DEPARTMENT OF BOTANY
PRANANATH COLLEGE (AUTONOMOUS) COLLEGE, KHORDHA

COURSE/ PROGRAMME NAME: B.Sc. BOTANY
(STATE MODEL SYLLABUS FOR UNDERGRADUATE COURSE-2019)

SPECIFIC PROGRAMME OUTCOME OF B.Sc. BOTANY

1. Imparting knowledge and understanding:

- Able to compare and contrast the characteristics, their occurrence, morphological differences, lifecycles of plant diversity ranging from virus, prokaryotic to eukaryotic complex forms.
- Able to explain the ecological interrelation of life on the earth by tracing energy and nutrient flow through the environment in different strata related to the structure of populations, communities and ecosystems.
- Able to know the functional aspects of plants from gene to organ level.
- To learn the socioeconomic values of natural resources for a sustainable development of the society.
- Gain detailed knowledge about the economically important plants.
- The field and the laboratory works enhance the implementation of theoretical knowledge and their intellectual skills to construct and test hypothesis, to plan, conduct and write a report on an independent project.

2. Skill development:

- To study and analyze any plant form by applying the basic knowledge of plant sciences
- To analyze the various problems related to project works
- Communication of scientific ideas
- Team work efficacy
- Use of library resources
- Career planning and time management
- Learn to use appropriate techniques, equipments and their applications

COURCE OUTCOME

B.Sc 1st Year

SEM	COURSE	COURSE CODE	COURSE OUTCOME
I	**Microbiology and Phycology**	**BOT-CC I -TH**	• Gain knowledge about the systematic position the occurrence, distribution, morphology, anatomy, method of reproduction, life history and the economic importance of microbes and algae.
	Microbiology and Phycology	**BOT-CC I -PR**	• Microscopic observation and Identification of various algal plants. • Gram staining procedure
	Biomolecules and Cell Biology	**BOT-CC II -TH**	• To know the plants at cellular level i.e. the chemical composition, structural and functional aspects of the biomolecules, structural organization of the cells. • Study of the various organelles, their functions and cell division.
	Biomolecules and Cell Biology	**BOT-CC II -PR**	• Qualitative study of the organic molecules • Structure and Physiological processes and cell divisions within the cell by cytological study
II	**Mycology and Phytopathology**	**BOT-CC III -TH**	• Gain knowledge about the the Kingdom-Fungi including their systematic status, occurrence, mode of nutrition, structural variations and lifecycle. • Study the Lichen, a symbiotic association of fungi with algae and their economic significance. • Gain knowledge about the diseases caused by the viruses, bacteria and fungi in plants.
	Mycology and Phytopathology	**BOT-CC III -PR**	• Morphological and cytological studies of fungi through slides and photographs. • To identify various plant diseases through herbarium specimens, infected fresh specimens etc.
	Archegoniatae	**BOT-CC IV -TH**	• Gain knowledge about the Kingdom-Plantae, the land plants, their origin and adaptation • Learn to know about rang of thallus organization, structure, reproduction, evolutionary trends and economic importance in bryophytes, petridophytes and gymnosperms • Able to know palaeobotany- geological time scale, fossils and fossilization processes taking some examples from petridophytes and gymnosperms.
	Archegoniatae	**BOT-CC IV -PR**	• Learn to prepare anatomical slides of the land plants. • Observe and identify the plants from various groups under microscope. • Study the fossil slides.

B. Sc. 2nd Year

III	**Anatomy of Angiosperms**	**BOT-CC V -TH**	• Learn the internal structures like cell, tissue, organs of the angiosperms • Learn the tissue organization and their structural comparison in leave, roots and stem of both dicot and monocot plants. • Normal and anomalous secondary growth of angiospermic plants
	Anatomy of Angiosperms	**BOT-CC V -PR**	• Learn the permanent slide preparation techniques, observe the tissue organization and identify the parts of the plant with appropriate reasons. • Learn the tissue organization according to the plant adaptations.
	Economic Botany	**BOT-CC VI -TH**	• Gain knowledge about the origin, evolution, domestication, cultivation and extraction or utilization of economically important plants which are indispensable for life like cereals, legumes, sugar, spices, drugs, oils and fat, essential oils, rubber, timber, fiber etc.
	Economic Botany	**BOT-CC VI -PR**	• Acquaint with the parts of the plants that are economically important • Micro chemical test procedure to know the presence of major organic components like carbohydrates, proteins and fats in the crop plants
	Genetics	**BOT-CC VII -TH**	• Gain knowledge about the laws of inheritance, extra chromosomal inheritance, linkage and crossing over, gene mapping, variation in chromosome structure and number, mutation, fine structure of gene, population and evolutionary genetics
	Genetics	**BOT-CC VII -PR**	• Analyze the allelic and genotypic frequencies • To prove the Mendelian laws of inheritance through probability and Chi-square analysis • Pedigree analysis • Chromosomal anomaly and blood grouping
IV	**Molecular Biology**	**BOT-CCVIII -TH**	• **Learn the historical perspective and the proof of nucleic acids as genetic material.** • **structure of DNA and RNA, replication and their organization within the cell** • **Detailed functions of nucleic acids related to protein synthesis (gene expression)**
	Molecular Biology	**BOT-CCVIII -PR**	• Study the estimation of Nucleic Acids in bacteria through systematic techniques of culture media preparation, raising bacteria and isolating the genomic DNA • Study of Barr body and buccal smear preparation
	Plant Ecology & Phytogeography	**BOT-CC IX -TH**	• Know the detailed structure of various ecosystems (abiotic and biotic components) and their functions. • Various edaphic factors in relation to plant adaptations • Interrelationships of the living world and the environment • concepts Population and community

			• phyto-geography
	Plant Ecology & Phytogeography	**BOT-CC IX -PR**	• learn the techniques for qualitative and quantitative estimation of various components present in soil, water • morphological and anatomical study of plants to study their adaptive modifications • statistical quantitative analysis of distribution of herbaceous plants • students gain practical knowledge on the phyto-diversity after a field study
	Plant Systematics	**BOT-CC X -TH**	• gain knowledge on plant systematic, herbarium and its preparation, e-flora • taxonomic hierarchy, binomial nomenclature • systems of classification, their merits and demerits • phylogeny of angiosperms • descriptive studies of a number of families of taxonomic importance.
	Plant Systematics	**BOT-CC X -PR**	• To gain proficiency in the use of keys and identification manuals for identifying any unknown plants to species level. • Field study for the students to a floristic rich area under supervision to observe, collect the plants from their natural habitats and preparing herbaria through a series of procedures.

B. Sc. 3rd Year

V	**Reproductive Biology of Angiosperms**	**BOT-CC XI -TH**	• Gain knowledge on variations in the structures, developments, functions of reproductive parts of the angiospermic flower and their involvement in the process of reproduction. • Learn the types of pollinations and their significance • Fertilization and embryogenesis
	Reproductive Biology of Angiosperms	**BOT-CC XI -PR**	• Observe microscopic studies on pollen grains, ovules and their accessory parts • Experimental test procedures to study pollen viability, germination, pollen wall, tracing the path of pollen tube and endosperm development
	Plant Physiology	**BOT-CC XII -TH**	• Gain knowledge about the plant water relationships • Mineral nutrition and their uptake • Plant growth regulators and their physiological roles in plant growth and developments • Physiology of flowering and involvement of phytochromes
	Plant Physiology	**BOT-CC XII -PR**	• Learn the experimental procedures, observation and tabulating the data on various physiological processes in the plants like transpiration plasmolysis, water potential, stomatal index and frequency, seed germination, enzyme activities etc.
	Analytical Techniques in	**BOT-DSE I-TH**	• Gain knowledge about principles and operation of various types of microscopes, spectrophotometer,

	Plant Sciences		chromatography, electrophoresis • Various methods for cell fractionation • Radioisotopes and their uses • Learn the statistical methods and formulas to represent data
	Analytical Techniques in Plant Sciences	**BOT-DSE I-PR**	• Gain skill on working principles of PCR, chromatography, separation and estimation of proteins, separation of marker DNA, spectrophotometer • Analysis of Chi-square test and T-test
	Natural Resource Management	**BOT-DSE II-TH**	• Gain knowledge about the natural resources, their significance and sustainable use • Able to know the Bioresources, their types, threats, control and management • Learn various types of energy resources, their contemporary practices in management and resource accounting
	Natural Resource Management	**BOT-DSE II-PR**	• Gain skill on estimation of solid waste generated by a domestic system, measurement of dominance woody species, calculation and analysis of ecological footprint • Learn the procedures for the estimation of moisture content, texture, porosity, water holding capacity, organic matter and carbon content of soil.
VI	**Plant Metabolism**	**BOT-CC XIII-TH**	• Gain knowledge on the concept of metabolism and signal induction • Various types of carbon assimilation • Carbon oxidation and ATP synthesis • Lipid metabolism: synthesis and breakdown and its significance • Nitrogen metabolism: nitrogen fixation and ammonia assimilation
	Plant Metabolism	**BOT-CC XIII-PR**	• Learn the practical procedures and to draw the conclusion for various metabolic path ways in plants like pigment isolation and quantification, hill reaction, rate of photosynthesis, rate of respiration, Catalase activity test, chloroplast photo reduction of dye tests etc.
	Plant Biotechnology	**BOT-CC XIV-TH**	• Gain Knowledge about the techniques of genetic engineering like tissue culture and recombinant DNA technology and their applications
	Plant Biotechnology	**BOT-CC XIV-PR**	• Gain Knowledge about Concepts, tools and techniques related to *in vitro* propagation of plants. • Learn the methods of preparation of MS medium and various sterilization procedures for equipments and explants • Learn the procedures for artificial seed production, isolation of plasmid DNA. • Methods and operation of gel electrophoresis etc
	Horticultural Practices and Post-Harvest	**BOT-DSE III-TH**	• Gain knowledge about the importance and scope of horticulture • Able to know various horticultural plants like

	Technology		ornamental, fruits and vegetable, crops, their salient features, production, cultivation, irrigation, harvesting, marketing and management. • Details about Landscaping and garden designing • Know the post harvest techniques in horticultural crops like evaluation of quality traits, harvesting, preservation, storage and transportation • Field and post-harvest diseases, their control and management
	Horticultural Practices and Post-Harvest Technology	**BOT-DSE III -PR**	• Learn the identification of ornamental plants by their salient features, horticultural techniques, plant vegetative propagation, planning and lay out of the parks and avenues through field study • Know the techniques of tissue culture and fruit preservation etc. •
	Dissertation / Project Work	**BOT-DSE IV**	• Learn the basics of research, literature recession, analysis and expression of their understanding of the topic in their own words. • Design the experiments of his interest and execute it • Trained in handling of the basic and advance instruments • Generate the data, compile and analyze and interpret the data. • Presentation skill is developed in the students • The student is ready to work in any R&D setup

GENERIC ELECTIVE

I & III	**Biodiversity (Microbes, Algae, Fungi and Archegoniates)**	**GE 1A & 1B -TH**	• Able to compare and contrast the characteristics of plant diversity ranging from virus, prokaryotic to eukaryotic complex forms, their occurrence, morphological differences, lifecycles and their ecological and economic importance •
	Biodiversity (Microbes, Algae, Fungi and Archegoniates)	**GE 1A & 1B -PR**	• Learn about the microscopic observation and identification of algae, fungi, bryophytes, lichens, pteridophytes and gymnosperm. • Gram staining of bacteria.
II & IV	**Plant Physiology and Metabolism**	**GE 2A and 2B -TH**	• Gain knowledge about the plant water relations, Physiological, metabolic processes, enzyme structure and functions, plant growth and developments
	Plant Physiology and Metabolism	**GE 2A and 2B -PR**	• Learn the methods and determination of plasmolysis, transpiration, photosynthesis, enzyme activities etc.

DEPARTMENT OF CHEMISTRY

COURSE OUTCOME

Sl.No.	CORE	**COURSE OUTCOME**
1.	**I**	**Fundamentals of inorganic Chemistry and Analytical Application**
2.	**II**	**Fundamentals of Physical Chemistry and its analytical application**
3.	**III**	**Fundamentals of Organic Chemistry and its application for synthesis in a conventional and green method**
4.	**IV**	**Fundamentals of Physical Chemistry and its analytical application**
5.	**V**	**Fundamentals of inorganic Chemistry and Analytical Application**
6.	**VI**	**Fundamentals of Organic Chemistry and its application for synthesis in a conventional and green method**
7.	**VII**	**Application of physical Chemistry forbehavioural studies of matter**
8.	**VIII**	**Extensive studies on inorganic chemistry, preparation, and analysis of inorganic compounds/complexes**
9.	**IX**	**Extensive studies on organic chemistry, advanced analytical method, and its application**
10.	**X**	**Application of physical Chemistry forbehavioural studies of matter**
11.	**XI**	**Extensive studies on organic chemistry, advanced analytical method, and their application**
12.	**XII**	**Extensive and advanced studies on physical and analytical methods**
13.	**XIII**	**Extensive studies on inorganic chemistry, preparation, and analysis of inorganic compounds/complexes**
14.	**XIV**	**Extensive studies on organic chemistry, advanced analytical method, and their application**
15.	**DSE – I**	**Research application in material sciences**
16.	**DSE – II**	**Extensive studies of chemistry by the Green Approach**
17.	**DSE - III**	**Studies on industrial chemicals and environmental pollution**
18.	**GE - I**	**Fundamentals of Chemistry and its Analytical application**
19.	**GE - II**	**Fundamentals of Chemistry and its analytical application**

DEPARTMENT OF MATHEMATICS
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	CC – I CALCULUS	**Objective:** The main emphasis of this course is to equip the student with necessary analytic and technical skills to handle problems of mathematical nature as well as practical problems. More precisely, main target of this course is to explore the different tools for higher order derivatives, to plot the various curves and to solve the problems associated with differentiation and integration of vector functions. **Expected Outcomes:** After completing the course, students are expected to be able to use Leibnitz's rule to evaluate derivatives of higher order, able to study the geometry of various types of functions, evaluate the area, volume using the techniques of integrations, able to identify the difference between scalar and vector, acquired knowledge on some the basic properties of vector functions.
2	CC – II Discrete Mathematics	**Objective:** This is a preliminary course for the basic courses in mathematics and all its applications. The objective is to acquaint students with basic counting principles, set theory and logic, matrix theory and graph theory. **Expected Outcomes:** The acquired knowledge will help students in simple mathematical modeling. They can study advance courses in mathematical modeling, computer science, statistics, physics, chemistry etc.
3	CC – III Real Analysis	**Objective:** The objective of the course is to have the knowledge on basic properties of the field of real numbers, studying Bolzano-Weierstrass Theorem , sequences and convergence of sequences, series of real numbers and its convergence etc. This is one of the core courses essential to start doing mathematics. **Expected Outcome:** On successful completion of this course, students will be able to handle fundamental properties of the real numbers that lead to the formal development of real analysis and understand limits and their use in sequences, series, differentiation and integration. Students will appreciate how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems
4	CC – IV Differential equations	**Objective:** Differential Equations introduced by Leibnitz in 1676 models almost all Physical, Biological, Chemical systems in nature. The objective of this course is to familiarize the students with various methods of solving differential equations and to have a qualitative applications through models. The students have to solve problems to understand the methods. **Expected Outcomes:** A student completing the course is able to solve differential equations and is able to model problems in nature using Ordinary Differential Equations. This is also

		prerequisite for studying the course in Partial Differential Equations and models dealing with Partial Differential Equations.
5	CC – V Theory of Real functions	**Objective:** The objective of the course is to have knowledge on limit theorems on functions, limits of functions, continuity of functions and its properties, uniform continuity, differentiability of functions, algebra of functions and Taylor's theorem and, its applications. The student how to deal with real functions and understands uniform continuity, mean value theorems. **Expected Outcome**: On the completion of the course, students will have working knowledge on the concepts and theorems of the elementary calculus of functions of one real variable. They will work out problems involving derivatives of function and their applications. They can use derivatives to analyze and sketch the graph of a function of one variable, can also obtain absolute value and relative extrema of functions. This knowledge is basic and students can take all other analysis courses after learning this course.
6	CC – VI Group Theory-I	**Objective:** Group theory is one of the building blocks of modern algebra. Objective of this course is to introduce students to basic concepts of group theory and examples of groups and their properties. This course will lead to future basic courses in advanced mathematics, such as Group theory-II and ring theory. **Expected Outcomes:** A student learning this course gets idea on concept and examples of groups and their properties . He understands cyclic groups, permutation groups, normal subgroups and related results. After this course he can opt for courses in ring theory, field theory, commutative algebras, linear classical groups etc. and can be apply this knowledge to problems in physics, computer science, economics and engineering.
7	CC – VII Partial differential equations and system of ODEs	**Objective:** The objective of this course is to understand basic methods for solving Partial Differential Equations of first order and second order. In the process, students will be exposed to Charpit's Method, Jacobi Method and solve wave equation, heat equation, Laplace Equation etc. They will also learn classification of Partial Differential Equations and system of ordinary differential equations. **Expected Outcomes:** After completing this course, a student will be able to take more courses on wave equation, heat equation, diffusion equation, gas dynamics, non linear evolution equations etc. All these courses are important in engineering and industrial applications for solving boundary value problem.

8	CC – VIII Numerical Methods and Scientific Computing	**Objective:** Calculation of error and approximation is a necessity in all real life, industrial and scientific computing. The objective of this course is to acquaint students with various numerical methods of finding solution of different type of problems, which arises in different branches of science such as locating roots of equations, finding solution of systems of linear equations and differential equations, interpolation, differentiation, evaluating integration. **Expected Outcome:** Students can handle physical problems to find an approximate solution. After getting trained a student can opt for advance courses in numerical analysis in higher mathematics. Use of good mathematical software will help in getting the accuracy one need from the computer and can assess the reliability of the numerical results, and determine the effect of round off error or loss of significance.
9	CC – IX Topology of Metric spaces	**Objective:** This is an introductory course in topology of metric spaces. The objective of this course is to impart knowledge on open sets, closed sets, continuous functions, connectedness and compactness in metric spaces. **Expected Outcomes:** On successful completion of the course students will learn to work with abstract topological spaces. This is a foundation course for all analysis courses in future.
10	CC – X Ring Theory	**Objective:** This is a second course in modern algebra which deals with ring theory. Some basics of ring theory like rings, subrings, ideals, ring homomorphisms and their properties and. This course is an integral part of any course on Modern algebra the ohers being Group theory and Field Theory. **Expected Outcomes:** After completing this course, this will help students to continue more courses in advanced Ring theory modules, Galois groups.
11	CC – XI Multivariable Calculus	**Objective:** The objective of this course to introduce functions of several variable to a student after he has taken a course in one variable calculus. The course will introduce partial derivatives and several of its consequences and will introduce double and triple integrals along with line integrals which are fundamental to all streams where calculus can be used. **Expected Outcomes:** After reading this course a student will be able to calculate partial derivatives, directional derivatives, extreme values and can calculate double, triple and line integrals. He will have idea of basic vector calculus including green's theorem, divergence theorem.and stokes theorem. He can take courses in calculus on manifolds, Differential geometry and can help in numerical

		computations involving several variables.
12	CC – XII Linear Algebra	**Objective:** Linear algebra is a basic course in almost all branches of science. A full course in undergraduate program will help students in finding real life applications later.. The objective of this course is to introduce a student the basics of linear algebra and some of its application **Expected Outcomes:** The student will use this knowledge wherever he/She goes after undergraduate program. It has applications in computer science, finance mathematics, industrial mathematics, bio mathematics and what not.
13	CC – XIII Complex analysis	**Objectives:** The objective of the courseis aimed to provide an introduction to the theories for functions of a complex variable. The concepts of analyticity and complex integration are presented. The Cauchy's theorem and its applications, the calculus of residues and its applications are discussed in detail. **Expected Outcomes:** Students will be able to handle certain integrals not evaluated earlier and will know a technique for counting the zeros of polynomials. This course is prerequisite to many other advance analysis courses.
14	CC – XIV Group Theory-II	**Objective:** The objective of this course **i**s to be exposed to more advanced results in group theory after completing a basic course. The course introduces results on automorphism, commutator subgroup, group action Sylow theorems etc. **Expected Outcomes:** The knowledge of automorphism helps to study more on field theory. Students learn on direct products, group actions, class equations and their applications with proof of all results . This course helps to opt for more advanced courses in algebra and linear classical groups.
15	DSE – I Linear Programming	**Objective:** The objective of this course is to familiarize industrial problems to students with various methods of solving Linear Programming Problems, Transportation Problems, Assignment Problems and their applications. Also, students will know the application of linear Programming method in Game Theory. **Expected Outcomes:** More knowledge on this topic in higher studies will help students to deal industrial models. This is also prerequisite for studying advanced courses in Nonlinear Programming Problems, Inventory Control Problem and Queuing Theory etc.
16	DSE – II Probability and Statistics	**Objective:** The objective of the course is to expertise the student to the extensive role of statistics in everyday life and computation, which has made this course a core course in all branches of mathematical and engineering sciences. **Expected Outcome:** The students shall learn probability and statistics for various random variables, multivariate distributions, correlations and relations. He shall learn law of large numbers and shall be able to do basic numerical calculations.

17	DSE – III Differential Geometry	**Objective:** After learning methods on curve tracing and Analytic Geometry, the objective of this course is to teach Differential geometry of curves and surfaces which trains a student using tools in calculus to derive intrinsic properties of plain curves and space curves. **Expected Outcome:** After completing this course a student will learn on serret-Frenet formulae, relation between tangent, normal and binormals, first and second fundamental forms and ideas on various curvatures. He has scope to take more advanced courses in surface theory and geometry.
18	DSE – IV Number Theory	**Objective**: The main objective of this course is to build up the basic theory of the integers, prime numbers and their primitive roots, the theory of congruence, quadratic reciprocity law and number theoretic functions, Fermat's last theorem, to acquire knowledge in cryptography specially in RSA encryption and decryption. **Expected Outcomes**: Upon successful completion of this course students will able to know the basic definitions and theorems in number theory, to identify order of an integer, primitive roots, Euler's criterion, the Legendre symbol, Jacobi symbol and their properties, to understand modular arithmetic number-theoretic functions and apply them to cryptography.
19	GE – I **CALCULUS AND DIFFERENTIAL EQUATIONS**	**Objective:** Calculus invented by Newton and Leibnitz is powerful analytical tool to solve mathematical problems which arise in all branches of science and engineering. The main emphasis of this course is to equip the student with necessary analytic and technical skills to handle problems of a mathematical nature as well as practical problems using calculus and differential equation. The aim should be to expose the students to basic ideas quickly without much theoretical emphasis with importance on applications. **Excepted Outcomes:** After completing the course, students are expected to be able to apply knowledge of calculus and differential equations in the areas of their own interest.
20	GE – II ALGEBRA	**Objective:** This is a preliminary course for the basic courses in mathematics like, abstract algebra and linear algebra. The objective is to acquaint students with the properties of natural numbers i.e. Euclidean algorithm, congruence relation, fundamental theorem of arithmetic, etc. The basics of linear algebra i.e. vector spaces, matrices are introduced here.

		Expected Outcomes: The acquired knowledge will help students to study further courses in mathematics like, group theory, ring theory and field theory and linear algebra. It has applications not only in higher mathematics but also in other science subjects like computer science, statistics, physics, chemistry etc.
21	GE – III **REAL ANALYSIS**	**Objective:** The objective of the course is to have the knowledge on basic properties of the field of real numbers, studying Bolzano-Weiersstrass Theorem , sequences and convergence of sequences, series of real numbers and its convergence etc. This is one of the core courses essential to start doing mathematics. **Expected Outcome:** On successful completion of this course, students will be able to handle fundamental properties of the real numbers that lead to the formal development of real analysis and understand limits and their use in sequences, series, differentiation and integration. Students will appreciate how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems.
22	GE – IV NUMERICAL METHODS	**Objective:** Calculation of error and approximation is a necessity in all real life, industrial and scientific computing. The objective of this course is to acquaint students with various numerical methods of finding solution of different type of problems, which arises in different branches of science such as locating roots of equations, finding solution of nonlinear equations, systems of linear equations, differential equations, Interpolation, differentiation, evaluating integration. **Expected Outcome:** Students can handle physical problems to find an approximated solution. After getting trained a student can opt for advance courses in Numerical analysis in higher mathematics. Use of good mathematical software will help in getting the accuracy one need from the computer and can assess the reliability of the numerical results, and determine the effect of round off error or loss of significance.

DEPARTMENT OF GEOLOGY

COURSE OUTCOME

Sl. No.	Core	TITLE	COURSE OUTCOME
1	CC - I	General Geology & Quaternary geology	Students can learn about various characteristic features of the planet earth and other terrestrial planets. They can also study the various geomorphic forms, their processes, evolution of topographic and bathymetric features. Also he/she can study about the youngest period of earth's history i.e., Quaternary Geology.
2	CC - II	Tectonics & Remote sensing	This paper is all about earth movement like Horizontal and vertical plate movements, Isostatic theories and continental drift. He/she can learn about Remote sensing and aerial photography, their applications in various fields, types of satellites and their uses.
3	CC - III	Crystallography & Mineralogy	Students can learn about the arrangement of atoms in solids, unit cells, space lattices, six crystals systems and their classification under crystallography, Mineralogy is concerned with all aspects of minerals including their physical properties, Chemical composition, internal crystal structure and occurrence and distribution in nature and their origin in terms of physic chemical conditions of formations.
4	CC - IV	Optics & Geochemsitry	From this paper students can learn about nature of light: - internal reflection, double refraction, Pleochroism, Interference colour etc. He/she can also learn about isotopes, composition of planets and meteorites, cosmic abundance of elements, Geochemical classification under geochemistry.
5	CC - V	Igneous Petrology	Students can learn about the identification, classification, origin, evolution and processes of formation and crystallization of igneous rocks.
6	CC - VI	Sedimentary Petrology	From this paper students can learn about the occurrence, composition, texture and other overall characteristics of sedimentary rocks.
7	CC - VII	Metamorphic Petrology	From this paper students can learn about the identification, origin, evolution and processes of formation and recrystallisation of Metamorphic rocks.
8	CC - VIII	Palaeontology	From this paper students can learn about the morphology and geological history of Flora and Fauna
9	CC - IX	Stratigraphy	From this paper students can learn about the principles, concept of Geologic History of India.
10	CC - X	Structural Geology	From this paper students can learn about rock deformation with respect to the stresses that act within the earth and to measure the rock geometries to uncover information about the history of deformation in the rocks.
11	CC - XI	Processes of formation & Mineral economics	From this paper students can learn about the process of formation and Economic Minerals.
12	CC - XII	Economic Geology	From this paper students can learn about the important ore minerals and distribution in India, different exploration and exploitation technique for mineral exploration.
13	CC - XIII	Groundwater & Engineering Geology	Form this paper students can learn about the occurrence, distribution and movement of water below the Earth's surface and he/she can learn about the geological factors regarding location of engineering works.
14	CC - XIV	Mining & Environmental Geology	From this paper students can learn about the geological information about mines, shafts and placers and estimating ore reserve. He/She can learn about the effective preparing for and responding to disasters. In resource management, students can learn about conservation of mineral resources and environmental impact assessment.
15	DSE - I	Fuel Geology	From this paper students can learn about origin, occurrence, movement, accumulation and exploration of hydrocarbon fuels.
16	DSE - II	Climate Change & Disaster Management	From this paper students can learn about the atmosphere, weather patterns, & long term shifts in temperature pattern

17	DSE – III	Earth & Climate	From this paper students can learn about the climate system, monsoon mechanism, atmospheric circulation and glacial – Inter glacial stages.
18	DSE-IV	Project work/Field Study	From this paper teachers will assign topics to the students for Project work or Field study should be treated as the project work.
18	GE - I	General Geology & Mineralogy	From this paper students can learn about geomorphic forms, arrangement of atoms in solids, unit cells, space lattices, six crystals system and their classification under crystallography. Mineralogy is concerned with all aspects of minerals including their physical properties, chemical characters.
19	GE - II	Petrology & Historical Geology	From this paper students can learn about different types of rocks, morphology and geologic history of flora and fauna & geological history of India.

DEPARTMENT OF GEOGRAPHY
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	CC - I	The course will provide an understanding of the conceptual and dynamic aspects of landform development. Students will also learn the processes of Physical and Chemical weathering, Erosion, Mass wasting and able to differentiate between the landforms and deposits created by wind, Water, Glacier, Sea waves etc.
2	CC - II	1. As map making is the sole purpose of geographers, by going through this paper students can acquire good knowledge about different procedure of map making and various projection system of map making by developing broad knowledge about latitude, longitude, meridians, parallels etc. 2. Another part helps students in developing their quantitative application in geographical study which gives more accuracy in any geographical enquiry which can further helps students in conducting research activities.
3	CC - III	1. Students will acquire an understanding regarding the relationship between prevailing geographic environment and cultural practices of human being. 2. This paper tries to build an idea among students regarding the role that geography play in community engagement. 3. Students will develop the ethical aptitudes and disposition necessary to acquire and hold leadership position in industry, government and professional organizations.
4	CC - IV	On successful completion of this course, students should be able to understand the mean global atmospheric circulations and disturbances, world climate systems, climatic variability and change.
5	CC - V	1. Students will become able to acquaint themselves with nature and scope of oceanography and distribution pattern of land, sea and oceans. 2. They will have knowledge of bottom relief of oceans, their waves and current in relation to origin, type, characteristics and impact of ocean waves and current on environment. 3. Students will also have knowledge about ocean resources, their types and distribution and their influences upon mankind.
6	CC - VI	Keeping in view the nature of data and purpose of study, students would be able to make a rational choice amongst listed various statistical methods.
7	CC - VII	1. The paper will provide an in-depth and broad understanding of Odisha in terms of its location, physical, population, agriculture, industry and transport sector. This will enrich the perspectives of the students towards Odisha geography. 2. They understand the Problems and Prospects in relation to Economic, Industry and Agriculture of Odisha and will know about the production and distribution of Rice, Pulses and Oil seeds. 3. They will know the distribution and growth of population, growth of urban population, Urban Centres and also understand the regional distribution of resources. 4. The paper will broaden the students' observation about their home land.
8	CC - VIII	1. Perceive the evolution of the philosophy of Geography. 2. Appreciate the contribution of the thinkers in Geography. 3. They will also learn the contributions of different schools of geographical thought. 4. Discussing the evolution of geographical thought from ancient to modern times. 5. Establishing relationship of Geography with other disciplines and man-environment relationships. 6. Analyzing modern and contemporary principles of Empiricism, Positivism, Structuralism, Human and Behavioural Approaches in Geography
9	CC - IX	1. Focus on building theories about spatial arrangement and distribution of economic activities. 2. Explain the importance of economic geography in analyzing the ways societies and economic works.

		3. Discuss and critically evaluate these concepts and theoretical approaches. 4. Explain and apply key concepts and theoretical approaches in economic geography.
10	CC - X	The Students will learn the importance of conserving biodiversity to maintain ecological balance as well as national and international concerns on various environmental issues.
11	CC - XI	The student will get familiarised with the theoretical foundations and conceptual grounding of this branch; understand and evaluate the concept of region in geography and its role and relevance in regional planning; and to comprehend the regional development and planning process in India.
12	CC - XII	1. Have knowledge of the principles of remote sensing, sensor resolutions and image referencing schemes. 2. Interpret satellite imagery and understand the preparation of false colour composites from them. 3. Training in the use Geographic Information System (GIS) software for contemporary mapping skills. 4. Analyzing and interpreting remotely sensed satellite images and aerial photographs in order to understand topographical and cultural variations on the Earth's surface. 5. Conducting field excursions and preparation of field report on research on problem in different areas of India. 6. Apply GIS to the preparation of thematic maps. 7. Use GNSS.
13	CC - XIII	1. The paper will provide an in-depth and broad understanding of India in terms of its location, physical, population, agriculture, culture, industry and transport sector. This will enrich the perspectives of the students towards Indian geography. 2. They understand the problems and different policies of India. 3. They understand globalization and Indian economy and also understand the regional distribution of resources. 4. The paper will broaden the students' observation about the Indian subcontinent.
14	CC - XIV	1. Understand the definition, classification of hazards and disasters 2. Gain knowledge about approaches to hazard study. 3. Assess risk, perception and vulnerability with respect to hazards. 4. Prepare hazard zonation maps. 5. Assessing the nature, impact and management of major natural and man-made hazards affecting the Indian subcontinent. 6. Develop an idea about factors, consequences and management of earthquake, Cyclone, landslide, flood and riverbank erosion. 7. Acquire knowledge about human induced disaster.
15	DSE - I	1. The outcome of this paper lies in the field that students can develop their understanding regarding population and its various characteristics including population growth, density, fertility, mortality, death rate, birth rate etc. 2. Through this he/she can understand the negative or positive effect of population growth in the society and can create awareness among the people of society regarding this.
16	DSE - II	Students will become sensitized to concept and classification of resources, use or misuse and will learn conservation methods and techniques
17	DSE – III	1. Understand the nature, scope, approaches and recent trends in urban Geography. 2. Temporal analysis of urban growth using census data 3. Trace the origin of urban places over time and analyze the factors, stages and characteristics of these places 4. Analyze the theories of urban evolution and growth, Hierarchy of urban settlements 5. Understand the various aspects of urban place : location, site and situation, the concept of urban hierarchies, the patterns of urbanization in developed and developing countries, the ecological processes of urban growth; urban fringe; city-region

		6. Analyze the models on city structure, Identify and analyze the problems of housing, slums and civic amenities 7. To know the patterns and trends of urbanization in India 8. To Study the City planning and Urban Issues with special reference to Delhi, Kolkata, Chandigarh and Bhubaneswar.
18	DSE-IV	1. Have expertise in identification of area of study, methodology, qualitative and quantitative analysis, and conclusions to be drawn about the area – fundamental to geographical research. 2. Handle logistics and other emergencies on field.
19	GE-I	1. The paper will provide an in-depth and broad understanding of India in terms of its location, physical, population, agriculture, industry and transport sector. This will enrich the perspectives of the students towards Indian geography. 2. They understand the population problems in India. Access the population policies and reaction the countries. 3. They understand globalization and Indian economy. And also understand the regional distribution of resource. 4. The paper will broaden the students' observation about the Indian subcontinent.
20	GE - II	1. The paper will provide an in-depth and broad understanding of Odisha in terms of its location, physical, population, agriculture, industry and transport sector. This will enrich the perspectives of the students towards Odisha geography. 2. They understand the Problems and Prospects in relation to Economic, Industry and Agriculture of Odisha and will know about the production and distribution of Rice, Pulses and Oil seeds. 3. They will know the distribution and growth of population, growth of urban population, Urban Centres and also understand the regional distribution of resources. 4. The paper will broaden the students' observation about their home land.

DEPARTMENT OF ZOOLOGY
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	CC - I	***Non-chordates I: Protista to Pseudocoelomates.*** Students will gain knowledge and skill in the fundamentals of animal sciences, understand the complex interactions among various living organisms.
2	CC - II	***Principles of Ecology-*** Analyse complex interactions among the various animals of different phyla, their distribution and relationship with the environment.
3	CC - III	***Non chordates II:Coelomates-*** Students will gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms.
4	CC - IV	***Cell biology-*** Apply the knowledge of internal structure of cell, its functions in control of various metabolic functions of organisms
5	CC - V	***Diversity of Chordates-*** Develop skills in the fundamentals of animal sciences; understand the complex interactions among various Complex Vertebrate groups.
6	CC - VI	***Physiology: Controlling andCoordinating systems-*** Correlate the physiological processes of animals and relationship of organ systems.
7	CC - VII	***Fundamentals ofBiochemistry-*** Allow the students to gain basic knowledge about various bio molecules and their role in metabolism.
8	CC - VIII	***Comparative anatomy of Vertebrates-*** Concepts on evolution of organ systems in vertebrates.
9	CC - IX	***Physiology: Life Sustaining Systems -*** Correlate the physiological processes of animals and relationship of organ systems.
10	CC - X	***Biochemistry of Metabolic Processes -*** Understand the mechanisms that work to keep the human body alive and functioning.
11	CC - XI	***Molecular Biology -*** To understand the functional biology of nucleic acids, transcription and translation etc.
12	CC - XII	***Principles of Genetics -*** Understand about various concepts of genetics and its importance in human health. Concept behind genetic disorder, gene mutations- various causes associated with inborn errors of metabolism.
13	CC - XIII	***Developmental Biology -*** Basic concepts of developmental biology. Students insight into maintaining healthy relationships with their opposite gender and allows them to make right choice about their life partner thus preventing

		congenital diseases.
14	CC - XIV	***Evolutionary Biology -*** Theories of Evolution, Knowledge on eras and evolution of species.
15	DSE - I	***Animal Behaviour and Chronobiology -*** Understand the complex evolutionary processes and behaviour of animals. Develops empathy and love towards the animals.
16	DSE - II	***Immunology -*** Imparts deep knowledge on tissues, cells and molecules involved in host defence mechanisms. Gain Knowledge on Types of immunity, antigens-antibodies and their properties, Autoimmunity. Understand the immune mechanisms in disease control, vaccination, process of immune interactions.
17	DSE – III	***Fish and Fisheries -*** Understand concepts of fisheries, fishing tools and site selection. Gain knowledge of Agro based Small Scale industries like Aquaculture, fish farming etc.
18	GE - I	***Animal Diversity -*** Students will gain knowledge and skill in the fundamentals of animal sciences, understand the complex interactions among various living organisms.
19	GE - II	***Human Physiology -*** Students will gain fundamental knowledge on animal physiology.

DEPARTMENT OF PHYSICS
PRANANATH COLLEGE(AUTONOMOUS), KHORDHA
COURSE OUTCOME

Sl.No	Core Subjects	Course Outcome
1	MATHEMATICAL PHYSICS-I	**The emphasis of the course is on applications in solving problems of interest to physicists. Students are to be examined on the basis of problems, seen and unseen.**
2	CORE PAPER-II MECHANICS	**The course provides advanced knowledge and training on classical mechanics. Students will be able to articulate and describe: 1 Relative motion. Inertial and non inertial referenceframes.**
3	CORE PAPER-III ELECTRICITY AND MAGNETISM	**Electricity and Magnetism are two related phenomena producedby electromagnetic force. The emphasis of the course is on applications in solving problems on electricity and magnetism.**
4	CORE PAPER-1V WAVES AND OPTICS	**The branch of optics that studies interference, diffraction and polarization and other phenomena for which ray approximationis not valid. Learning objectives of this course: to acquire skills allowing the student to identify and apply formulas of optics and wave physics .**
5	CORE PAPER-V MATHEMATICAL PHYSICS-II	**The emphasis of the course is on applications in solving problems of interest to physicists. Students are to be examinedon the basis of problems, seen and unseen.**
6	CORE PAPER-VI THERMAL PHYSICS	**Typically designed for students to provide a general introductionto thermodynamics and kinetic theory of gases.**
7	CORE PAPER-VII ANALOG SYSTEMS AND APPLICATIONS	**The emphasis of the course is on continuous electrical signal andits uses in various applications.**
8	CORE PAPER-VIII MATHEMATICAL PHYSICS-III	**The emphasis of the course is on applications in solving problems of interest to physicists. Students are to be examinedon the basis of problems, seen and unseen.**
9	CORE PAPER-IX ELEMENTS OF MODERN PHYSICS	**Branch of physics the developed in the early 20^{th} century and onwards. Modern physics led to breakthroughs in material science, Nuclear physics and modern technology.**
10	CORE PAPER-X DIGITAL SYSTEMS AND APPLICATIONS	**Designed to store, process and communicate information in digital form. They are found in wide range of application.**
11	CORE PAPER-XI QUANTUM MECHANICS AND APPLICATIONS	**Energy and matter are described at their most fundamentallevel. This course covers the experimental basis of quantum physics.**

12	CORE PAPER-XII SOLID STATE PHYSICS	**Practical and theoretical investigations of the properties of solids. This course includes theoretical description of crystal andelectronic structure, lattice dynamics, and optical properties of different materials**
13	CORE PAPER-XIII ELECTROMAGNETIC THEORY	**Electromagnetic theory based on Maxwell's equations establishes the basic principle of electrical and electronic circuits over the entire frequency spectrum .**
14	CORE PAPER-XIV STATISTICAL MECHANICS	**Statistical mechanics is a mathematical framework that applies statistical methods and probability theory to large assemblies of microscopic entities.**
15	Discipline Specific Elective Paper-1 CLASSICAL DYNAMICS	**The emphasis of the course is on applications in solving problems of interest to physicists. Students are to be examinedon the basis of problems, seen and unseen.**
16	Discipline Specific Elective Paper-II Nuclear and Particle Physics	**Particle physics grew out of nuclear physics and is the study ofthe elementary building blocks of matter, radiation, and their interaction.**
17	Discipline Specific Elective Paper-III Nano Materials and Application	**The course provides advanced knowledge and training in state- of-the-art nano and functional materials and devices with a focuson low-dimensional materials,**

H.O.D
DEPT. OF PHYSICS

PRINCIPAL
PRANANATH COLLEGE(AUTO.)
KGORDHA

DEPARTMENT OF COMPUTER SCIENCE
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	CC - I	It helps students to learn basics of C programming language and To be able to develop logics to create programs/ applications in C.
2	CC - II	It helps students to understand different methods used for the simplification of Boolean functions and binary arithmetic , design and implement combinational circuits, synchronous & asynchronous sequential circuits and to study in detail about Semiconductor Memory Systems.
3	CC - III	It helps to know about the Object Oriented Programming concepts, to learn basics of C++ programming language and to be able to develop logics to create programs/ applications in C++.
4	CC - IV	It helps to learn how the choice of data structures impacts the performance of programs ,to study specific data structures such as arrays, linear lists, stacks, queues, hash tables, binary trees, binary search trees, heaps and AVL trees. And To learn efficient searching and sorting techniques.
5	CC - V	It helps to learn the fundamentals of Object Oriented Programming in Java environment ,to learn the use of Java language and the Java Virtual Machine and to write simple Java programming applications.
6	CC - VI	It helps to learn the fundamental elements of database system,To learn the basic concepts of relational database management systems and To learn various SQL commands.
7	CC - VII	It helps to learn the mathematical foundations for Computer Science and Topics covered essential for understanding various courses.
8	CC - VIII	It helps to understand Operating system structure and services and to understand the concept of a Process, memory, storage and I/O management.
9	CC - IX	It helpsto learn how do computers and terminals actually communicate with each other and to understand the parts of a communication network and how they work together.
10	CC - X	It helpsTo be able to learn the core concepts of Computer Graphics and To be able to create effective programs for solving graphics problems..
11	CC - XI	It helps to learn the fundamentals of web designing , to design and develop standard and interactive web pages and to learn some popular web scripting languages.
12	CC - XII	It helps to learn the way of developing software with high quality and the relevant techniques, to introduce software engineering principles for industry standard and To focus on Project management domain and Software risks management.
13	CC - XIII	It helps to learn the basic concepts of AI principles and approaches and to develop the basic understanding of the building blocks of AI.
14	CC - XIV	It helps to be able to learn design principles and concepts of algorithms and to have a mathematical foundation in analysis of algorithm.
15	DSE - I	It helps to learn various numerical techniques and to be able to implement different numerical techniques using programming language.

16	DSE - II	It helps to learn the basics of UNIX OS, UNIX commands and File system ,to familiarize students with the Linux environment,to learn fundamentals of shell scripting and shell programming and to be able to write simple programs using UNIX.
17	DSE – III	It helps to learn emerging issues related to various fields of data science, to understand the underlying principles of data science, exploring data analysis and tTo learn the basics of R Programming.
18	GE - I	It helps to make the students understand and learn the basics of computer,To make them familiar with the parts and functions of computer and To learn the features of some emerging technologies.
19	GE - II	It helps to learn the basics of C programming language, To understand the fundamentals of linear data structure and to be able write simple C and data structure programs.

DEPARTMENT OF ELECTRONICS		
SL. NO.	**CORE/DSE/GE**	**COURSE OUTCOME**
1	CC-I	Basic idea regarding circuit components, laws,DC transient and AC circuit analysis and network theorems.
2	CCII	Exposes Mathematics foundation for Electronics such as Ordinary differential equations and their series solution, Matrices, Sequence and series, Complex variables and Functions.
3	CC-III	Exposes for Semiconductor basics and Semiconductor devices like P.N junction Diode, Bioplar Junction Transistor, Field Effect transistor and power devices like UJT,SCR,TRIAC ,DIAC, IGBT , MESFET etc.
4	CC-IV	Gives concepts of Quantum Physics, Mechanical Properties of matter,Thermal Physics and Electric and magnetic Properties of matter.
5	CC-V	Explain concepts Of diode circuits,BJT, Feedback amplifiers, Power and Tuned amplifiers, and MOSFET circuits.
6	CC-VI	Expose for Digital Electronics such as logic gates, Number system,Combitional and sequential logic designs and Verilog/VHDL.
7	CC-VII	Concept for programming in C language and Data Structure.
8	CC-VIII	Expose for basic Operational Amplifiers and its applications, Multivibrator ICs (IC 555),Fixed and variable IC regulators and signal conditioning circuits.
9	CC-IX	Concepts of Signals and systems,LTI systems,Fourier series representation of periodic signals,Fourier transformand Laplace transform of signals.
10	CC-X	Idea of qualites of measurement, basic measurement instruments, measurement of resistance and impedance, Oscilioscopes, Transducers and censors.
11	CC-XI	Gives Concepts of microprocessors- 8085 Architecture, Programming, Microcontrollers-Architecture, PIC16F887 Microcontroller and it's interfacing.
12	CC-XII	Concept of vector analysis,Poission and Laplace equation,Maxwell's equations and Electro magnetic wave propagation
13	CC-XIII	Concepts of different type of modulation techniques such as Amplitude ,Frequency, phase modulation, pulse analog modulation, Digital modulation techniques.
14	CC-XIV	Exposes Different phenomenon of light like Intereference , Diffraction, Polarization, Construction and operations of LEDs,Lasers,Photodetectors,LCD displays and Guided waves and optical fibers.
15	DSE-I	Exposes to Control systems, Time , frequency domain and state space analysis of systems, Controllers and Compensation techniques.
16	DSE-II	Concepts of Digital Signal Processing-discrete time systems, Z-transform, Discrete Fourier Transform and Digital Filters.
17	DSE-III	Gives concept of Electromagnetic wave propagations through Transmission lines, Wave guides, Antennas.
18	GE-I	Concepts of Electronic Circuits, Network theorems, Devices like Diode and it's application, Bipolar Juncton Transistor Amplifiers, Printed Circuit Boards Designing.
19	GE-II	Expose for Digital Electronics such as logic gates, Number system, Combitional and sequential logic designs and Verilog/VHDL.

DEPARTMENT OF ECONOMICS
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	I	This course is designed to expose the students to the basic principles of microeconomics theory. The emphasis will be on thinking like on economist and the course will illustrate how microeconomic concepts can be applied to analyse real life situations.
2	II	This course is designed to transmit the body of basic math emetics that enables the study of microeconomic theory, macroeconomic theory statistics and econometrics set out in this syllabus. The objective is to apply the mathematical techniques to economic theory.
3	III	This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. These course discuses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings investment, GDP, money inflation and the balance of payments.
4	IV	The objective of this course is to transmit the body of basic mathematics that enables the study of microeconomic theory, macroeconomic theory statistics and econometrics. This course also aims of applying mathematical techniques to economic theory in general.
5	V	This course introduces the students to formal training in microeconomic theory to analyse the behaviours of individuals agendas. Here mathematical tools are used to facilitate understanding of the basic concepts. This course looks at the behaviour of consumer and the producer and covers the behaviour of a competitive firm.
6	VI	This course introduces the students to formal modelling of a macro-economy interms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run and the role of policy in this context. It also introduces the students to various theoretical issues of an open economy.
7	VII	This course begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It students the measure of relationship between variables, index numbers and time series. It also develops the nation of probability, probability distributions.
8	VIII	This course gives emphasis on conceptual clarity of the market, general equilibrium and welfare, imperfect markets, and topics under information economics.
9	IX	In this course, the students are introduced to the long run dynamic issues like growth and technical progress. It also provides the micro foundations to the various aggregative concepts used in the previous course.
10	X	The course is to develop a research orientation among the students and to acquaint them with fundamentals of research methods. Specifically, it aims at introducing them to the basic concepts used in research and to scientific social research methods and their approach. It includes discussions on sampling techniques, research designs and techniques to analysis.
11	XI	This course reviews trends in economic indicators and policy debates in India in the post – Independence period, with particular emphasis on paradigm shifts and funning pints. Given the rapid. Changes taking place in India, the reading list will have to be updated annually.
12	XII	The course begins with a discussion of alternative conception s of development and there. Justification. It then proceeds to aggregate models of growth, inequality measurement, linking political institutions to growth and inequality by discussing the role of state in economic development.

13	XIII	This course examines sector specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Incline empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.
14	XIV	The course begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to particular problems of enforcement experienced in poor countries. The course ends with reflections of the role of globalization.
15	DSE - I	This paper deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures. The subject encompasses a host of topics including public goods, market failure and externalities.
16	DSE - II	This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models. The course also covers the consequences of and texts for regression models.
17	DSE - III	The course introduces the students to the basics of environmental economics to understand the fundamentals of environmental concerns. And develop insights in to valuation of environment.
18	GE – I	This course introduces the students to the essential of Indian economy with an intention of understanding the basic feature of the Indian economy and its planning process. It also aids in developing an insight into the agricultural and industrial sectors of India and current challenges of Indian economy.
19	GE – II	This paper deals with the external sector, financial markets in India, Indian public finances and Economic Reforms. This paper also through some light on current challenges of India Economy

DEPARTMENT OF EDUCATION
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	CC – I	On completion of this course, the learners shall be able to: • State and analyze the meaning of education and form own concept on education • Explain philosophy as the foundation of education • Analyze aims of education • Describe the essence of different formal philosophies and draw educational implications • Compare and contrast Indian and western philosophies of education
2	CC - II	On completion of this course, the learners shall be able to: • Explain the concept of educational psychology and its relationship with psychology. • Understand different methods of educational psychology. • Describe the theoretical perspectives of educational psychology. • Explain the concepts of growth and development of child and adolescence, and underlined general principles of growth and development. • Describe briefly the periods and the typical characteristics of growth and development during childhood and adolescence. • Specify the contexts and factors influencing development. • Explain the theory of cognitive development and its educational implications. • State the different forms and characteristics of individual differences and the ways of meeting the classroom issues arising out of the differences. • Identify the learning needs during the different stages of development and adopt appropriate strategies in and out of school to meet the learning needs.
3	CC - III	On completion of this course, the students shall : • State the relationship between education and society. • Understand the meaning of Educational Sociology and function of education as a social system. • State different agencies of education and their functions. • Justify the importance of education for social change. • Describe the role of education in modernization and globalization. • Describe the function of education to ensure equality and equity.
4	CC - IV	On completion of this course, the students shall: • Explain the concept of pedagogy • Differentiate pedagogy from other allied concepts • Explain different teaching task with example • Establish relationship between teaching and learning • List out different approaches and methods of teaching • Prepare a lesson plan following different designs
5	CC - V	On completion of this course, the students will. • State the nature, purpose and types of educational assessment and evaluation. • Develop and use different types of tools and techniques for continuous and comprehensive assessment of learning in the school situation. • Explain the importance of assessment for learning and its processes for enhancing the quality of learning and teaching. • Describe the characteristic of a good test. • Analyze the trends and issues in learning and learner assessment.

		• Analyze and interpret results of the assessment using standard score. • Illustrate the principles of test construction in education.
6	CC - VI	On completion of this course, the student will: • Describe nature, scope and limitation of educational research. • Understand different types and methods of educational research. • Explain sources from where knowledge could be obtained. • Describe the process of research in education. • Analyze research design in education. • Illustrate procedure of collecting and analyzing data. • Prepare the research report
7	CC - VII	On completion of this course, the students will: • Describe the importance of statistics in education. • Organise and represent educational data in tabular and graphical form. • Compute and use various statistical measures of average, variation and bi-variate distribution to in analysis and interpretation of educational data. • Describe the concept and importance of normal probability curve and interpret test scores in using normal probability curve. • Understand the divergence of data from normality.
8	CC - VIII	On completion of this course, the student will • Understand the development of education in India during ancient period, medieval period and pre-independence period. • Describe the development of education in India during post-independence period. • Describe major recommendations of different policies and committee reports on education in India.
9	CC - IX	On completion of this course, the students will • Differentiate curriculum from courses of study, text book. • Analyse bases and sources of curriculum. • Describe different types of curriculum. • Critically examine National curriculum framework- 2000 and 2005. • Describe process of curriculum development and differentiate different models of curriculum development. • Evaluate curriculum using different evaluation models.
10	CC - X	On completion of this course, the students will • State the concept, need, principles and bases of guidance. • Use various tools and techniques of guidance in appropriate contexts. • Explain the role of school in organizing different guidance programmes. • State the concept, scope and type of counseling. • Narrate the process, tools and techniques of counseling. • Explain the qualities and role of a counselor. • Describe different programmes for with differently abled children. • Explain the role of teacher and head master in organizing different guidance programmes
11	CC - XI	On completion of the course the students will: • Grasp the structure of educational system of Odisha • State the function of institutions/units at the state and district levels • Appreciate the contribution of Utkalmani Gopabandhu Das to the thoughts and • Practices of Indian education narrate the learning objectives and implementation process of the major education Schemes of central as well as state government being implemented in the state of Odisha • Explain the role of various state and district level institutions in

		education • Analyze the scenario of higher and technical education of Odisha • Establish linkage between higher education and development of the state
12	CC - XII	On completion of this course, the student will: • Explain the concept, nature and scope of ICT in education • Explore ICT resources for Teaching and learning. • Differentiate between Web1.0 and Web2.0 • Describe the importance of free and open source software in education • Demonstrate the use of various application software in education. • Develop the ability to use various tools connect the world • Explain the content by using various subject tools. Explore tools and techniques of ICT for evaluation.
13	CC - XIII	On completion of this course the students will: • Understand the importance of pre-school and elementary school education. • Analyze various problems and issues for ensuring quality education. • State the importance of secondary education and analyze various problems and issues for ensuring quality in secondary education. • Enumerate the importance of higher education and analyze various problems and issues for ensuring quality in higher education. • Justify the importance of teacher education and analyze various problems and issues for ensuring quality in teacher education. • Analyze emerging concerns in Indian education
14	CC - XIV	On completion of this course, the students will • Describe the concept, types and importance of educational management. • Spell out the structure of educational management at different levels - from national to institution level • Describe different aspects and importance of educational management. • Describe the concept, theories and style of leadership in educational management. • Analyze the concept, principles and structures of total quality management approach in education.
15	DSE - I	On completion of this course, the student will • Analyze the issues relating to place of English in school curriculum, acquisition of skills in English, realization of aims and Learning Objectives of learning English and language policy as conceived in NPE, 1986 and NCF – 2005 • Use various methods, approaches and strategies for teaching-learning English and transact various types of lesson plans covering all aspects of English language following different approaches • Develop test items to assess learning in English and provide feedback as well as prepare enrichment materials • Use the understanding of phonetics for facilitating students' speaking in English • Plan appropriate pedagogical treatment of the prescribed contents for effective classroom transaction
16	DSE - II	On completion of this course, the student will: • State the importance and place of Odia as mother tongue in school curriculum. • Develop the strategies to address the problems of Odia language acquisition in multilingual context. • Use various strategies for facilitating the acquisition of language skills in Odia. • Decide appropriate pedagogic approaches to transact different types of

		lessons in Odia. • Prepare appropriate tools for comprehensive assessment of learning in Odia. • Explain the fundamentals of Odia linguistics and their relevance in teaching learning Odia. • Plan appropriate pedagogic treatment of the prescribed textual contents (in Odia) of classes IX and X.
17	DSE – III	On completion of this course, the student will: • Analyse various policies on education for school education in India • Evaluate progress of schools education • Examine the problems in implementation of the policies on school education • Explore status of women education and education for SC, ST and Minorities in Indian
18	DSE – IV	On completion of the course the students shall be able to: • Define meaning and scope of inclusive education. • Identify the assumptions of disability underlying current general and special education practices • Understand the various suggestions given by different recent commissions on education of children with disabilities for realizing the concept of "Universalization of Education"; • Explore and utilize pedagogical approaches that can support students with a variety of learning profiles in respectful ways • Explain the meaning and implications of universal design in learning (UDL) for classroom pedagogy • Examine the different support services and collaboration for inclusive education
19	GE - I	On completion of this course, the learners shall be able to: • State and analyse the meaning of education and form own concept on education • Explain philosophy as the foundation of education • Analyse aims of education • Describe the essence of different formal philosophies and draw educational implications • ompare and contrast Indian and western philosophies of education
20	GE - II	On completion of this course, the students will: • Explain the concept of educational psychology and its relationship with psychology. • Understand different methods of educational psychology. • Explain the concepts of growth and development of child and adolescence, and underlined general principles of growth and development. • Describe briefly the periods and the typical characteristics of growth and development during childhood and adolescence. • Explain the theory of cognitive development and its educational implications. State the different forms and characteristics of individual differences and the ways of meeting the classroom issues arising out of the differences. • Identify the learning needs during the different stages of development and adopt appropriate strategies in and out of school to meet the learning needs.
21	GE - III	On completion of this course the students will • Understand the importance of pre-school and elementary school education. • Analyze various problems and issues for ensuring quality

		education. • State the importance of secondary education and analyze various problems and issues for ensuring quality in secondary education. • Enumerate the importance of higher education and analyze various problems and issues for ensuring quality in higher education. • Justify the importance of teacher education and analyze various problems and issues for ensuring quality in teacher education. • Analyze emerging concerns in Indian education
22	GE - IV	On completion of this course, the students will. • State the nature, purpose and types of educational assessment and evaluation. • Develop and use different types of tools and techniques for continuous and comprehensive assessment of learning in the school situation. • Explain the importance of assessment for learning and its processes for enhancing the quality of learning and teaching. Describe the characteristic of a good test. • Analyze the trends and issues in learning and learner assessment. • Analyze and interpret results of the assessment using standard score. • Illustrate the principles of test construction in education.

DEPARTMENT OF ENGLISH
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	CC - I	**BRITISH POETRY AND DRAMA: 14TH TO 17TH CENTURIES** The paper seeks to introduce the students to British poetry and drama from the 14th to the 17thcentury.
2	CC - II	**BRITISH POETRY AND DRAMA: 17TH AND 18TH CENTURY** The Introduction of this paper is to acquaint students with the Jacobean and the 18th century British poetry and drama.
3	CC - III	**BRITISH PROSE: 18TH CENTURY** The Introduction of the paper is to acquaint the students with a remarkable, newly evolved form of literature: the essay
4	CC - IV	**INDIAN WRITING IN ENGLISH** The paper seeks to introduce the students to Indian Writing in English through a selection of representative poems, novel and play.
5	CC - V	**BRITISH ROMANTIC LITERATURE** The paper aims at acquainting the students with the Romantic period and some of its representative writers.
6	CC - VI	**BRITISH LITERATURE 19TH CENTURY** The paper seeks to introduce the students to the exploits of the 19th century British Literature in prose, especially fiction and cultural criticism.
7	CC - VII	**BRITISH LITERATURE: EARLY 20TH CENTURY** The paper aims at acquainting the students with the literature of Britain in the early 20th century, focusing on the modernist canon in poetry, novel, and literary criticism.
8	CC - VIII	**AMERICAN LITERATURE** This is a survey paper providing an overview of canonical authors from American Literature in the established genres.
9	CC - IX	**EUROPEAN CLASSICAL LITERATURE** The paper seeks to introduce the students to European Classical literature, commonly considered to have begun in the 8thcentury BC in ancient Greece and continued until the decline of the Roman Empire in the 5thcentury AD.
10	CC - X	**WOMEN'S WRITING** The paper seeks to acquaint the students with the works of women writers from different cultures and nations in various genreswith special reference to the workings of patriarchy, issues of gender, and relations of desire and power.
11	CC - XI	**MODERN EUROPEAN DRAMA** The aim of this paper is to introduce the students to the best of experimental and innovative dramatic literature of modern Europe.
12	CC - XII	**INDIAN CLASSICAL LITERATURE** The paper seeks to create awareness among the students of the rich and diverse literary and aesthetic culture of ancient India.
13	CC - XIII	**POSTCOLONIAL LITERATURES** The paper seeks to introduce the students to postcolonial literature —a body of literature that responds to European colonialism and empire in Asia, Africa, Middle East, the Pacific and elsewhere.

14	CC - XIV	**POPULAR LITERATURE** The paper seeks to introduce the students to genres such as children's literature, detective fictionand campus fiction, which have a "mass" appeal, and can help us gain a better understanding of the popular and folk roots of literature.
15	DSE - I	**LITERARY THEORY** The paper seeks to expose the students to the basic premises and issues of major theoretical approaches to literary texts.
16	DSE - II	**WORLD LITERATURE** The paper proposes to introduce the students to the study of world literature through representative selection of texts from around the world, written in languages other than English, but made available to the readers in English translation.
17	DSE – III	**PARTITION LITERATURE** The paper seeks to expose the students to some significantwritings on Indian partition.
18	GE - I	**ACADEMIC WRITING AND COMPOSITION** The paper seeks to train the students in the basic writing skills required for writing competently in the academic context.
19	GE - II	**GENDER AND HUMAN RIGHTS** The paper seeks to familiarize the students with issues of inequality, and oppression of caste, race and gender.

DEPARTMENT OF HISTORY
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	I	History of India: The students need to know ancient man and their nature while passing through Palaeolithic, Mesolithic and Neolithic age.
2	II	Social formation and cultural patterns of the ancient world: It gives information of food habits, agriculture, animal husbandry as well as bronze age civilisation.
3	III	History of India-II (300 BCE-750 CE): It enhances the knowledge about the glorious rule and rulers of ancient India and its philosophy of religion.
4	IV	Social formation and cultural patterns of the medieval world: Present a good knowledge about polity, economy, trade and commerce, church of ancient world.
5	V	History of India-III (750 CE - 1206 CE): The students learn the medieval literature, archaeology, social classifier, caste, Buddhism, Jainism and process of urbanisation.
6	VI	Rise of the modern west-I: This paper provides early colonial expansion conquest of America, African slave and medieval art architecture, painting and literature.
7	VII	History of India-IV (1206 CE – 1526 CE): This paper provides information about Persian literature, Tarikh tradition are regional identities of Bahamanis, Vijaynagar and Odisha.
8	VIII	Rise of the modern west-II: History of modern west gives information of the conflicts between parliament and monarchy in England, revolution demanding social equality, fraternity and liberty.
9	IX	History of India-V (1526 CE – 1750 CE): This paper gives a clear picture of mughal administration and revenue system, rajput painting and trade pattern in later medieval period.
10	X	Historical theories and methods: It is beneficial to the students engaged in research work. It speaks the meaning, scope and definition of history.
11	XI	History of modern Europe-I: (1780 – 1880) It gives knowledge on European crisis on social, political and economy. The French revolution of 1789 which changed the political map of Europe completely.
12	XII	History of India-VI (1750 CE – 1857 CE): This paper provides information regarding colonial rule in India. Army, Police and judicial system providing in colonial rule.
13	XIII	History of India-VII (1857 CE – 1950 CE): This paper inform the social-religious reform movements, Mahatma Gandhi and his perspective INA, movement of 1920, 1930, 1942, partition and independence.
14	XIV	History of modern Europe-II: (1880 - 1939) The paper deals with socialism, communism as well as feudalism prevailing in Europe resulting a rise of racism and Nazism followed by two world wars.
15	DSE - I	History and culture of Odisha-I: This paper unveils the ancient of Odisha with a post making events like Kaling War rule at Kharavela, and important dynasties and the architectural development.

16	DSE - II	History and culture of Odisha-II: This paper explains the agitation and uprising in medieval Odisha like Paik Rebellion, Ghumur Rebellion, Keonjhar uprising, Prajameli Movement and Language Movement.
17	DSE - III	History and culture of Odisha-III: This paper covers the Buddhism, Jainism, Shaivism, Sactism and Tantrism in Odisha. Vaisnavism and culture of Jagannath.
18	GE – I	History of India – I (Early times to 1750): This paper includes a brief knowledge of ancient medieval history with the vedic culture, Mourya Gupta as well as regional language.
19	GE – II	History of India – II (1750 - 1950): This paper provides information regarding colonial rule and contemporary movements like Sepoy Mutiny, Aligarh movement, growth of pre-partition and making of constitution.

DEPARTMENT OF PHILOSOPHY
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	CC - I	General Philosophy Clear and Concise explanation and arguments about basic philosophical problems such as:- knowledge, reality, substance, truth, God, World, goodness and evil etc.
2	CC - II	Logic and Scientific Method. It acquaints vs. With laws of thoughts fro perfecting inteligence ability. It comprehends how to think and what to think.
3	CC - III	System of Indian Philosophy - I It helps to recognise the reality of the world with a view to transforming and spiritualising human life.
4	CC - IV	Symbolic Logic It brings preciseness and clarity in translating the day to day language by the help of valid arguments, variables, ideograms and deductive method.
5	CC - V	Ethics It inquires about norms and values, about ideas of good and bad, right and wrong, virtue and vice which are mostly used to guide the Human Being for practice.
6	CC - VI	History of Greek philosophy. It exposes t hmm e origin and development of Greek thought and it familiarise the thoughts of Thales, phythagoras, herachitus, Socrates, Plato and Aristotle.
7	CC - VII	System of Indian Philosophy - II. It deals with the Upanisadic concept of reality like Brahman and Atman, Pramanas, categories, Maya Mainly for the attainment of Mukti.
8	CC - VIII	Contemporary Indian philosophy. It highlights the evolutionary process by understanding the concept of man, ideal social order, universal religion, vision of a just society as exposed by the contemporary thinkers like Tagore, Vivekananda, Radhakrishnan, Gandhi.
9	CC - IX	History of Modern European philosophy. It provides an objective and scientific analysis for believing the reason and mind as the best instrument for the search after truth.
10	CC - X	Philosophy of Language It helps to understand well the very words "Meaning" and "Definition" and study the relation of language to things.
11	CC - XI	Western classics: Meditations of Rene Descartes. It helps to learn about the entire thoughts of Rene Descartes such as universal doubt, Cogito-ergo-sum, existence of God, ideas and mind-body dualism.
12	CC - XII	Indian Text: Isa Upanisad It unfolds Brahmavidhya, Explains Brahman as the absolute spiritual reality for moral and spiritual purification.
13	CC - XIII	Social and political philosophy It helps us to protest against the evils of individualism and capitalism by laying emphasis on the society rather than the self-centred individuals.
14	CC - XIV	Applied Ethics It helps us to employ the general Ethical Principles to almost all aspects of human life and animal rights, biomedical sphere, environment, Business and to different profession.
15	DSE - I	Philosophy of Bhagvad Gita. It encourages to live life with purity, strengths, discipline, honesty and

		integrity by the synthesis of jnana yoga, karma yoga and bhakti yoga.
16	DSE - II	Philosophy of Religion It deals with the philosophical thinking about religion in terms of general conceptual framework with detached objectivity.
17	DSE – III	It acquaints with the Gandhian concept of a just society through his idea of social engineering. Sarvodaya, Satyagraha, Nai-Takim, Satya and Ahimsa for World peace.

DEPARTMENT OF POLITICAL SCIENCE
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	CC – I	This course is divided into two sections. Section 'A' introduces the students to the idea of political theory, its history and approaches and an assessment of its critical and contemporary trends. Section 'B' is designed to reconcile political theory and practices through reflections on the ideas and practices related to democracy.
2	CC - II	This course acquaints students with the Constitutional design of state structures and institutions, and their actual working over time. The Indian Constitution accommodates conflicting impulses (of liberty and justice, territorial decentralization and a strong union, for instance) within itself. The course traces the embodiment of some of these conflicts in constitutional provisions, and shows how these have played out in political practice. It further encourages a study of state institutions in their mutual interaction, and in interaction with the larger extra-constitutional environment.
3	CC - III	This course is divided into two sections. Section A helps the student familiarize with the basic normative concepts of political theory. Each concept is related to a crucial political issue that requires analysis with the aid of our conceptual understanding. This exercise is designed to encourage critical and reflective analysis and interpretation of social practices through the relevant conceptual tool kit. Section B introduces the students to the important debates in the subject. These debates prompt us to consider that there is no settled way of understanding concepts and that in the light of new insights and challenges, besides newer ways of perceiving and interpreting the world around us, we inaugurate new modes of Political debates.
4	CC - IV	Actual politics in India diverges quite significantly from constitutional legal rules. An understanding of the political process thus calls for a different mode of analysis - that offered by political sociology. This course maps the working of 'modern' institutions, premised on the existence of an individuated society, in a context marked by communitarian solidarities, and their mutual transformation thereby. It also familiarizes students with the working of the Indian state, paying attention to the contradictory dynamics of modern state power.
5	CC - V	This is a foundational course in comparative politics. The purpose is to familiarize students with the basic concepts and approaches to the study of comparative politics. More specifically the course will focus on examining politics in a historical framework while engaging with various themes of comparative analysis in developed and developing countries.
6	CC - VI	The course provides an introduction to the discipline of public administration. This paper encompasses public administration in its historical context with an emphasis on the various classical and contemporary administrative theories. The course also explores some of

		the recent trends, including feminism and ecological conservation and how the call for greater democratization is restructuring public administration. The course will also attempt to provide the students a comprehensive understanding on contemporary administrative developments.
7	CC - VII	This paper seeks to equip students with the basic intellectual tools for understanding International Relations. It introduces students to some of the most important theoretical approaches for studying international relations. The course begins by historically contextualizing the evolution of the international state system before discussing the agency-structure problem through the levels-of-analysis approach. After having set the parameters of the debate, students are introduced to different theories in International Relations. It provides a fairly comprehensive overview of the major political developments and events starting from the twentieth century. Students are expected to learn about the key milestones in world history and equip them with the tools to understand and analyze the same from different perspectives. A key objective of the course is to make students aware of the implicit Euro-centricism of International Relations by highlighting certain specific perspectives from the Global South.
8	CC - VIII	In this course students will be trained in the application of comparative methods to the study of politics. The course is comparative in both what we study and how we study. In the process the course aims to introduce undergraduate students to some of the range of issues, literature, and methods that cover comparative political.
9	CC - IX	The paper seeks to provide an introduction to the interface between public policy and administration in India. The essence of public policy lies in its effectiveness in translating the governing philosophy into programs and policies and making it a part of the community living. It deals with issues of decentralization, financial management, citizens and administration and social welfare from a non-western perspective.
10	CC - X	This course introduces students to the key debates on the meaning and nature of globalization by addressing its political, economic, social, cultural and technological dimensions. In keeping with the most important debates within the globalization discourse, it imparts an understanding of the working of the world economy, its anchors and resistances offered by global social movements while analyzing the changing nature of relationship between the state and trans-national actors and networks. The course also offers insights into key contemporary global issues such as the proliferation of nuclear weapons, ecological issues, international terrorism, and human security before concluding with a debate on the phenomenon of global governance.
11	CC - XI	This course goes back to Greek antiquity and familiarizes students with the manner in which the political questions were first posed. Machiavelli comes as an interlude inaugurating modern politics followed by Hobbes and Locke, Rousseau, Marx. This is a basic foundation course for students.

12	CC - XII	This course introduces the specific elements of Indian Political Thought spanning over two millennia. The basic focus of study is on individual thinkers whose ideas are however framed by specific themes. The course as a whole is meant to provide a sense of the broad streams of Indian thought while encouraging a specific knowledge of individual thinkers and texts. Selected extracts from some original texts are also given to discuss in class. The list of Reference books is meant for teachers as well as the more interested students.
13	CC - XIII	Philosophy and politics are closely intertwined. Students will be exposed to the manner in which the questions of politics have been posed in terms that have implications for larger questions of thought and existence. Contemporary political philosophy and debates are introduced to the students here.
14	CC - XIV	Based on the study of individual thinkers, the course introduces a wide span of thinkers and themes that defines the modernity of Indian political thought. The objective is to study general themes that have been produced by thinkers from varied social and temporal contexts. Selected extracts from original texts are also given to discuss in the class. The list of Reference books is meant for teachers as well as the more interested students.
15	DSE - I	This course attempts to build an understanding of human rights among students through a study of specific issues in a comparative perspective. It is important for students to see how debates on human rights have taken distinct forms historically and in the contemporary world. The course seeks to anchor all issues in the Indian context, and pulls out another country to form a broader comparative frame
16	DSE - II	Under the influence of globalization, development processes in India have undergone transformation to produce spaces of advantage and disadvantage and new geographies of power. The high social reproduction costs and dispossession of vulnerable social groups involved in such a development strategy condition new theories of contestation and struggles. A variety of protest movements emerged to interrogate and challenge this development paradigm that evidently also weakens the democratic space so very vital to the formulation of critical consensus. This course proposes to introduce students to the conditions, contexts and forms of political contestation over development paradigms and their bearing on the retrieval of democratic voice of citizens.
17	DSE – III	This course's objective is to teach students the domestic sources and the structural constraints on the genesis, evolution and practice of India's foreign policy. The endeavour is to highlight integral linkages between the 'domestic' and the 'international' aspects of India's foreign policy by stressing on the shifts in its domestic identity and the corresponding changes at the international level. Students will be instructed on India's shifting identity as a postcolonial state to the contemporary dynamics of India attempting to carve its identity as an 'aspiring power'. India's evolving relations with the superpowers during the Cold War and after, bargaining strategy and positioning in international politics facilitate an

		understanding of the changing positions and development of India's role as a global player since independence.
18	DSE – IV	This course opens up the question of women's agency, taking it beyond 'women's empowerment' and focusing on women as radical social agents. It attempts to question the complicity of social structures and relations in gender inequality. This is extended to cover new forms of precarious work and labour under the new economy. Special attention will be paid to feminism as an approach and outlook.
19	GE - I	The aim of the course is to introduce students to contemporary debates on feminism and the history of feminist struggles. The course begins with a discussion on construction of gender and an understanding of complexity of patriarchy and goes on to analyze theoretical debates within feminism. It offers a gendered analysis of Indian society, economy and polity with a view to understanding the structures of gender inequalities. And the last section aims to understand the issues with which contemporary Indian women's movements are engaged with.
20	GE - II	This paper deals with concepts and different dimensions of governance highlighting the major debates in the contemporary times. There is a need to understand the importance of the concept of governance in the context of a globalizing world, environment, administration, development. The essence of governance is explored through the various good governance initiatives introduced in India.
21	GE - III	Locating Gandhi in a global frame, the course seeks to elaborate Gandhian thought and examine its practical implications. It will introduce students to key instances of Gandhi's continuing influence right up to the contemporary period and enable them to critically evaluate his legacy.
22	GE - IV	This course provides a comprehensive introduction to the most important multilateral political organization in international relations. It provides a detailed account of the organizational structure and the political processes of the UN, and how it has evolved since 1945, especially in terms of dealing with the major global conflicts. The course imparts a critical understanding of the UN's performance until now and the imperatives as well as processes of reforming the organization in the context of the contemporary global system.

DEPARTMENT OF COMMERCE
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	I	The course structure of this paper would equip the students to get in–depth knowledge of financial accounting along with its practical application thereby giving an opportunity to gain easy access to this competitive business world. .
2	II	The students would be able to deal with the legal aspect of different business situations.
3	III	After the completion of this paper, the students will be able to have confidence in managing cost issues and also to keep a check on cost control and taking managerial decisions.
4	IV	Students would acquire knowledge about the legal framework and the ways and means to deal with the legal aspect of different situations of corporate sector.
5	V	This paper can provide conceptual clarity about the techniques to prepare financial statements of companies along with accounting treatment of various situations viz. floating of shares, amalgamation and liquidation of companies.
6	VI	This paper would provide the understanding of various provisions of income tax act as well as equip the students to make practical applications of the provisions for taxation purpose
7	VII	Students would be able to make use of different management principles in the course of decision making in different forms of business organizations.
8	X	After the completion of this paper, the students will be able to have confidence in managing cost issues and also to keep a check on cost control and taking managerial decisions.
9	XII	After the completion of this paper, students will be able to understand finance in a better way along with giving them insight to practical management of long and short finance for real business houses.
10	XIII	At the end of the paper student will have detail knowledge about principles and techniques of audit in accordance with current legal requirement and as per the guidelines of different statutory authorities.
11	XIV	After reading this subject the students will be able to understand basic concepts in the areas of business calculus and financial mathematics and to connect acquired. Knowledge with practical problems in economic practice.
12	DSE-1	This paper can enhance the capability of the students to manage the most important assets of organization i.e. human beings which is much needed to ensure growth of that organization.
13	DSE-II	After the completion of this course, the student will be able to understand the structure and function of mercantile banking and various financial service available in the present business would.
14	DSE-III	After completion of this paper, students will be able to help tax consultants in tax planning, assessment and filing income tax returns of corporate sector, thereby they can get themselves self- employed.
15	DSE - IV	After completion of this paper, this paper will educate the students about various aspect of investment in detail along with understand ability of stock market operation, focusing on need for common investor protection.
16	GE- I	The students would be able to apply tools of consumer behaviour and firm theory to business situations.

17	GE- II	Students would be able to apply the modern tools of macro-economic analysis so as to minimize the adverse impact of macro-economic factors on business.
18	GE – III	Students would be armed with the knowledge of using different statistical tools very much required in the decision making process in any business as well as business research. .
19	GE – IV	After the completion of this paper, the students will able to identify marketing components and fit them in the value chain along with the various marketing strategies.

DEPARTMENT OF BBA
COURSE OUTCOME

Sl. No.	Paper	COURSE OUTCOME
1	101	Analyze and apply social responsibility and business ethics in the workplace. Detail the forms of business organization and differentiate between sole proprietorships, partnerships and corporations. Understand entrepreneurship, small business and franchising. Apply understanding of management in the business world.
2	102	Students will review the grammatical forms of English and the use of these forms in specific communicative contexts, which include: class activities, homework assignments, reading of texts and writing. Develop reading, writing and analytical skills and communicate their ideas critically, creatively, and persuasively through the medium of language. Equip with the practical, emotional, intellectual and creative aspects of language by integrating knowledge and skills. Enhance LSRW communicative skills through language and literature. Increase confidence in their ability to read, comprehend, organize, and retain written information. Improve their ability to read and understand the written word in everyday life through the study of literary text
3	103	On completion of this course, the students will be able to Understand various quantitative & statistical methods. Understand data and draw inference from data. Calculate and interpret statistical values by using statistical tool (correlation & regression) Demonstrate an ability to apply various statistical tool to solve business problem
4	104	Show proficiency in basic accounting concepts, conventions and understanding of the accounting process. Understand the process and preparation of financial statements for Sole Proprietorship and Company and Departmental Business Organizations
5	201	Develop the ability to explain core economic terms, concepts, and theories. Explain the function of market and prices as allocative mechanisms. Apply the concept of equilibrium to both microeconomics and macroeconomics. Identify key macroeconomic indicators and measures of economics change, growth, and development.
6	202	Management theories help organizations to focus, communicate, and evolve. Using management theory in the workplace allows leadership to focus on their main goals. When a management style or theory is implemented, it automatically streamlines the top priorities for the organization.
7	203	To maximise profits and sustain profitability, revenue as well as cost should be managed. Effective cost management will free up cost and capital funds, which then can be reinvested to grow the business or spent on other investment opportunities.
8	204	Upon completion of this course, students will be able to: Relate the basic concepts and technologies used in the field of

		management information systems; Compare the processes of developing and implementing information systems. Outline the role of the ethical, social, and security issues of information systems. Translate the role of information systems in organizations, the strategic management processes, with the implications for the management. Apply the understanding of how various information systems like DBMS work together to accomplish the information objectives of an organization.
9	301	Ability to discuss psychological factors unique to organizations. Ability to identify psychological factors unique to individuals working in organizations. Ability to discuss topics such as selection, performance appraisal and training. Ability to discuss topics such as team building, task groups, and leadership. Ability to identify some of the psychological perspectives essential to the role of the manager (e.g., influence, authority, etc.). Major Content Areas. Decision, Planning and Monitoring Systems. Organizing tasks, People & Culture. Leading and Empowering People. Conflict resolution, Working Conditions and Job Satisfaction. Group dynamics and Personality types. Organizational Change and Renewal.
10	302	To understand the Business Ethics and to provide best practices of business ethics. To learn the values and implement in their careers to become a good managers. To develop various corporate social Responsibilities and practise in their professional life To Imbibe the ethical issues in corporate governance and to adhere to the ethical codes
11	303	To make the students understand the various services offered and various risks faced by banks To make them aware of various banking innovations after nationalization To give them an overview about insurance industry To make the students understand various principles, provisions that govern the Life General Insurance Contracts
12	304	Business Law examines the role of the law on all aspects of business ownership and management. Throughout the course, students focus on legal ethics, court procedures, torts, contracts, consumer law, property law, employment law, environmental law, and international law.
13	305	At the completion of the course the learner will be able to: develop vocabulary and improve the accuracy in grammar. produce words with right pronunciation. Improve LSRW- listening, speaking, reading and writing skills and the related sub-skills.
14	401	Upon successful completion of Financial Management, the student will be able to: Demonstrate an understanding of the overall role and importance of the finance function. Demonstrate basic finance management knowledge. Communicate effectively using standard business terminology.

15	402	On completion of this course, the students will be able to Students will demonstrate Strong conceptual knowledge in the functional area of marketing management. Effective understanding of relevant functional areas of marketing management and its application. Analytical skills in identification and resolution of problems pertaining to marketing management.
16	403	Critically assess existing theory and practice in the field of HRM Develop an ability to undertake qualitative and quantitative research Apply knowledge about qualitative and quantitative research to an independently constructed piece of work Respond positively to problems in unfamiliar contexts Identify and apply new ideas, methods and ways of thinking Demonstrate competence in communicating and exchanging ideas in a group context Be able to advance well-reasoned and factually supported arguments in both written work and oral presentations Work effectively with colleagues with diverse skills, experience levels and way of thinking Be able to evaluate HRM related social, cultural, ethical and environmental responsibilities and issues in a global context
17	404	Identify the elements of operations management and various transformation processes to enhance productivity and competitiveness Analyze and evaluate various facility alternatives and their capacity decisions, develop a balanced line of production & scheduling and sequencing techniques in operation environments Develop aggregate capacity plans and MPS in operation environments. Plan and implement suitable materials handling principles and practices in the operations. Plan and implement suitable quality control measures in Quality Circles to TQM
18	405	Master core concepts and methods from ecological and physical sciences and their application in environmental problem solving. Master core concepts and methods from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions. Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems. Understand the transnational character of environmental problems and ways of addressing them, including interactions across local to global scales. Apply systems concepts and methodologies to analyze and understand interactions between social and environmental processes. Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world. Demonstrate proficiency in quantitative methods, qualitative analysis,

		critical thinking, and written and oral communication needed to conduct high-level work as interdisciplinary scholars and/or practitioners.
19	501	To analyze and compare different models used to explain individual behaviour related to motivation and rewards. to identify the processes used in developing communication and resolving conflicts. to explain group dynamics and demonstrate skills required for working in groups (team building)
20	502	Defines the functions of financial markets and intermediary institutions. Explains why interest rates changes. Explains Efficient Market Hypothesis. Explains effects of asymmetric information on financial markets Explains the reasons of financial crisis. Explains functions of Central Banks. Distinguishes effects of money market tools on the financial system. Computes economic value of bonds. Computes economic value of stocks. Explains the structure of banking industry. Explains functions of investment banks. Compares for an exchange regimes.
21	503	Upon completing requirements for this course, the student will be able to: Explain use of advertising and sales promotion as a marketing tool. Describe advertising and sales promotional appeals. Explain appropriate selection of media. Discuss means of testing effectiveness of advertising and sales promotion.
22	504	Upon completion of this course, students will be able to: 1. Relate the basic concepts and technologies used in the field of management information systems; 2. Compare the processes of developing and implementing information systems. 3. Outline the role of the ethical, social, and security issues of information systems. 4. Translate the role of information systems in organizations, the strategic management processes, with the implications for the management. 5. Apply the understanding of how various information systems like DBMS work together to accomplish the information objectives of an organization.
23	505	To develop an understanding of social environment To develop an understanding of cultural environment Understanding the linkages among social, cultural and scientifc/business environment
24	601	Upon completion of this course, the students will be able to: Discuss different methodologies and techniques used in research work. Explain basic computer skills necessary for the conduct of research. Assess the basic function and working of analytical

		instruments used in research. Propose the required numerical skills necessary to carry out research.
25	602	The student will be able to: Demonstrate an understanding of basic concepts in organizational behavior. Demonstrate an understanding of the intricacies of marketing planning and overall marketing. Demonstrate an understanding of the concepts underlying corporate financial decision making
26	603	Gaining knowledge about organizational development process. How to change and develop organizations. Better understanding of the change management model. Skills needed to develop an action plan for the development process.
27	604	Introduction of research, its meaning, definition, nature & significance. Classification of research• & literary research. Collection materials, to choose research topic•
28	605	Upon completion of the course students should be able to: 1. Analyze the impact of E-commerce on business models and strategy. 2. Describe the major types of E-commerce. 3. Explain the process that should be followed in building an E-commerce presence. 4. Identify the key security threats in the E-commerce environment. 5. Describe how procurement and supply chains relate to B2B E-commerce.

P G DEPARTMENT OF COMPUTER SCIENCE
COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	CS-1.1	Data Structure and Algorithms: The students learn the basic knowledge of data structures and their implementations, understand importance of data structures in context of writing efficient programs & develop skills to apply appropriate data structures in problem solving.
2	CS-1.2	Computer System Architecture: It gives the basic structure, function, characteristics, design of the various functional units and components of computer system.
3	CS-1.3	Database Systems & Implementation: This paper provides the basic introduction to database system technologies like - design, concurrency, security and backup/recovery issues of database management systems.
4	CS-1.4	Discrete Mathematical Structures: The course provides the students with an overview of discrete mathematics. Students will learn about topics such as logic and proofs, sets and functions, recursion, graph theory, matrices, Boolean algebra and other important discrete math concepts.
5	CS-1.5	Object Oriented Design using UML: This Object-Oriented Analysis and Design Using UML teaches the students how to effectively use object-oriented technologies and software modelling as applied to a software development process.
6	CS-1.6	Algorithms Lab: This paper helps the students to write programs to solve problems using divide and conquer strategy, backtracking strategy & greedy and dynamic programming techniques.
7	CS-1.7	Database Lab: This paper provides basic database concepts, applications, data models, schemas and instances, demonstrates the use of constraints and relational algebra operations, describes the basics of SQL and construct queries using SQL.

8	CS-2.1	Computer Networks: The course gives knowledge about computer network organization and implementation, obtaining a theoretical understanding of data communication and computer networks.
9	CS-2.2	Advanced JAVA: It helps students to develop error-free, well-documented Java programs, develop and test Java network, search engine, and web framework programs, learn how to write, test, and debug advanced-level Object-Oriented programs using Java.
10	CS-2.3	Operating System Design: It gives the ability to learn real life applications of Operating System in every field, learn different memory management techniques, understands the different services provided by Operating System at different level, understands the use of different process scheduling algorithm and synchronization techniques.
11	CS-2.4	Theory of Computation: This paper introduces students to the mathematical foundations of computation including automata theory; the theory of formal languages and grammars; the notions of algorithm, decidability, complexity, and computability, enhance students' ability to understand and conduct mathematical proofs for computation and algorithms.
12	CS-2.5	Data Mining: It helps students to understand basic applications, concepts, and techniques of data mining, to develop skills for using recent data mining software to solve practical problems in a variety of disciplines, to gain experience doing independent study and research.
13	CS-2.6	JAVA Programming Lab: It provides fundamentals of object-oriented programming in Java. It helps to understand various concepts of JAVA, to familiarize Java environment to create, debug and run simple Java programs, to demonstrate java compiler and eclipse platform and learn how to use Net Beans IDE to create Java Application.

14	CS-2.7	Operating Systems Lab: It gives an understanding of the design aspects of operating system concepts through simulation, introduce basic Unix commands, system call interface for process management, interprocess communication and I/O in Unix
15	CS-3.1	Artificial Intelligence: The students learn to demonstrate fundamental understanding of the history of AI, its foundations & applications, to apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning, demonstrate proficiency in applying scientific method to models of machine learning
16	CS-3.2	Software Engineering: It provides an understanding of the working knowledge of the techniques for estimation, design, testing and quality management of large software development projects
17	CS-3.3	Compiler Design: It Provides an understanding of the fundamental principles in compiler design, the skills needed for building compilers for various situations, learn the process of translating a modern high-level language to executable code required for compiler construction.
18	CS-3.4	Network Security: Students will understand basics of Cryptography and Network Security, able to secure a message over insecure channel by various means, learn about how to maintain the Confidentiality, Integrity and Availability of a data, understand various protocols for network security to protect against the threats in the networks.
19	CS-3.5	Mobile Computing: Student will be able to understand the basic concepts of mobile computing, learn the basics of mobile telecommunication system, familiar with the network layer protocols and Ad-Hoc networks, gain knowledge about different mobile platforms and application development
20	CS-3.6	AI Programming Lab:
21	CS-3.7	Software Engineering Lab:
22	CS-4.1	Comprehensive Viva:
23	CS-4.2	Project Work and Viva Voce:

DEPARTMENT OF M.A PMIR

COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	General Management	The study of management will provide you with the tools and skills needed to land leadership positions, head up your own company, as well as manage teams, individuals, and organizations effectively.
2	Industrial Relations	Students learns the relation in the industry created by the diverse and complex attitudes and approaches of both management and workers in connection with the management of the industry.
3	Labour Legislations	Students learns The basic subject matter of labour law can be considered under nine broad heads: employment; individual employment relationships; wages and remuneration; conditions of work; health, safety, and welfare; social security; trade unions and industrial relations; the administration of labour law; and special provisions for labours.
4	Industrial Sociology and Psychology	Students will able to understand the study of people at work and is concerned with the entire spectrum of human beings. Its scope is the entire process of management dealing with people at work.
5	Organizational Behaviour	The study of organizational behaviour gives insight on how employees behave and perform in the workplace. It helps us develop an understanding of the aspects that can motivate employees, increase their performance, and help organizations establish a strong and trusting relationship with their employees.
6	Human Resource Management	It is a comprehensive and strategic approach that of managing the workplace environment, culture, and the people involved.
7	Human Resource Development	Students get to know how to deals with the development of human resources for efficient utilization of these resources in order to achieve the individual, group and organizational goals.
8	Strategic Management	It is a comprehensive and strategic approach that of managing the workplace environment, culture, and the people involved.
9	Industrial and Managerial Economics	Students will able to learn The subject matter of industrial economics incorporates the study of theory of the firm, decision regarding price, investment, location of firms, wages of labour, advertising strategy, elements of market structure, demand analysis, determinants of profitability, industrial policy and government regulation
10	Research Methodology and Statistics	A research methodology gives research legitimacy and provides scientifically sound findings. It also provides a detailed plan that helps to keep researchers on track, making the process smooth, effective and manageable.

11	Management Information System	Studying the management of informational systems allows you to understand the demands put on employees and practical ethical challenges that may arise in the future. Studying management information system is going to make you understand the role of information technology in the company.
12	Marketing management	This management field deals with advertising and making strategies for expanding the public reach of the company.
13	Financial management	Finance management deals with the management of the financial assets of the company. It also focuses on generating increased revenue for the company for better results.
14	Total Quality Management and productivity Management	Also known as Production and Operation Management, this department deals with industrial processes, planning, and control. This ensures a smooth and quality transaction at every level.

DEPARTMENT OF COMMERCE (PG)
M.COM COURSE OUTCOME

Sl. No.	Core	COURSE OUTCOME
1	CC – I	MC -1.1MANAGEMENT CONCEPTS AND PRACRTICES Familiarize the students with the developments of management principles and practices.
2	CC - II	MC - 1.2STATISTICS FOR MANAGEMENT The objective of this course is to make the students learn the application of statistical tools and techniques for decision making.
3	CC - III	MC – 1.3 CORPORATE FINANCIAL ACCOUNTING The objective of this course is to expose students to advanced accounting issues and practices such as maintenance of company accounts, valuation of goodwill and shares, and handling accounting adjustments.
4	CC - IV	MC – 1.4FINANCIAL MANAGEMENT The objective of this course is to enable the students to understand the fundamentals of financial management in the context of a corporate entity. It attempts to acquaint them with different dimensions of financial management with a focus on the application of the relevant tools and techniques of financial decision-making aimed at shareholder's wealth maximization.
5	CC - V	MC-1.5ACCOUNTING FOR MANAGERIAL DECISION MAKING The objective of this course is to acquaint students with the accounting concepts, tools and techniques for managerial decisions.
6	CC - VI	MC – 1.6 INSURANCE MANAGEMENT The course aims at developing necessary skills for applying the principles of financial analysis to management of funds by commercial banks and the insurance sector.
7	CC - VII	MC – 2.1 BUSINESS ENVIRONMENT The Course develops ability to understand and scan business environment analysis opportunity and take decisions under uncertainty.
8	CC - VIII	MC – 2.2 ORGANISATION BEHAVIOUR The objective of this course is to help students understand the conceptual framework of Interpersonal and organizational Behaviour.
9	CC - IX	MC – 2.3 MARKETING MANAGEMENT The objective of this course is to facilitate understanding of the conceptual framework of marketing and its applications in decision making under various environmental context.
10	CC - X	MC – 2.4 MANAGERIAL ECONOMICS This course develops managerial perspective to economic fundamentals as aids to decision making under given environment.
11	CC - XI	MC – 2.5 SMALL BUSINESS MANGEMENT The objective of the present course is to sensitize the students about the role of SME sector in the economic development of the country. The present course also includes discussion on various functions of small scale units including tools and techniques of project preparation and appraisal.
12	CC - XII	MC – 2.6 SOCIAL SURVEY & RESEARCH METHODOLOGY The Objective of this course is to acquaint students the concepts Social Survey and Research. They will also be provided inputs research methods, research methodology, and process of research the process of

		research the process of report writing.
13	CC - XIII	MC – 3.1 PROJECT REPORT Presentation and Viva-Voce:
14	CC - XIV	MC – 3.2: STRATEGIC MANAGEMENT The objective of this course is to enhance decision making abilities of students in situation of uncertainty in a dynamic business environment.
15	CC - XV	MC – 3.3 FINANCIAL INSTITUTIONS AND MARKETS This course aims at providing students with an understanding of the structure, organization and working of financial markets and Institutions in India.
16	CC - XVI	MC – 3.4ECONOMIC ANALYSES FOR DECISION MAKING This course develops managerial perspective to economic fundamentals as aids to decision making under given environment.
17	CE - I	MC – 3.5 ADVANCED ACCOUNTING The objective of the course is to expose the students to advanced company account as well as specialized accounts for different types of organization. OR MC – 3.8 MERCHANT BANKING AND FINANCIAL SERVICES To know the conceptual, functional, and regulatory aspects of India Capital Market and Merchant Banking activities
18	CE - II	MC – 3.6 CORPORATE TAX PLANNING To provide a conceptual idea about the various provisions of the Income Tax Act. related to the corporate sector and study the implications of these provisions on the tax planning of the companies OR. MC – 3.9 INTERNATIONAL FINANCE To provide a theoretical and practical understanding of the issues involved in international finance from the perspective of a company engaged in international trading.
19	CE - III	MC – 3.7 ADVANCED AUDITING To gain expert knowledge of current audit practices and procedure and apply them in auditing engagements. OR MC – 3.10 SECURITY ANALYSIS This paper intends to make the students understand about markets available for securities trading, its pricing and valuation and strategies used in bond valuation
20	CC - XVII	MC – 4.1 CORPORATE GOVERNANCE & BUSINESS ETHICS The objective of the paper is to provide a theoretical understanding of the issues involved in corporate governance and business ethics from the perspective of a company manager engaged in welfare of the stakeholders.
21	CC - XVIII	MC – 4.2 MANAGEMENT OF FINANCIAL INSTITUTIONS The objective of the present course is to provide a comprehensive knowledge to the students about the role of financial institutions in the economy and the way these institutions, specially the commercial banks manage the asset and liabilities side of the balance sheet.
22	CE - IV	MC – 4.3 INTERNATIONAL ACCOUNTING To acquaint the students regarding the international dimensions of accounting, foreign currency translation, transactional reporting and efforts at harmonization.

		OR MC – 4.6 PORTFOLIO MANAGEMENT The objective of this course is to help students understand various aspect of security analysis & portfolio management.
23	CE - V	MC – 4.4 ACCOUNTING STANDARDS AND CORPORATE REPORTING To provide an understanding of the accounting standards of ASB and IASB, and to study the corporate reporting practices in India. OR MC – 4.7 RISK MANGMENT & DERIVATIVES This course will familiarize the students in the application of various tools and techniques of financial risk management.
24	CE - VI	MC – 4.5 ACCOUNTING FOR NPOs To help students understand the basic principles of preparing and presenting financial statements and reports of NPOs. OR MC – 4.8 FINANCIAL REGULATORY FRAMEWORK The basic purpose of this course is to enable the students to have fundamental knowledge about the financial regulatory systems prevailing in India.