- i. European expansion and opening of China: tribute system. Canton trade. Ophum trade and Wars, unequal treaties.
- 2. Response of the Chinese I: Taiping Rebellion, Self-Strengthening Movement.
- 3. Response of the Chinese II: Hundred Days' Reform, Boxer Rebellion
- 4. Revolution of 1911: causes and results, role of Sun Yat Sen

UNIT-2: CHINA-II

- 1. May Fourth Movement: causes and significance
- 2. Kuomintang and the 1st United Front.
- 3. Chinese Communist party: origin & growth; Role of Mao Tse Tung; 2nd United Front and Civil War.
- 4. Chinese Revolution of 1949- causes and significance

UNIT-3: JAPAN-1

- 1. Tokugawa Shogunate-causes of decline
- 2. The Perry Mission and Opening of Japan
- 3. Meiji Restoration; popular and democratic movements-Satsuma rebellion; Meiji constitution of 1889
- 4. Modernisation of Japan under Meijis: Education, society and economy.

UNIT-4: JAPAN-II

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

Recommended Readings: (Paper -VIII: Major Course)

- 1. H. M. Vinacke: History of far East in Modern Times (kalyani)
- 2. Archana Tewari: The History of China and Japan (Pearson India)
- 3. James McClain: Japan: A Modern History (WW Norton & Co.)
- 4. Amit Bhattacharyya: Transformation of Japan (Setu) Bengali Translation available
- 5. Amit Bhattacharyya: Transformation of China (Setu) Bengali Translation available
- 6. J.K. Fairbank and M. Goldman: China: A New History (Prentice Hall India)
- 7. Immanuel Hsu: The Rise of Modern China (OUP)
- 8. Siddharta Guha Roy: Adhunik Purba Asia, Chin o Japaner Itihas (Progressive)
- 9. Subodh Kumar Mukhopadhyay : Adhunik Chin O Japaner Itihas (Progressive)