

DEPARTMENT OF APPLIED NUTRITION

SEMESTER -I

BASICS OF BIOCHEMISTRY

COURSE CODE: AN101

COURSE OUTCOMES

Unit 1: Introduction to Nutrition& Carbohydrates -

CO1: Understanding of nutrition basics - food groups, body needs for nutrients and carbohydrates – sources, process of digestion, metabolism and utilization.

CO 2: Gain knowledge about carbohydrates, their role and utilization in body processes and understand biological cycles involved in carbohydrate metabolism.

Unit 2: Proteins & Nucleic Acids -

CO3: Understand proteins and their role and utilization in body processes and learn about the metabolism of amino acids.

CO 4: Gain Knowledge on basic structure and functional significance of nucleic acids.

Unit 3: Lipids

CO5: Understand lipid metabolism and their role in human nutrition. Learn about the consequences of high fat consumption in the diet.

CO 6: Gain Knowledge about essential fatty acids and their deficiency.

Unit 4: Energy Metabolism

CO7: Gain knowledge about types of energy and principles of calorimetry. Understand the concept of Recommended Dietary Allowance.

CO 8: Determines energy value of various and understand the concept of Basal Metabolic Rate.

NUTRITIONAL BIOCHEMISTRY

COURSE CODE: AN201

COURSE OUTCOMES

Unit 1: Vitamins-

CO1: Understand the importance of Fat-soluble vitamins in human nutrition, including their classification, sources, and the effects of excess and deficiency.

CO 2: Understand the importance of water-soluble vitamins in human nutrition, including their classification, sources, and the effects of excess and deficiency.

Unit 2: Minerals

CO3: Understand the role of minerals in human nutrition, including their classification, sources, and comprehend the functions of minerals with health

CO 4: Understand the role of Zinc and Selenium as antioxidants.

Unit 3: Water balance and Electrolyte balance

CO5: Gain knowledge on Water metabolism: Distribution of water in body fluids, Regulation of water metabolism.

CO 6: Knowledge about acid base balance & imbalance in the body. Japanese Water Therapy.

Unit 4: Enzymes and Hormones

CO7: Understand Role of Enzymes human physiology

CO 8: Understand Role of Hormones in human physiology

FOOD SCIENCE & TECHNOLOGY

COURSE CODE: AN301

COURSE OUTCOMES

Unit 1: Basics of Food Science, Cereals & Millets

CO1: Understand the role of food in human nutrition and. Learn various cooking techniques and how to minimize nutritional loss while cooking.

CO 2: Learn the significance of functional foods like cereals and millets and their role in cookery.

Unit 2: Pulses & Legumes, Milk & Milk Products

CO 3: Understand the importance of pulses and legumes and their role in cookery.

CO 4: Understand the significance of milk and milk products in cookery and gain knowledge about different types of fermented & non-fermented milk product

Unit 3: Fleshy Foods, Spices, Condiments & Beverages

CO5: Acquire knowledge about different fleshy foods and their role in cookery.

CO 6: Understand the active compounds and medicinal properties of various spices and condiments used Indian cookery.

Unit 4: Vegetables & Fruits, Sugar & Jaggery, Fats & Oils

CO7: Understand the composition and nutritive value of fruits and vegetables.

CO 8: Understand Role Sugar & jaggery and fats & oils in cookery.

FAMILY & COMMUNITY NUTRITION

COURSE CODE: AN401

COURSE OUTCOMES

Unit 1: Basics of Meal Planning

CO 1: Understand the concept of a balanced diet and RDA concept.

CO 2: Understand menu planning principles, and the needs of different physiological age groups.

Unit 2: Nutritional Requirement during Pregnancy, Lactation & Infancy

CO 3: Understand the changes and complications during pregnancy and nutrient requirements of pregnant and lactating women.

CO 4: Identify the many stages of infant development and growth. Acquire knowledge on factors to be considered while preparing & introducing supplementary foods.

Unit 3: Nutrient Requirement for Pre-Schoolers, School Going Child & Adolescent

CO 5: Identify feeding issues and factors affecting nutritional status in Preschoolers.

CO 6: Understand the nutritional concerns during pre-school, school going and adolescent ages, planning of packed lunches.

Unit 4: Nutrition Requirement for Geriatric Group & Nutritional Assessment

CO 7: Understand the nutritional needs of the elderly, basics and importance of Nutritional Assessment in clinical practice.

CO 8: Understand the method of Assessment of Nutritional status.

SKILL ENHANCEMENT COURSE
FOOD SERVICE MANAGEMENT

COURSE CODE: AN300

COURSE OUTCOMES

- CO 1:** Understand the Principles of management, difference between Commercial & Non-commercial food service institutions
- CO 2:** Learn different Food management techniques such as Menu construction, Menu planning, types of menus and food service styles.
- CO 3:** learn the nuances of Setting up food service establishment
- CO 4:** Understand the financial management aspect of the food service industry and gain sufficient knowledge to launch his or her own food service company.

SEMESTER-V

FOOD SAFETY AND QUALITY CONTROL

COURSE CODE: AN501

COURSE OUTCOMES

- CO 1:** Explain the application of food quality management and food safety system. Understand the physical, chemical and microbiological contaminants.
- CO 2:** Learn about GM Foods and BSE. Examine and analyze the suitability of different food packaging to ensure they comply with Indian laws.
- CO 3:** Understand different food contaminants of metals, mineral, plant, and Animal origin. Evaluate safety of food ingredients and analyze and identify potential risks in the food chain.
- CO 4:** Develop the skill of reading nutritional labels, certification of the packaged food products and be able to judge the status of claims and misleading descriptions (with respect to Indian standards).
- CO 5:** Understand various mycotoxins and phycotoxins and conceptualize the concept of adulteration in food products.
- CO 6:** Recognize the importance of food additives in the production of food products and gain knowledge about allowable additives and their limits in processed foods. Recognize radioactive pollutants from a variety of sources.
- CO 7:** Acquire knowledge on different properties and microbiology of foods. Learn how to use culture techniques to investigate microbial food contamination
- CO 8:** Interpret the chromatographic techniques. Understand how to execute HACCP. Understand various areas of Food Safety & Quality Assurance and comprehend food quality managements systems.

SEMESTER-V

GENERAL ELECTIVE FUNDAMENTALS OF FOOD & NUTRITION

COURSE CODE: AN500

COURSE OUTCOMES

- CO 1:** Define food and understand the various types of foods that are available in the market.
- CO 2:** Understand the functions and sources of nutrients, and different physiological processes by which food is absorbed in the human body
- CO 3:** Acquire knowledge on Pre & probiotics foods and understand the benefits of gut microflora.
- CO 4:** Develop the skill of reading nutritional labels, certification of the packaged food products.
- CO 5:** Learn how to store raw and cooked foods.
- CO 6:** Understand the concept of adulteration in food products and identify common adulterants present in food.
- CO 7:** Identify the kinds of organisms found on the human body, that may cause food contamination and illustrate the link between personal hygiene and food safety.
- CO 8:** Demonstrate the principles of personal hygiene appropriate to safe food handling.

SEMESTER-VI

PUBLIC HEALTH, FOOD HYGIENE & SANITATION

COURSE CODE: AN601

COURSE OUTCOMES

- CO 1:** Explain the history and philosophy of public health as well as its core values, concepts, and functions across the globe and in society.
- CO 2:** Understand Epidemiological methods, vector management and different control strategies. Understand different food borne infections and toxic effects of specific food toxicants
- CO 3:** Define health education and state the objectives of health education. Apply the public health and community health education interventions to real life situations
- CO 4:** Understand the functioning of Primary health care system and the importance of using Audio-visual aids in health education. Demonstrate a wide range of skills in the use of mass media to spread health awareness and develops own audiovisual aids for this purpose.
- CO 5:** Learn about various national and international organizations that work in the field of public health and their missions.
- CO 6:** Conceive the concept of adulteration in food products and identify different adulterants in everyday foods. Apprehend National and International Food standards and food laws.
- CO 7:** Understand the importance and role of Consumer Education and Protection and explain the basic concepts related to Consumer Education and Protection.
- CO 8:** Explore transfer and career opportunities in health-related professions.

SEMESTER-VI

ADVANCED NUTRITION

COURSE CODE: AN602

COURSE OUTCOMES

- CO 1:** Understand the history and development of food technology industry. Appreciate the role of food technology in combating malnutrition in developing countries.
- CO 2:** Comprehend the role of physical, chemical and microbial agents in spoilage of foods and methods of their control
- CO 3:** Explain general principles of food preservation and Apply the principles and methods involved in the processing of different foods.
- CO 4:** Understand home scale methods of food preservation and apply them in real life situation and understand and compare various commercial methods of preservation.
- CO 5:** Learn about packaging systems and safety and legislative requirements and explain various types of packaging material, their properties used in packaging of food product and labelling.
- CO 6:** Understand the Packaging requirements of food categories and explain packaging of different food products like cereals, vegetables, fruits, meat, fish.
- CO 7:** Define & understand properties of functional foods, Antioxidants and nutraceuticals and appreciate their role in health and disease.
- CO 8:** Apply knowledge gained in food microbiology, processing, and preservation of safe, nutritious, and high-quality food products and Identify service providers for developing Entrepreneur/business establishment.

DEPARTMENT OF BOTANY

SEMESTER-I

Course Code:BOT101

Course Outcomes

After completion of the course the student is able to:

CO1.Understand the characteristics of bacteria and viruses

CO2. Identify the characteristics of algae

CO3. Understand the classification and characteristics of fungi

CO4. Identify the classification and characteristics of bryophytes

CO 5.Understand the morphological diversity of Bryophytes and Pteridophytes

CO 6.Know the taxonomic position, occurrence, thallus structure, reproduction of Bryophytes.

Co7.Know the evolution of Bryophytes and Pteridophytes

SEMESTER-II

Course Code: BOT201

Course Outcome

After completion of the course the student is able to:

- CO1. Understand the diversity of Gymnosperms and economic importance.
- CO2. Know the evolutionary trends and affinities of living gymnosperms with respect to external and internal features
- CO3. Know the conceptual development of “taxonomy” and “systematics”
- CO4. Learn the types of classifications- Natural and phylogenetic.
- CO5. Learn about the characters of biologically important families of angiosperms.
- CO 6. Know the floral variations in angiospermic families, their phylogeny and evolution.
- CO 7. Understand various rules, principles and recommendations of plant nomenclature in plant identification.
- CO8. Understand the concept, types, development and functions of various ecosystems and their communication.
- CO9. Study of herbarium techniques.
- CO 10. Learn the taxonomic evidences from cytological, embryological, numerical and chemicals.

Plant Anatomy and Embryology

Course Code: BOT304

Course Outcomes

After completion of the course the student is able to:

CO1. Develop an understanding of concepts and fundamentals of plant anatomy

CO2. Examine the internal anatomy of plant systems and organs

CO3. Develop critical understanding on the evolution of concept of organization of shoot and root apex.

CO4. Analyze the composition of different parts of plants and their relationships.

CO5. To identify and compare structural differences among different taxa of vascular plants.

CO6. Learn about double fertilization and their significance.

CO 7. To know the structure and development of monocot and dicot embryos.

Skill Enhancement Course SEC-1 (Credits -2)

SEC-2 Biofertilizers and Organic Farming

Course Code: SEC/BOT301

Course Outcomes:

After completion of the course the student is able to:

CO1. To Learn the importance of Nursery and Gardening, the career and occupational opportunities

CO2. To Learn the techniques of gardening - Types, methods & Tools

CO3. The students will acquire sufficient academic and practical experiences and become self-employed in the nursery ventures.

CO4. The students will learn about how to prepare suitable soil media for potting up, seedling and cutting.

CO5. To impart the skills like germinating seed and transplant seedlings and cutting into pots

CO6. To understand the entrepreneurial skills in nursery technology

Cell Biology, Genetics and Plant Physiology

Course Code: BOT404

Course Outcome

After completion of the course the student is able to:

CO1. To explain the structure of Cell components and their functions.

CO2 .To describe cell division in plants.

CO3.To have knowledge of the nature and function of genes, processes of inheritance .

CO4.To describe linkage,crossing over and mutations .

CO5. Understand water relation of plants with respect to various physiological processes.

CO 6.Explain chemical properties and deficiency symptoms in plants

CO 7.Explain the significance of Photosynthesis and respiration

SEMESTER-IV

Skill Enhancement Course

SEC-4 Mushroom Culture Technology

Course Code: SEC/BOT402

Course Outcomes:

After completion of the course the students are able:

CO1. To provide an adequate knowledge about importance and habitation of mushroom.

CO2. To get knowledge of nutritional value, cultivation unit and storage methods.

CO3. To acquire knowledge about spawn and spawning techniques.

CO4. To understand the factors influencing the mushroom cultivation and post harvesting methods.

CO5. The students will acquire sufficient academic and practical experiences and become self-employed in the mushroom

Semester-V
Generic Elective
Industrial Microbiology

Course Code: BOT501

Course Outcome:

- CO1.** Understand the concept and role of microbes in industry and environment.
- CO2.** Critically analyze the types of bioreactors and the fermentation process.
- CO3.** Evaluate the role of microorganisms in industry and microbes in agriculture.
- CO4.** Reflect upon different Landscaping practices and garden design
- CO5.** Develop skills on the remediation process of contaminated soil

Semester-V

BIODIVERSITY AND CONSERVATION

Course Code: BOT502

Course Outcomes:

- CO1.** Understand the various concepts of Biodiversity, values and factor influence its loss
- CO2.** Identify the threats to biodiversity and its habitat loss.
- CO3.** Understand the need for conservation of biodiversity.
- CO4.** Understand the role of Plants in relation to Human life.

SEMESTER-VI

TISSUE CULTURE & BIOTECHNOLOGY

CourseCode:BOT602

Course Outcomes:

CO1.To provide students with an understanding of principles and techniques of plant tissue culture

CO2 .Understand the basic knowledge about tissue culture tools, medium, sterilization and techniques of tissue culture.

CO3. Study about the role of tissue culture in crop improvement.

CO4. Understand the fundamentals of Recombinant DNA

CO5. Know about the Genetic Engineering.

CO6. Analyze the enzymes and vectors for genetic manipulations

CO7. Concepts, tools and techniques related to in vitro propagation of plants.

CO8. Understand the principle and basic protocols for Plant Tissue Culture.

DEPARTMENT OF BIOTECHNOLOGY

SEMESTER- I

COURSE CODE : BT101

Course outcomes:

- Students develop an understanding of the Cytoskeleton and Cell Membrane & discuss the structure of Microtubules, microfilaments & can differentiate the organisms by its cell structure
- Students can explain various process in cell division
 - To understand the basic unit of the organism.
 - To differentiate the organisms by its cell structure.
 - To know Components of the Cell and their division.
 - To explain the arrangement of Genes and their interaction.
 - To describe the influence of the environment on gene expression.
 - To understand extra nuclear inheritance, linkage & crossing over

SEMESTER-II

Biochemistry and Microbiology

COURSE CODE: BT201

Course outcomes:

- After completion of Biochemistry program students will be able to get exposed
- To develop strong theoretical and practical background in fundamental concepts.
- To get insights of multiple important technical areas of Biochemistry.
- To apply contextual knowledge and modern tools of biochemical research for solving problems.
- To give students a generalized idea about microbiology its basic aspects
- Course will provide practical knowledge about different types of bacteria, virus and fungi found in environment
- principles and applications of various types of Microscopy
- Students would know about the contribution of microbiologists, the principle and application of various types of microscopic techniques, and different staining protocols
- Study the morphology of bacteria and detailed account of bacterial cell structure
- Classify microorganisms through Bergey's manual and apply basic knowledge of nutrients required by different microorganisms for their growth
- Students would be able to understand characteristics of viruses, classification and life cycles of viruses
- Description of the structure and Classification, staining, culturing, physiology, of microorganisms

SEMESTER-III

MOLECULAR BIOLOGY & RECOMBINANT DNA TECHNOLOGY

COURSE CODE:BT301

Course Outcomes:

- Learning structural levels of nucleic acids- DNA and RNA and genome organization in prokaryotes and eukaryotes.
- Understanding the concept of Gene and the gene architecture.
- Overview of the central dogma of life and various molecular events
- Overview of the central dogma of life and various molecular events
- Understanding the principles and applications of Polymerase Chain Reaction(PCR).
- Molecular Events of Transcription and processing of transcripts, RNA editing.
- Described the knowledge of recombinant DNA technology
- Understood the tools of gene manipulation and gene transfer
- Knowledge of construction and labeling of molecular probe, construction of genomic library and protein engineering.
- Understood the techniques of recombinant DNA technology and its applications
- Came to know about the techniques and applications of human genome projects
- Molecular Events of Translation leading to protein synthesis and Post translational modification.
- Understanding the regulation of gene expression in prokaryotes using operon concept and Eukaryotes.
- Learn the methods of DNA sequencing and various tools and techniques of molecular biology.

SEMESTER-IV

Bioinformatics and Biostatistics

COURSE CODE: BS405

Course Outcomes:

- Store and Retrieve drug related information using online tools
- Comprehend the utility of tools & databases available in genomic & proteomics
- Understand simple calculations, to plan and execute research designs
- Analyse data, interpret, information and compare observed data

SEMESTER- V
GENERIC ELECTIVE (GE)

BASICS IN BIOTECHNOLOGY

COURSE CODE: BS503

Course Outcomes:

- About various tissue culture techniques to culture by *invitro* techniques and molecular farming
- Various fermentation techniques and process of production of the fermented foods and chemicals
- Applications of animal cell culture and use the assisted reproductive technology in livestock and its applications.
- Store and Retrieve drug related information using online tools and Comprehend the utility of tools & databases available in genomic & proteomics

SEMESTER –V

PLANT BIOTECHNOLOGY

COURSE CODE:BT 601

Course outcomes:

- Learning important milestones in the plant tissue culture.
- Understanding the concepts and principles of Plant tissue culture.
- Learning the techniques of sterilization and monitoring methods of sterilization.
- Learning different pathways of plant regeneration under in vitro conditions - organogenesis and somatic embryogenesis.
- Techniques of establishing cell suspension culture. Synthetic seeds and applications.
- Understanding the techniques of virus elimination – methods of virus indexing. Meristem and Shoot tip culture and Applications.
- Performing procedures for Micropropagation techniques in rose and banana.
- Culturing of reproductive structures - anther, microspores, embryos, endosperm, Ovule and ovary cultures and methods to produce haploids.
- Protoplast isolation, culture and protoplast fusion - applications -. Somaclonal variation - applications.
- Learning methods to conserve germplasm under In vitro. Production of Secondary metabolites production through cell culture.

SEMESTER -VI

ANIMAL BIOTECHNOLOGY

COURSE CODE :BT 801

Course outcomes:

- Outline the history and structure of animal cell
- To illustrate the techniques, procedure and growth patterns of animal cell culture.
- To describe in vitro applications of animal cell culture
- To distinguish the structure of gametes and its application in animal cell culture.
- To use the assisted reproductive technology practiced in livestock and its applications
- To construct the techniques in production of cloned animals and its applications.
- To predict the ethical, social and moral issues related to cloning
- To Construct techniques involved in transgenic animal technology and its applications
- To apply the applications of Gene therapy for the treatment of various diseases.

DEPARTMENT OF BUSINESS ADMINISTRATION
SEMESTER-1
PRINCIPLES OF MANAGEMENT

COURSE CODE: BB104

COURSE OUTCOMES

CO-1. Student understand the meaning, principles and evolution of management and further to enhance their knowledge in its functions.

CO-2: To present the importance of Planning and Decision Making.

CO-3: To acquaint student the concepts of Organizing, Span of Management, Patterns of organization and Common organizational structures.

CO-4: To present the sources of recruitment and Training.

CO-5 : To present the emerging issues in management.

SEMESTER-I

BASICS OF MARKETING

COURSE CODE: BB105

COURSE OUTCOMES

CO-1: To understand the concept of Marketing and Selling.

CO-2: To understand the concept of Market Segmentation and its importance in marketing.

CO-3: To present process of new product development.

CO-4: To present the techniques New Product Development and Pricing decisions during the life of a product.

CO-5: To understand the importance and effectiveness of Promotional Mix.

SEMESTER-I
BUSINESS ECONOMICS

COURSE CODE: BB106

COURSE OUTCOMES

- CO-1: To understand nature and scope of Business Economics.
- CO-2: To comprehend the Demand Concepts and Elasticity of Demand.
- CO-3: To apprehend theory of production and cost concepts.
- CO-4: To learn short and long run cost curves and economies and diseconomies of scale.
- CO-5: To grasp the concept of market and its structures.

SEMESTER-II

ORGANIZATIONAL BEHAVIOUR

COURSE CODE: BB204

COURSE OUTCOMES

CO-1: To understand nature, factors influencing and scope of Organizational development.

CO-2: To comprehend the concept, importance and theories of motivation and Leadership.

CO-3: To apprehend of groups and group dynamics.

CO-4: To understand the concept of management of Change.

CO-5: To grasp the concept of Organizational Culture, Conflict and Effectiveness

SEMESTER-II

BUSINESS STATISTICS

COURSE CODE: BBA205

Course Outcomes:

CO-1: To understand the importance of Statistics in Business decisions and classification of data.

CO-2: To introduce the measures of central tendency.

CO-3: To understand the significance and requisites of measuring dispersions, Skewness and kurtosis.

CO-4: To help the students in understanding the importance of Index Numbers in business decisions.

CO-5: To understand the concept of Correlation and Regression in business decisions

SEMESTER-II

FINANCIAL ACCOUNTING

COURSE CODE: BB206

Course Outcomes

CO-1 : To understand the purpose and principals of Accounting and nature of Accounts.

CO-2: To learn preparation of various types of books.

CO-3: To learn preparation of Financial Statements.

CO-4: To learn analyzing of Financial Statements,

CO-5: To understand the importance of Accounting Standards, procedure for issue and importance of IFRS and Ind-AS

SEMESTER-III

HUMAN RESOURCE MANAGEMENT

COURSE CODE: BB304

Course Outcomes

CO1- To Understand basic Human Resource Management concept and environment

CO2- To Acquire Human resources, its planning and job analysis.

CO3-To Understand developing about Human Resources such as Training, Career planning.

CO4-To Understand Labour Management

CO5- To Understand performance appraisal

SEMESTER-III

INFORMATION TECHNOLOGY FOR BUSINESS

COURSE CODE: BB305

Course Outcomes

- CO1- Implement basic computer system such as Hardware, Software, Memory and Network & its Topologies.
- CO2- To Understand the concepts of Information systems and DBMS
- CO3- To Understand the concepts of multimedia
- CO4- To Understand Internet concepts & security issues.
- CO5- To Understand applications of office Management.

SEMESTER-III
FINANCIAL MANAGEMENT

COURSE CODE: BB306

Course Outcomes

- CO1- To understand the meaning of financial management and to know the difference between Profit Maximization and Wealth Maximization.
- CO2- To understand the concept of Time value of Money and its importance in decision making.
- CO3 – Awareness as to sources of long-term finances.
- CO-4 - To understand how to manage Working Capital Management.
- CO-5 - To understand how to manage Receivables.

SEMESTER-IV

BUSINESS LAW & ETHICS

COURSE CODE : BBA404

COURSE OUTCOMES:

CO1: To understand Introduction of law & Indian Contract act and its case studies

CO2: To Understand about special contracts and sale of goods act.

CO3: To Understand about company , its formation, directors,meetings.

CO4: To understand consumer protection law in India, rights of consumer awareness, Pollution and Environmental Control Law

CO5: To Understand Business ethics and efficiency.

SEMESTER-IV

MARKET RESEARCH

COURSE CODE: BBA402

COURSE OUTCOMES:

CO-1 : To understand the need for marketing research and process of marketing research.

CO-2 : To present various sources of data and its collection.

CO-3 : To present various sources of secondary data

CO-4: To understand various measurement and scaling techniques.

CO-5: To understand various Sampling methods available.

SEMESTER-IV

MANAGEMENT SCIENCE

COURSE CODE: BB406

COURSE OUTCOMES:

CO-1: To understand the production and operations process and its functions.

CO-2 To understand the importance of capacity planning, factory location, plant layout, sequencing of operations and work study

CO-3: To present the various purchase and stores management techniques.

CO-4: To know the importance of Operations Research and Linear Programming.

CO-5: To understand Transportation, Assignment and Queuing techniques.

SEMESTER-V

BRAND MANAGEMENT

COURSE CODE: BB504

COURSE OUTCOMES:

CO1- TO understand the nature, scope and the meaning with significance of branding.

CO2- TO create the awareness in branding and advertising and their strategies.

CO3- To understand the concept of brand extensions .

CO4- TO learn about the brand positioning and re-positioning personality.

CO5- To understand the sources of branding and the concept of brand equity.

SEMESTER-V

RETAIL MANAGEMENT

COURSE CODE: BB505

COURSE OUTCOMES:

CO1- To understand the role of retailing and concept of FDI in Indian Retailing.

CO2- To understand the theories and formats of Retail Development.

CO3- To know the meaning of Merchandising and analysing performance.

CO4- To create the awareness of Retail store designs and its significance.

CO5- To know the role of physical distribution management.

SEMESTER-V

CUSTOMER RELATIONSHIP MANAGEMENT

COURSE CODE: BB506

Course Outcomes:

CO1- To understand the concept and evolution of Customer Relationship.

CO2- To Know the CRM concepts and its significance.

CO3- To know the steps in the planning and Strategy development process in CRM.

CO4- To understand the CRM marketing initiatives and service sectors.

CO5- TO understand the Implementation problems in CRM

SEMESTER-VI

BUYER BEHAVIOUR

COURSE CODE : BB604

Course Outcomes:

CO1-Be able to identify the dynamics of human behavior and the basic factors that influence the consumers' decision process

CO2-To understand the depth concept & theories of Consumer buying Behavior

CO3-To Know the impact of culture on Buyer Behavior.

CO4- To understand and evaluate the alternatives in the buying decision process.

CO5-To understand different models of buyer behavior and be able to demonstrate how they may be applied to marketing strategy

SEMESTER-VI

ADVERTISING AND SALES PROMOTION

COURSE CODE : BBA605

Course Outcomes:

CO1-It helps the students to understand the importance of advertisements for promotion of products.

CO2 -To understand Communication decision process, Types of Advertisements, Creative Approaches and Execution styles. Advertisement Appeals.

CO3- Identify the different range and characteristics of media evaluate the effectiveness of different media in relation to advertising.

CO4-Students will have the ability to demonstrate the theories and concepts that are central to personal selling.

CO5-To understand different types and tools of Sales promotion and Implement the best sales management strategy for organization

SEMESTER-VI
RURAL MARKETING

COURSE CODE : BB606

Course Outcomes:

CO1.To expose the learners to the issues of Rural markets ,Reforms andDevelopment in the last few decades.

CO2.To help the students in understanding the nature ,characteristics ofruralmarkets and consumers and their buying decision process.

CO3.To understand Product Mix Decisions and Competitive product strategiesfor Rural Markets.

CO4.To understand Innovative pricing methods for Rural Markets , AppropriateMedia & Designing Right Promotion Mix.

CO5.To analyze appropriate channels of distribution and to explore new approaches to reach out rural markets

COMMERCE

SEMESTER-I

FINANCIAL ACCOUNTING - I

COURSE CODE: BCOM101

COURSE OUTCOMES

After completion of the course the student is able to:

1. Acquire conceptual knowledge of basics of accounting.
2. Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP.
3. Describe the role of accounting information and its limitations.
4. Equip with the knowledge of the accounting process and preparation of final accounts of soletraders.
5. Identify and analyze the reasons for the difference between cash book and pass book balances.
6. Recognize circumstances providing for increased exposure to errors and frauds.

SEMESTER-I

BUSINESS ORGANISATION AND MANAGEMENT

COURSE CODE: 102

COURSE OUTCOMES

1. Understand the scope of Business, and its importance.
2. Describe the Social Responsibility and Ethics of Business
3. Analyse different forms of business organizations
4. Identify various vital documents of a company
5. Learn various sources Industrial Financial resources
6. Explain the functioning of Stock Exchanges & Mutual funds.

SEMESTER – II

FINANCIAL ACCOUNTING-II

COURSE CODE: 201

COURSE OUTCOMES

1. Appreciate the need for negotiable instruments and procedure of accounting for them
2. Evaluate the concept of Consignment and learn its accounting treatment
3. Distinguish Joint Venture and Partnership and to learn the methods of maintaining records under Joint Venture.
4. Determine the ascertainment of profit under Single Entry system.
5. Understand the meaning and features of Non-Profit Organizations
6. Prepare Receipts & Payment Account, Income & Expenditure Account and Balance Sheet for Non-Profit Organizations.

SEMESTER- II
BUSINESS – LAW

COURSE CODE: 202

COURSE OUTCOMES

1. Demonstrate, understand and communicate all the Legal Terminology of Business.
2. Understanding Development of Business Law in India.
3. Outline Essentials of a valid Contract and agreements expressly declared to be void.
4. Wagering Agreements from Contingent contracts and classify different modes of Discharge.
5. Acquire knowledge about Sale of Goods Act 1930 and Consumer Protection Act 1986.
6. Explain Intellectuals Property Right , Information Technology Act & Environmental Protection

SEMESTER – III
ADVANCED ACCOUNTING

COURSE CODE :301

COURSE OUTCOMES

1. Prepare financial accounts for partnership firms in different situations .
2. Prepare financial statements for partnership firms on dissolution of the firm.
3. Apply the New Companies Act provisions regarding Company accounts.
4. Evaluate the different ways for a company to raise finances from the public .
5. Understand Profits prior to incorporation of a Company.
6. Understand the need and methods of valuation of shares and goodwill.

SEMESTER – III

BUSINESS STATISTICS –I

COURSE CODE : 303

COURSE OUTCOMES

1. Express the fundamentals of Statistics.
2. Understand basic statistical concepts such as statistical collection, statistical series, tabular and graphical representation of data.
3. Calculate measures of central tendency, dispersion and asymmetry
4. Interpret the meaning of the calculated statistical indicators.
5. Choose a statistical method for solving practical problems.
6. Predict values of strategic variables using regression and correlation analysis.

SEMESTER – III

SKILL ENHANCEMENT COURSE (SEC-2) PRINCIPLES OF INSURANCE

COURSE CODE: 203

COURSE OUTCOMES

1. Identify and categorize the various risks faced by an organization & individuals
2. Relate to the role of Insurance in economic development of society and social security.
3. Understand the basic terminology and Principles of Insurance.
4. Describe the difference between Life & Non –Life insurance Products.
5. Able to understand the various policies of Insurance.

SEMESTER – IV

INCOME TAX

COURSE CODE: 401

COURSE OUTCOMES

1. Acquire the complete knowledge of basic concepts of income tax
2. Illustrate the concept of exempted incomes.
3. Calculate Residential status of a person.
4. Compute the income under the head "Income from Salary"
5. Compute income under the head "Income from House Property"
6. Compute income under the head "Income from Business or Profession"
7. Apply the conceptual and legal knowledge about Income Tax provisions .
8. Computation of Income from different heads with reference to an Individual Assessee.
9. Identify intra and inter head set of losses and carry forward of losses.
10. Understand clubbing of income and the term aggregation of income.
11. Identify various deductions under section u/s80 C to 80 U 6. Assessing income, calculate tax liability and file E-returns.

SEMESTER – IV
BUSINESS STATISTICS – II

COURSE CODE: 402

COURSE OUTCOMES

1. Describe the various techniques of Advanced Statistics in the field of commerce.
2. Select appropriate statistical techniques for summarizing and displaying business data.
3. Analyze and draw inferences from business data using appropriate statistical methods.
4. Interpret and communicate the results of a statistical analysis in the context of a business problem.
5. Understand and use simple forecasting techniques.
6. Understand the concept of Index Numbers , Probability and theoretical distribution

SKILL ENHANCEMENT COURSE (SEC-4)

PRACTICE OF LIFE AND GENERAL INSURANCE

COURSE OUTCOMES

1. Analyse the growth of insurance business in India.
2. Explain the Organizational structure of LIC & various types of Policies.
3. Understand the meaning of various insurance policies offered to Organizations.
4. Apply the meaning of assignment & Nomination.
5. Describe about Policy claim procedure.
6. Evaluate survival benefits & various kinds of claims.

SEMESTER – V
COST ACCOUNTING

COURSE CODE : 501

COURSE OUTCOMES

1. Imbibe conceptual knowledge of cost accounting.
2. Select the costs according to their impact on business.
3. Differentiate methods of schedule costs per unit of production and calculating stock consumption.
4. Identify the specifics of different costing methods and interpret the impact of the selected costs method.
5. Apply cost accounting methods to evaluate and project business performance.
6. Demonstrate mastery of costing systems, cost management systems, budgeting systems and performance measurement systems

SEMESTER – V

COMPUTERIZED ACCOUNTING

COURSE CODE: 502

COURSE OUTCOMES

1. Acquire the knowledge of computer software.
2. Understand the limitations of manual accounting and advantages of computerized accounting.
3. Integrate technical skills with financial accounting procedures.
4. Explain the process of maintaining inventory and day-to-day transactions in Tally accounting software.
5. Manage account receivables and payables in ERP.
6. Able to generate MIS reports.

SEMESTER – VI

COST CONTROL AND MANAGEMENT ACCOUNTING

COURSE CODE601

COURSEOUTCOME

1. Understand various costing systems and management systems.
2. Analyse and provide recommendations to improve the operations of organisations through the application of Cost and Management accounting techniques.
3. Evaluate the costs and benefits of different conventional and contemporary costingsystems.
4. Differentiate methods of schedule costs as per unit of production.
5. Differentiate methods of calculating stock consumption.
6. Identify the specifics of different costing methods
7. Analyze cost-volume-profit techniques to determine optimal managerial decisions.
8. Apply cost accounting methods for both manufacturing and service industry.

SEMESTER – VI

THEORY AND PRACTICE OF GST

COURSE CODE : 602

COURSE OUTCOMES

After completion of the course the student is able to:

- 1 . Know the various provisions of GST Act 2017.
2. Practice various provisions of GST in Tally ERP 9.1.
3. Learn and compare various tax rates for goods and services under GST .
4. Practice the advance entries and adjustments relating to various transactions.
5. Generate the various reports and upload in the GST portal .

DEPARTMENT OF COMPUTER SCIENCE

SEMESTER-I

Programming in C

COURSE CODE: BS106

COURSE OUTCOME:

1. Know concepts in problem solving
2. To do programming in C language
3. To write diversified solutions using C language

Semester-II

Programming in C++

COURSE CODE: BS206

Course Outcome:

1. To understand how C++ improves C with object-oriented features.
2. To learn how to write inline functions for efficiency and performance.
3. To learn the syntax and semantics of the C++ programming language.
4. To learn how to design C++ classes for code reuse.
5. To learn how to implement copy constructors and class member functions.
6. To understand the concept of data abstraction and encapsulation.
7. To learn how to overload functions and operators in C++.
8. To learn how containment and inheritance promote code reuse in C++.
9. To learn how inheritance and virtual functions implement dynamicbinding with polymorphism.
10. To learn how to design and implement generic classes with C++ templates.
11. To learn how to use exception handling in C++ programs.

SEMESTER-III

Data Structures using C++

COURSE CODE: BS306

Course Outcome:

1. To impart the basic concepts of data structures and algorithms
2. To understand concepts about searching and sorting techniques
3. To Understand basic concepts about stacks, queues, lists, trees and graphs
4. To understanding about writing algorithms and step by step approach in solving problems withthe help of fundamental data structures

SEMESTER-IV

Database Management Systems

COURSE CODE: BS406

Course Outcome:

1. Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL.
2. Design ER-models to represent simple database application scenarios
3. Convert the ER-model to relational tables, populate relational database and formulate SQL queries on data.
4. Improve the database design by normalization.
5. Familiar with basic database storage structures and access techniques: file and page organizations, indexing methods including B tree, and hashing.

SEMESTER-V

Programming in JAVA

COURSE CODE: BS505

Course Outcome:

1. Gain knowledge about basic Java language syntax and semantics to write Java programs and use concepts such as variables, conditional and iterative execution methods etc.
2. Understand the fundamentals of object-oriented programming in Java, including defining classes, objects, invoking methods etc and exception handling mechanisms.
3. Understand the principles of inheritance, packages and interfaces.

SEMESTER-V

Operating System

COURSE CODE: BS506

Course Outcome:

1. Identify the role of Operating System. To understand the design of control unit.
2. Understanding CPU Scheduling, Synchronization, Deadlock Handling and Comparing CPUScheduling Algorithms. Solve Deadlock Detection Problems.
3. Describe the role of paging, segmentation and virtual memory in operating systems.
4. Description of protection and security and also the Comparison of UNIX and Windows based OS.
5. Defining I/O systems, Device Management Policies and Secondary Storage Structure and Evaluation of various Disk Scheduling.

SEMESTER-VI
COMPUTER NETWORKS

COURSE CODE: BS605

Course Outcome:

1. Describe the general principles of data communication.
2. Describe how computer networks are organized with the concept of layered approach.
3. Describe how signals are used to transfer data between nodes.
4. Implement a simple LAN with hubs, bridges and switches.
5. Describe how packets in the Internet are delivered.
6. Analyze the contents in a given data link layer packet, based on the layer concept.
7. Design logical sub-address blocks with a given address block.
8. Decide routing entries given a simple example of network topology
9. Describe what classless addressing scheme is.
10. Describe how routing protocols work.
11. Use C programming language to implement network programs.
12. Design and implement a network protocol.

SEMESTER-VI
PHP with MySQL

COURSE CODE: BS606

Course Outcome:

1. List the major elements of the PHP & MySQL work and explain why PHP is good for web development
2. Learn how to take a static website and turn it into a dynamic website run from a database using PHP and MySQL.
3. Analyze the basic structure of a PHP web application and be able to install and maintain the web server, compile, and run a simple web application.
4. Learn how databases work and how to design one, as well as how to use php MyAdmin to work with MySQL.
5. Learn different ways of connecting to MySQL through PHP, and how to create tables, enter data, select data, change data, and delete data. Connect to SQL Server and other data sources

DEPARTMENT OF COMPUTER APPLICATIONS (B.COM)

SEMESTER – I

Fundamentals of Information Systems

Course Code: DSC103

Course Outcomes:

- 1) Block Diagram Of a computer, Generations of Computer, Classification Of Computers, Applications of Computer, Capabilities and limitations of computer.
- 2) explains computers and data processing
- 3) defines input and output units computers
- 4) Knows the terms of motherboard, CPU, RAM, ROM, BIOS, CMOS and can express with their own words.
- 5) Identifies and explain computer hardware Defines hardware and software concepts
- 6) Expresses memories hardware will be to able express basic computer hardware
- 7) Operating System definition and types of Operating System.
- 8) Describes the communication units of computers.

SEMESTER – II

PROGRAMMING WITH C & C++

Course Code: DSC203

Course Outcomes:

- 1) Demonstrate an understanding of computer programming language concepts. To be able to develop C programs on Linux platform.
- 2) Ability to design and develop Computer programs, analyzes, and interprets the concept of pointers, declarations, initialization, operations on pointers and their usage.
- 3) Able to define data types and use them in simple data processing applications also he/she must be able to use the concept of array of structures.
- 4) Student must be able to define union and enumeration user defined data types. Develop confidence for self education and ability for life-long learning needed for Computer language.
- 5) To understand how C++ improves C with object-oriented features.
- 6) To learn the syntax and semantics of the C++ programming language.
- 7) To learn how to design C++ classes for code reuse.
- 8) To understand the concept of data abstraction and encapsulation.
- 9) To learn how containment and inheritance promote code reuse in C++.

SEMESTER – III

RELATIONAL DATABASE MANAGEMENT SYSTEM

Course Code: DSC 303

Course Outcomes:

1. Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL.
2. Design ER-models to represent simple database application scenarios
3. Convert the ER-model to relational tables, populate relational database and formulate SQL queries on data.
4. Improve the database design by normalization.
5. Familiar with basic database storage structures and access techniques: file and page organizations, indexing methods including B tree, and hashing.
6. Need for Distributed Database Systems , Structure of Distributed Database , Advantages and Disadvantages of DDBMS , Advantages of Data Distribution , Disadvantages of Data Distribution , Data Replication , Data Fragmentation and Client Server Databases.

SEMESTER – IV
WEB TECHNOLOGIES

Course Code: DSC 403

Course Outcomes:

- 1) Students are able to develop a Static and dynamic webpage.
- 2) Form data sent from client, process it and store it on database data sent from client and store it on database.
- 3) Creating Java Script Programs
- 4) Explain the Events and Event handlers
- 5) Creating XML Document

SEMESTER – V

EXCEL FOUNDATION

Course Code: DSC 506

Course Outcomes:

- 1) Examine spreadsheet concepts and explore the Microsoft Office Excel environment.
- 2) Create, open and view a workbook.
- 3) Save and print workbooks.
- 4) Enter and edit data.
- 5) Modify a worksheet and workbook.
- 6) Work with cell references.
- 7) Learn to use functions and formulas.
- 8) Create and edit charts and graphics.
- 9) Filter and sort table data.
- 10) Work with pivot tables and charts.
- 11) Import and export data.
- 12) Tables And Formatting
- 13) Excel Files & Templates
- 14) Printing the Work

SEMESTER – V

Computer Applications E-COMMERCE

Course Code: DSC 506

Course Outcomes:

- 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.
- 6) Consumer Oriented E-Commerce Applications
- 7) Electric Data Interchange
- 8) E-Marketing techniques.

SEMESTER-VI
Computer Applications
BUSINESS ANALYTICS PROGRAMMING

Course Code: DSE608

Course Outcome:

- 1) Students to know the MySQL Installer, Download sample Database, Loading SampleDatabase, Structured Query Language, Data types.
- 2) Creating the tables, Joins , Constraints and Sub Queries.
- 3) Students learn the SAS, Installation of SAS university Edition, SAS architecture, Data Types, formats and informats, libraries, Importing external data, Reading and manipulating Data, functions, Data Transformations.
- 4) Installation of Anaconda Navigator, Data types – string, tuples, set, lists, dictionary, Arrays.
- 5) Installation of R studio, Vectors, Matrices, Data types, Importing files, Writing files, Merging Files, Data Manipulation and Data Cleaning, Functions.

DEPARTMENT OF CHEMISTRY

SEMESTER- I

COURSE CODE: CHE101

COURSE OUTCOMES:

- Differentiate the type of bonds present in the given molecule.
- Identify hybridization, structure of molecule and their bond angles.
- Interpret the Factors responsible for any Organic chemical reaction to take place.
- Identify the composition of matter which is made up of atoms and molecules.
- Describe the characteristics of states of matter and how states of matter are affected by the parameters (Pressure, Volume and Temperature)

DEPARTMENT OF CHEMISTRY

SEMESTER- II

COURSE CODE: CHE201

COURSE OUTCOMES:

- To get acquainted with application of VSEPR theory in explaining structure and bonding.
- To interpret nature of compounds of p block elements.
- To understand about the inert nature of Zero group elements, factors responsible for their reactivity and explaining structure and bonding.
- To get acquainted with characteristics of d block elements.
- To understand about the preparations, physical & chemical properties of classes of organic compounds.
- To know the basic principles of electrochemistry and its applications in daily life.
- To understand the nature of dilute solutions and its properties.

SEMESTER- III

COURSE CODE: CHE301

COURSE OUTCOMES:

Inorganic Chemistry

- Predict the nature of lanthanides and actinides and their influence on the other elements of periodic table
- Analyze the geometry, stability, magnetic properties and isomerism of coordination compounds
- With the basics of 18 valence electron rule, It will help students to predict the stability of metal carbonyls
- Using the knowledge of organometallic compounds, students can design new synthetic pathways for the synthesis of novel compounds, Hence creating an interest in research and development.

SEMESTER- IV

COURSE CODE: CHE401

COURSE OUTCOMES:

Inorganic Chemistry

- Identify the geometries associated with various d-orbital splitting patterns, predict and analyse the stability, magnetic properties and spectra of coordination compounds
- Determine the stability of compounds / complexes and predicting the feasibility of reaction using HSAB rule
- Determine the complex composition using jobs method and mole fraction method, using this knowledge students can synthesis and analyse the new coordination compounds
- Importance of micro and macro inorganic compounds for the human body.

SEMESTER V

Paper-V

Spectroscopy and Chromatography

COURSE CODE: CHE506

COURSE OUTCOMES:

- Gaining practical knowledge of handling chemicals and analytical instruments
- Explain principle and Applications of analytical and chromatographic techniques
- Students will be able to describe the common methods and main methods of spectroscopic and chromatographic analysis
- Assess and suggest a particular analytical technique and evaluate sensitivity
- Explain theoretical principle in separation and structure elucidation
- Able to interpret the structure with help of spectra
- Gain knowledge on importance of instrumental methods than chemical methods.
- Gain knowledge on principles involved in various techniques.

DEPARTMENT OF CHEMISTRY

SEMESTER- V

Generic Elective (GE) Course

**Chemistry of Cosmetics, Food Processing, Drugs and
Pharmaceuticals**

COURSE CODE: CHE501

COURSE OUTCOMES:

- Chemicals which are used to prepare cosmetics and perfumes
- Broad idea of adulteration of food and how to identify adulterated food
- Develop skills on food processing and food packing methods
- Differentiate the diseases according to the symptoms.
- Classify the drugs based upon chemotherapy, Pharmacodynamics properties.
- Describe development, regeneration and normal function of body systems.
- Select the dose for a drug.
- Formulate and evaluate conventional dosage forms.
- Develop the drug synthesis.

SEMESTER-VI

Medicinal Chemistry Paper-VI

COURSE CODE:CHE6011301

COURSE OUTCOMES:

- Basic knowledge in pharmaceuticals in addition to understand the types of diseases, drugs used to cure specific diseases, concept of ADME, mode of action etc.
- Differentiate the diseases according to the symptoms.
- Classify the drugs based upon chemotherapy, Pharmacodynamics properties.
- Understanding of basic biological and pharmacological interactions
- Use of corresponding knowledge for the development of clinically active drugs
- Drug design and analytical methods
- Relate the structure and physical properties of drugs to pharmacological activity
- Correlating the pharmacology of disease and its cure
- Drug metabolic pathways, adverse effect and therapeutic value of drug
- Chemical synthesis of some drugs
- The importance of vitamins, hormones in the growth and development of human body.

SEMESTER-1

Data Science

Paper – I: Fundamentals of Information Technology

COURSE OUTCOMES:

Students should be able to

1. Identify the components of a computer and their functions.
2. Understand the concept of networking, LAN, Internet, and working of www.
3. Understand the notion of problem solving using computer by programming
4. Understand the notion of Software Project and the Process of software development

SEMESTER-1I

Data Science

Paper – II : Problem Solving and Python Programming

COURSE OUTCOMES:

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

1. Develop algorithmic solutions to simple computational problems.
2. Develop and execute simple Python programs.
3. Develop simple Python programs for solving problems.
4. Structure a Python program into functions.
5. Represent compound data using Python lists, tuples, dictionaries.
6. Read and write data from/to files in Python Programs

SEMESTER-III

Data Science

Paper–III: Data Engineering with Python

COURSE OUTCOMES:

- Handle different types of files and work with text data
- Use regular expression operations
- Use relational databases via SQL
- Use tabular numeric data
- Use the data structures: data series and frames
- Use PyPlot for visualization

SEMESTER-IV

Data Science

Paper-IV: Machine Learning

COURSE OUTCOMES:

- Basics of Machine Learning and its limitations
- Machine Learning Algorithms: supervised, unsupervised, bio-inspired
- Probabilistic Modeling and Association Rule Mining

DEPARTMENT OF ENGLISH

SEMESTER -I

Course code: ENG101

Course Outcomes:

CO1. To understand the varieties of cultures, languages, poetic diction, use of language, imagery, etc., through exposure to various Poems, Essays, Short Stories, and One Act Plays.

CO2. To acquire the knowledge of language skills, poetic diction, vocabulary, dialogue writing, etc.

CO3. To read and appreciate the prescribed literary selections for pleasure, and to analyze and interpret the given poem, essay, short stories for narrative technique and moral behind them

CO4. To apply the acquired knowledge of grammar and vocabulary to the real time situation through practice of conversation, essay writing and exercises.

CO5. Students would understand different sounds, nuances and their proper enunciation in English Language

CO6. Student would be able to speak and write grammatically correct sentences on learning all parts of grammar and tenses

CO7. Students would be able to understand the root words, their origin, prefixes, suffixes, homophones, Homographs, Homonyms and their meanings.

CO8. Students would be able to identify commonly miss-spelt words and would be able to formulate new words using prefixes such as, un-, dis-, and suffixes like, -ment, -tion, -sion, etc.

CO9. Students would be able to learn right usage of punctuation marks like, Capitalization, Full stops, Comma, in a sentence

CO10. Students learn to start and sustain a formal conversation. They would be capable to describe their course of study and would also be able to leave a voicemail or make an appointment over phone.

CO11. Students would enhance their reading competence by reading about some of the historical incidents and inspirational people

CO12. Students develop their creative writing skills through précis writing and dialogue writing

CO13. This helps to build self confidence and would enable the student to speak confidently in any official or unofficial conversations.

CO14. Students would be able to develop a positive mindset by knowing about themselves, their strengths and the points they could develop for a successful life

SEMESTER -II

Course code: ENG201

Course Outcomes:

After completion of the course a student is able to

CO1. To understand the varieties of cultures, languages, poetic diction, use of language, imagery, etc., through exposure to various Poems, Essays, Short Stories, and One Act Plays.

CO2. To acquire the knowledge of language skills, poetic diction, vocabulary, dialogue writing, etc.

CO3. To Understand and appreciate the musical quality given by meter, rhyme and rhythm in poetry and the idiomatic expressions in prose sections

CO4. To apply the acquired knowledge of grammar and vocabulary to the real time situations through practice of conversation, essay writing and exercises.

CO5. Students would understand different Affricate sounds, Plosive sounds, Approximant sounds& their proper enunciation in English Language

CO6. Student would be able to speak and write grammatically correct sentences on learning all parts of grammar and tenses

CO7. To develop reading, writing and comprehension skills apart from the vocabulary and usage.

CO8. Students would be able to identify commonly miss-spelt words and would be able to formulate new words using suffixes like, -ment, -al,-ance,-ence, -able,-ible, etc.

CO9. Students would be able to learn right usage of punctuation marks like, Hyphen, Em-dash,in a sentence

CO10. Student learns to start and sustain a formal conversation. They would be capable to describe their course of study and would also be able to leave a voicemail or make an appointment over phone.

CO11. To analyze and interpret the socio-cultural aspects based on the prescribed prose texts

CO12. To acquire the knowledge of business writing skills like note making, formal letters and informal letters.

CO13. This helps to build leadership skills and also helps in the overall etiquette building&grooming of the students

CO14. Student would be able to develop a positive mindset by knowing about themselves, their strengths and the points they could develop for a successful life

SEMESTER -III

Course code: ENG301

Course Outcomes:

CO1. To Understand and appreciate the musical quality given by meter, rhyme and rhythm in poetry of Indian and World Poets

CO2. Students would also be able to get a glimpse of colonial literature.

CO3. Students would get a brief idea of some of the technical terms of business English, their antonyms, synonyms. They also would be able to use right usage of idioms.

CO4. The advanced grammar like the concord and connectives further enriches the students' usage of English.

CO5. Students would be able to present their opinions and ideas more effectively by learning writing techniques like, Discursive essay method and Argumentative essay method.

SEMESTER- IV

COURSE CODE:ENG401

Course Outcomes:

CO1. To Understand and appreciate the musical quality given by meter, rhyme and rhythm in poetry of Indian and World Poets

CO2. Students would also be able to get a glimpse of colonial literature.

CO3. Students would get a brief idea of some of the technical terms of business English, their antonyms, synonyms. They also would be able to use right usage of idioms.

CO4. The advanced grammar like the Reported Speech and Voice helps the students to present their opinions more effectively.

CO5. Students would become more office ready by learning to write Business reports and media reports.

SEMESTER- III

Skill Enhancement Course (SEC)

COURSE CODE:SEC/ENG301

Course Outcomes:

CO1. To understand the various elements of poetry such as diction, tone, genre, imagery, figures of speech, symbolism, theme and other stylistics

CO2. To be able to locate grammar in Prose, to develop prose style, and to understand the difference between the formal and the informal

CO3. To be able to understand and use the techniques of Report Writing: Business Reports and Media Reports

CO4. To be able to use the Idioms, phrases, one word substitutions, synonyms and Antonyms and other vocabulary related elements in writing essays and oral communication

SEMESTER –V, VI

Course code: ENG501

Course Outcomes:

CO1: The students will be equipped with language skills and critical thinking capabilities

CO2: Enables the students to use English effectively in real world context

CO3: Enriches the students with vocabulary skill and making them use the right word at right time.

CO4: Provides wide exposure on appropriacy of language use in different contexts

**DEPARTMENT OF ELECTRONICS
SEMESTER – V**

DIGITAL ELECTRONICS

Course code: 3311

Course Outcomes:

1. Imbibe conceptual knowledge of Electronics.
2. Differentiate methods of analog and digital Electronics
3. Apply digital Electronics to daily appliances.
4. Demonstrate mastery of various Gates and applications

SEMESTER – V
GE – BASIC ELECTRONICS

Course code: 3312

Course Outcomes:

- Able to learn about forward biased and reversed biased circuits.
- Able to plot the V-I Characteristics of diode and transmission.
- Able to design combinational logic circuits and PLDs.

SEMESTER – VI

MICRO CONTROLLER & APPLICATION

Course code: 3313

Course Outcomes:

1. Understand various components of 8051 microcontroller.
2. Analyse and provide recommendations to improve the operations of micro controller.
3. Evaluate the Characteristics of 8051 micro controller.
4. Differentiate methods of Digital Electronics applications in circuits.

DEPARTMENT OF ECONOMICS

SEMESTER-1

MICRO ECONOMICS

COURSE CODE: ECO 101

Course Outcomes:

CO1. Understand in details with examples Concepts of Micro and Macro Economics. CO2. Understand in depth Laws of Utility.

CO3. Learn in details with examples meaning and properties of indifference curve. CO4. Deliberate in depth cost and revenue concepts.

CO5. Specify the details of concepts of Marginal cost and Marginal revenue CO6. Understand the details of meaning and types of markets. .

CO7. . Learn in depth types of Imperfect Competition CO8. Deliberate the characteristics of Price Discrimination.

CO9. Identify the classification and characteristics of Kinked Demand Curve.

SEMESTER-II
MACRO ECONOMICS

COURSE CODE: ECO 201

COURSE OUTCOMES

CO1. Identify in details with examples Key variables of Macro Economics.

CO2. Understand in details with examples Concepts of National Income.

CO3. Identify in depth Marginal Efficiency of Capital.

CO4. Specify the details of Concept of Multiplier.

CO5. Identify the characteristics of Keynesian Macro Economics.

CO6. Deliberate in depth Liquidity Theory of money.

CO7. Identify the characteristics of Demand for Money.

CO8. Identify in details with examples Concept if Inflation.

CO9. Learn the classification and characteristics of Trade Cycles.

SEMESTER-III

STATISTICS FOR ECONOMICS

COURSE CODE: ECO 301

COURSE OUTCOMES

CO1. Understand the classification and characteristics of Population Census versus Sample Survey. CO2. Specify the details of Measures of Central Tendency

CO3. Learn about the Measures of Dispersion. CO4. Understand in depth Karl Pearson Method

CO5. Learn in details with application, Index Numbers CO6: Learn the details of Introduction to Time series.

SEMESTER-IV
INDIAN ECONOMY

COURSE CODE : ECO 401

COURSE OUTCOMES

- CO1. Understand the characteristics of Indian economy.
- CO2. Identify the classification and characteristics of Indian Agriculture.
- CO3. Write down the classification and characteristics of New Industrial Policy.
- CO4. Specify in depth Public and Private Sector.
- CO5. Identify in depth the details of Planning Commission and NITI Ayog.
- CO6. Understand in depth the new economic reforms.
- CO7. Identify the details of Liberalisation, Privatisation and Globalisation.

SEMESTER-V

DEVELOPMENT ECONOMICS

COURSE CODE: ECO 501

Course outcomes

CO1. Learn in depth Understand the concept of Economic development and factors that affect Development.

CO2. Deliberate in details with examples differentiate between Economic development and growth. CO3. Identify the characteristics of Economic Development.

CO4. Understand the Rodan's and Lewis' theories of Development. CO5. Identify the details of theories of Under development.

CO6. Deliberate in depth of Balanced and Unbalanced Growth theory.

DEPARTMENT OF ECONOMICS

B.A. HONOURS

SEMESTER-1

Paper I

HISTORY OF ECONOMIC THOUGHT

COURSE OUTCOMES:

- To expose the students to different schools of Economic thought.
- Students should be familiar with the origin and development of economic theory.
- They should be able to identify four distinct systems of Economic theory(Classical, Marxian, Neoclassical and Keynes) and their characteristics.

SEMESTER-1

Paper II

NATIONAL INCOME ACCOUNTING

COURSE OUTCOMES:

- To make the students understand Economic processes of Production, Exchange , Distribution and also accounting of the same.
- To make the students understand the components and methods of computing National Income.
- To make student understand the challenges in computing national Income with reference to India and States.
- To provide foundation to learn Macro Economic theory.

SEMESTER-1

Paper III

MATHEMATICS-I

COURSE OUTCOMES:

- The course aims at a quick refresher of basic algebra with an orientation of applications in Economics.
- The course provide the mathematical foundation for subsequent courses in quantitative methods.

SEMESTER-1

Paper III

SATISTICS-I

COURSE OUTCOMES:

- Students will learn to use Statistical concept and measures with reference to major Economic data sets.
- Students will learn to use MS-Excel of any advanced version to compute descriptive statistics.

DEPARTMENT OF ECONOMICS

B.A. HONOURS

SEMESTER-1I

Paper I

MICRO ECONOMICS-I

COURSE OUTCOMES:

- The course is focused on analysis of prices and markets under non-competition conditions.
- Students will learn methods of price and output determination under general imperfect competition with special reference to Oligopoly.

SEMESTER-1I

Paper II

MACRO ECONOMICS-I

COURSE OUTCOMES:

- The course approaches the behaviour of the aggregate economy from the standpoint of conventional (demand-supply-equilibrium) theory.
- The behaviour of the aggregate economy is analysed in terms of levels of output, employment and prices and change therein.
- Students are introduced to theories of money and inflation.
- Students will appreciate the same problems from an open economy perspective.

SEMESTER-1I

Paper III

MATHEMATICS-II

COURSE OUTCOMES:

- This course builds on tools and concepts introduced in Mathematics I course and enables the students to develop methods used in general economic theory.
- Particular emphasis will be placed on solving problems of optimization

SEMESTER-1I

Paper IV

STATISTICS-II

COURSE OUTCOMES:

- The course introduces the student to basic concepts of statistical theory.
- Students will learn to apply statistical theory to problems of sampling, estimation and inference.

DEPARTMENT OF GEOGRAPHY

SEMESTER – I

Elements of Geomorphology

Course Code :GEO 101

Course Outcomes:

- Learn the details of theories regarding origin and evolution of the Earth system
- Comprehend the details of theories disclosing changes on earth's crust
- Understand the classification and characteristics of Composition of the Earth
- Learn about the intrusive forces of the earth such as earthquakes, volcanoes etc.
- Learn in details about extrusive forces with examples geomorphic agents

SEMESTER – II

Climatology and Oceanography

Course code: GEO201

Course Outcomes:

- Understand in details with application, if applicable, atmospheric structure and composition
- Learn in details regarding temperature distribution, global pressure systems, windsystems etc.
- Understand in details with application, if applicable, relief of the ocean floor
- Learn the details of theories regarding origin of sea waves and ocean currents.

SEMESTER – III

SEC - : Surveying Techniques and Cartography

COURSE CODE : SEC/GEO/301

Course Outcomes:

- Understand in details with application, if applicable, evolution of surveying
- Write down in details of classification and procedures of types of surveying
- Understand in details with application, if applicable, evolution of cartography
- Write down in details with examples map scale
- Understand the details of representation of data

SEMESTER – III

Human Geography

COURSE CODE : 301

Course Outcomes:

- Write down the details of human geography importance
- Deliberate in details with examples race, religion and language study
- Specify the details of demographic age transition study
- Understand in details with application, if applicable, population composition
- Learn in details with application, if applicable, human settlement study

SEMESTER – IV

Economic Geography

COURSE CODE: 401

Course Outcomes

- Identify the classification and characteristics of concepts of economic geography
- Understand the characteristics of locational theories
- Understand in depth study of primary activities
- Learn the details of study of secondary activities
- Write down in details with examples study of tertiary and quaternary activities

DEPARTMENT OF GENETICS

SEMESTER -I

TRANSMISSION GENETICS

COURSE OUTCOMES:

CO1 : Understand the basic patterns of inheritance according to classical Mendelian theory.

CO2 : Learn about cell cycle and its significance in Genetics.

CO3 : Understand and analyse how gene variation occurs during cell division due to linkage.

CO4 : Understand the structure and function of the Chromosomes.

CO5 : Learn to identify the chromosomal abnormalities, phases of cell division.

SEMESTER -II

MOLECULAR GENETICS

COURSE OUTCOMES:

CO1 : Understand how DNA is duplicated and also its functions.

CO2 : Learn about the structure of the gene and expression.

CO3 : Learn how gene expression is regulated.

CO4 : Application of gene transfer technology in various fields.

CO5 : Learn to extract, purify and quantify DNA and RNA.

DEPARTMENT OF HINDI

SEMESTER – I

Katha Sahitya Nibandh Evam Anya Gadya Vidhayen

Course Outcome

- CO 1 : Understanding to built good character and develop a good personality for Youth has been explained by Dr. Babu Gulab Rai in“Uthsa”and“Charithri Nirman”
- CO 2 : Understanding the story “Bhabhi” written by Mahadevi Varma context of Widow problems and her struggle for independence in present society.
- CO 3 : Understanding the vision of Premchand about middle class and Dalit problem in the story “Sadgathi”
- CO 4: Understanding the change in content and style of expression in short stories indifferent periods through the stories of Premchand, Ramchandra Shukle, Gulab Rai, Dinakar, Mohan Rakesh, Hari Shankar Persayee, Usha Preyamvada, Mamtakaluiya.
- CO5: Under standing the cultural consciousness of Ramdhari Singh Dinkariin “Bharathme Sanskriti sangam” .

SEMESTER – II

Katha Sahitya Nibandh Evam Anya Gadya Vidhayen

Course Outcome

1. In the story “Taayee” written by “Vishwanath Sharma” students come to the problems of a women who is suffering from Infertility problem , every women dreams to become mother, even though he doesn't become mother she shows all her love and affection towards the children of her sister in law, this story proves that every women's heart is filled with love.
2. In the lesson “Ande Ke Chilka” written by Mohan Rakesh students understands how people in the society acts as hypocrite towards religion and shows their false feelings towards religion and culture.
3. In the story “Rajneet Ka Batwara” written by “Harishanker Parsi” students comes to understand how own brothers from one house plays tricks in political parties by joining of each member separately in each parties for their selfishness and play game in politics and flutes the society.
4. In the lesson “Swamy Vivekananda” written by Rajiv Garg” students comes to know the life history of swami Vivekananda and his services towards society , and how youth can change the nation with their services.
5. In the lesson “Paryavaran Aur Hum” students understand how our nation the is facing the problem of pollution and what are the sources to over come out of these problems, and to keep our city clean and green city.

SEMESTER – III

Madhyakalin Hindi Kavya Adhunik Hindi Kavya

Course Outcome

- CO 1 : Deliberate the classification and characteristics of medieval and modern Hindi kavya
- CO 2: Understanding the role played by the poets of Bhakti culture in literature and society.
- CO3: Describing the progressive nature of Sant Kabir and his writings.
- CO 4 : Describing the Krishna-leela poetry of Surdas by relating it with his philosophy of his life.
- CO 5: Describing the Rama Bhakti poetry of Tulsidas along with the philosophy of Bhakti-culture.
- CO6: Understanding the vision of Meera Bai in context of her Krishna Bhakti

SEMESTER – IV

HINDI SAHITYA KAITIHAS

Course Outcome

- CO 1 : Understanding the origin of Hindi language and its literature.
- CO2: Identifying the dialects of Hindi language family.
- CO 3: Analysing the development of Khariboli Hindi.
- CO4: Understanding the concept to f history of literature.
- CO5: Understanding the basis of the classification of Hindi literature.

DEPARTMENT OF HISTORY

SEMESTER – I

History of India (From Earliest Times to c.700 CE)

COURSECODE: HIS101

Course Outcomes:

- Learn in details with examples Pallavas of Kanchi
- Learn in depth development of urban centres
- Learn the characteristics of Mauryan empire
- Understand in depth trade routes
- Understand in details with examples Art and architecture

SEMESTER – II

History of India (c.700-1526 CE)

COURSECODE: HI201

Course Outcomes:

- Understand the details of Rashtrakutas
- Write down the characteristics of Islamic intellectual traditions
- Identify the classification and characteristics of regional languages and literature
- Identify in depth Merchant guilds of south India

SEMESTER – III

History of India (1526-1857 CE)

COURSECODE:HIS301

Course Outcomes:

- Write down the characteristics of Persian and turkish tradition
- Understand in depth Sultanate political structure
- Learn in details with examples Bhakti movement
- Identify the details of Sufi cult
- Understand in details with examples Monetization

SEMESTER – IV

History of India (1858-1964 CE)

COURSE CODE:HIS401

Course Outcomes:

- Understand in depth Baburs invasion
- Understand in depth of Mughal rule under Akbar
- Learn in details with examples Art and architecture of Mughal
- Learn in depth of Conquest of Bengal

SEMESTER – V

History of the Modern World

COURSE CODE:HIS501

Course Outcomes:

- Learn the details of The French revolution
- Understand in depth Italian unification
- Understand in depth Napoleon -III
- Learn in depth the UNO
- Learn the classification and characteristics Soviet industrialization
- Learn in depth Formation of the USSR

SEMESTER – V

Indian National Movement (1857-1947 CE)

GENERIC ELECTIVE

Course Outcomes:

- Learn the details of 1857 Revolt
- Understand in depth the causes for 1857 Revolt
- Understand in depth Indian National Movement
- Learn in depth Phases of Freedom Movement

SEMESTER – VI

History and Culture Telangana (From earliest times to 2014 CE)

COURSE CODE:HIS601

Course Outcomes:

- Learn the details of Ancient Telangana History
- Understand in depth the Rule of Shathavahanas and other Ancient Kingdoms
- Understand in depth the Telangana Movement
- Learn in depth the two phases of Telangana Movement

B A MASS COMMUNICATION AND JOURNALISM

SEMESTER-I

Introduction to Communication and Journalism

COURSE CODE JOUR103

Course Outcomes

CO1: The student will be able to understand the concepts of communication

CO2: The student will be familiarized with models of communication

CO3: The student will be familiarized with theories of communication

CO4: The student will be able to understand the basics of Journalism

CO5: The student will be explained about various kinds of journalism

SEMESTER-II

Mass Media in India

COURSE CODE JOUR203

Course Outcomes

CO1: The student will be given historical understanding of media in India.

CO2: Explain the present status Radio in India.

CO3: Understand the Cinema and Films in Indian media.

CO4: Understand the Broadcast media

CO5: A brief history of New Media

SEMESTER-III

Reporting and Editing for Print Media

COURSE CODE JOUR303

Course Outcomes

CO1: The student will be able to Identify different dimensions of the news.

CO2: Will understand types of reporting

CO3: will study organizational set up

CO4: Edit the news reports.

CO5: Explain the laws relating to media

SEMESTER-IV

Broadcast and New Media Journalism

COURSE CODE JOUR401

Course Outcomes

CO1: The student will be able to understand broadcast media.

CO2: Learn radio production.

CO3: Understand radio

CO4: Understand television journalism

CO5: Get involved in new media journalism

DEPARTMENT OF MATHEMATICS

SEMESTER-I

DIFFERENTIAL AND INTEGRAL CALCULUS

COURSE CODE 101

COURSE OUTCOMES:

CO1: Gain the understanding of partial differentiation.

CO2: Deliberate in depth functions of two variables.

CO3: Verify whether a given function is continuous or not at a given point by an understanding of the neighbourhood of a point in (a,b) .

CO4: Find the limit of a function of two variables.

CO5: Apply and solve homogeneous functions

SEMESTER-II

DIFFERENTIAL EQUATIONS

COURSE CODE201

COURSE OUTCOMES:

- CO1: Gain the complete understanding of linear differential equations of first order and first degree.
- CO2: Deliberate in depth differential equations of first order and first degree.
- CO3: Verify whether a given differential equation is exact or not.
- CO4: Identify the appropriate integrating factors to make a non-exact differential equation to exact.
- CO5: Apply and solve first order differential equations
- CO6: Equipped with the various tools to solve few types differential equations that arise in several branches of science.

SEMESTER-III

SUBJECT: REAL ANALYSIS

COURSE CODE:MAT301

COURSE OUTCOMES:

CO 1: Appreciate beauty and applicability of the course.CO 2:

Deliberate in details real number systems

CO 3: Give examples of sequences and series.

CO 4:Understand the underlying vital basic concepts of real analysis such as epsilon- deltadefinition of limit of a sequence and convergence of a sequence.

CO 5: Determine the continuity and uniform continuity of a function at a point.

CO 7: Compute limits of given functions

CO 8: Explain the properties of continuous functions

CO 9: Prove and apply the mean value theorems

CO 10: Elaborate the geometrical representations of mean value theorems

SEMESTER –IV

LINEAR ALGEBRA

COURSE CODE: MAT401

COURSE OUTCOMES:

CO 1: Appreciate beauty and applicability of the course.

CO2: Deliberate in detailed vector spaces.

CO 3: Give examples of vector spaces and subspaces.

CO 4: Understand the underlying vital basic concepts of vector space such as pivot columns and pivot positions

CO 4: Determine the dimensions of Null space, Row space and Column space of a given matrix.

CO 5: Compute Ranks of Null space, Row space and Column space of a given matrix.

CO 6: Evaluate the eigenvalues and eigenvectors.

CO 7: Prove and apply the concepts of eigenvalues and eigenvectors in other areas of mathematics.

CO 8: Establish the complex eigenvalues and eigenvectors

SEMESTER-VI

NUMERICAL ANALYSIS

COURSE CODE: MAT501

COURSE OUTCOMES:

CO 1: Students realize the importance of the subject in solving some problems of algebra and calculus.

CO 2: Appreciate beauty and applicability of the course

CO 3: Deliberate in details of numerical analysis. CO 4: Find errors in numerical calculations.

CO 5: Solve equations in one variable .

CO 6: Apply bisection, iteration, false position, Newton's and Muller's methods.

CO 7: Use Newton's formula for interpolation.

CO 8: Apply Gauss's, Stirling's, Bessel's , Lagrange's and Newton's formulae for forward, backward and central interpolation.

CO 9: Learn numerical differentiation and numerical integration.

SEMESTER – I

DEPARTMENT OF MICROBIOLOGY

General Microbiology

COURSE CODE : MB101

COURSE OUTCOMES:

CO1: Can learn about history of microbiology, contributions of different scientists in the field of Microbiology and also applications related to this field.

CO2: Can learn about different types of microscopic techniques, measurement/calibration of microbes

CO3: Can learn about how to stain micro organisms using different staining techniques (dyes). By staining students can observe the shape and arrangement of cells. Students can also see the motility of bacteria by hanging drop method.

CO4: Can learn about classification of micro organisms. They can also learn about general characters of prokaryotic microorganisms.

CO5: Can learn about ultra structure of bacteria and viruses in detail. In addition students are also exposed to general characters and classification of eukaryotic micro organisms.

CO6: Can learn about different nutritional types in microorganisms and biochemical pathways underlying their mechanism.

CO7: Can learn about different sterilization techniques and mechanism of growth and factors

CO8: In practicals students will learn microscope handling, calibration, staining and morphology of some micro organisms.

SEMESTER – II

MICROBIAL DIVERSITY

COURSE CODE : MB201

COURSE OUTCOMES:

CO1: Concept of Biodiversity– Can learn about elements of biodiversity, its economic value. Students can also learn about classification of living organisms and get an idea about Bergey's manual.

CO2: Prokaryotic Microbial Diversity– Here students will learn about the diversity of prokaryotic microorganisms such as Archaeobacteria, Cyanobacteria etc.

CO3: Eukaryotic Microbial Diversity – Students will learn about diversity of eukaryotic microorganisms such as fungi, algae, protozoa etc.

CO4: Microbial Ecosystems – Students can learn about interactions between microorganisms in addition to understanding about microbiome and other ecosystems.

CO5: PRACTICALS - In practicals students are made to learn isolation of methanogens, halophiles, cyanobacteria etc.

CO6: PRACTICALS – Students can learn about how to observe algae, protozoa, and the making of a Winogradsky column that shows microbial diversity.

SEMESTER – III

FOOD AND ENVIRONMENTAL MICROBIOLOGY

Course Outcomes:

CO1: Can gain knowledge about the concept of fermented foods such as pickles, idly, etc.

CO2: Can learn about role of microorganisms in milk products.

CO3: Can understand what are probiotics and prebiotics.

CO4: Can understand why and how foods are spoiled

CO5: Can gain knowledge about various food preservation methods

CO6: Study about how food quality is assessed and screened.

CO7: Can learn about microorganisms present in air, water.

SEMESTER – IV

MEDICAL MICROBIOLOGY & IMMUNOLOGY

COURSE CODE : MB401

COURSE OUTCOMES

CO1: Can learn about concepts of normal flora, bacterial toxins and antimicrobial resistance.

CO2: Can get knowledge about air borne, food and water borne, and sexually transmitted diseases.

CO3: Can learn about zoonotic diseases and nosocomial infections.

CO4: Can learn about cells and organs of immune system.

CO5: Can get knowledge about concepts of antigen and antibody.

CO6: Can learn about antigen-antibody reactions and immunofluorescence techniques.

SEMESTER-V

APPLIED MICROBIOLOGY

COURSE CODE : MB503

COURSE OUTCOMES

- CO 1 – Students made to learn about Physical and chemical characteristics of soil; Rhizosphere and phyllosphere, Plant growth promoting microorganisms; Biofertilizers
- CO 2 Plant Diseases & Biocontrol: Students learn about diseases in plants and advantages and making of biopesticides
- CO 3 Microbial ecology: Students are made to understand concept of nitrogen fixation (symbiotic, non symbiotic); Role of microorganisms in nutrient cycles and Microbial interactions.
- CO 4 Role of microbes in environmental Pollution: Students can learn about microbiology of potable and polluted water, Sanitation of potable water and Sewage treatment. In addition to this they can also learn about Solid waste disposal and biodegradation of environmental pollutants –pesticides

GENERIC ELECTIVE

Microbiology and Human health

COURSE OUTCOMES

- CO 1:** Non-microbiology students are made to learn about history of microbiology, contributions of different scientists, basic culture techniques such as staining, and cultivation methods.
- CO 2:** In this students are made to learn about Microorganisms related to human health i.e. Normal microbial flora, and some pathogens.

SEMESTER-VI

MEDICAL MICROBIOLOGY

COURSE CODE : MB603

COURSE OUTCOMES

CO 1 INTRODUCTION TO MEDICAL MICROBIOLOGY

Students can learn about basic concepts of medical microbiology such as normal flora, infections, antibacterial substances. Etc.

CO 2 DIAGNOSTIC AND THERAPEUTICAL MICROBIOLOGY

In this section students can learn about general principles of diagnostic microbiology, lab diagnosis methods and chemotherapy concepts.

CO 3 MEDICAL BACTERIOLOGY

Students are made to study in detail about air borne, food and water borne diseases.

CO 4 MEDICAL VIROLOGY AND PARASITOLOGY

Students can learn about some other diseases such as influenza, hepatitis, polio, amoebiasis, rabies, malaria, hepatitis, AIDS etc.

DEPARTMENT OF POLITICAL SCIENCE

SEMESTER- I

Course Code: POL101

Course outcomes:

- Learn in depth meaning and nature of political theory
- Deliberate in details with examples differences between politics and political theory
- Understand the elements of state and origin theories of the states, and political concepts.
- Specify the details of theoretical perspectives of liberal, Marxist and feminist.
- Understand the political ideologies.
- Understanding the making of the public policies, role of the media and importance of the public opinion.

SEMESTER- II

WESTERN POLITICAL THOUGHT

Course Code: POL201

Course outcomes:

- Understand in details of the greek political philosophy.
- Identify the classification and characteristics of western political thought
- Understand in details with examples western political thought
- Understand in depth of different political thinkers ideologies.
- Identify the classification and characteristics of liberalistic ideologies.
- Learn the details of Marxism and hegemony theory.

SEMESTER- III

INDIAN POLITICAL THOUGHT

Course Code: POL301

Course outcomes:

- Understand the concepts of risk, hazard and disaster etc.
- To learn about the framework of risk management.
- To understand the vulnerability and rehabilitation methods.
- To study the frame work of NMDA and SMDA.

SEMESTER- IV

CONSTITUTION AND POLITICS OF INDIA

Course Code: POL401

Course outcomes:

- Identify the characteristics of Indian politics
- Understand the characteristics of Indian constitution
- Understand in details with application, if applicable, federalism
- Identify the classification and characteristics of power structure in India
- Identify the details of party system in India

SEMESTER- V

INTERNATIONAL RELATIONS

Course Code: POL501

Course outcomes:

- Identify the classification and characteristics of approaches of international relations
- Understanding the causes and consequences of the I and II world wars.
- Specify the classification and characteristics of cold war
- Write down in depth of globalization and international funding agencies.
- Understand the political concepts of international relations like power authority, sovereignty and balance of power.

SEMESTER- V

GENERIC ELECTIVE

HUMAN RIGHTS

Course outcomes:

- To understand the issues concerning the rights of citizens in general and the marginalized groups in particular.
- To assess the institutional and policy measures which have been taken in response to the demands of various movements.
- Understand the Conceptual dimensions, international trends and the Indian experience form the contents of the course.

SEMESTER- VI

GLOBAL POLITICS

Course Code: POL601

Course outcomes:

- Understanding the international organizations and regional organizations.
- Comprehend the details of international security methods, nuclear weapons etc.
- Write down the characteristics of India's foreign policy
- Specify in depth India and her neighbours relationship
- Learn the details of relations of India with great powers
- Examine the international social issues such as terrorism, Environmental movements etc.

DEPARTMENT OF POLITICAL SCIENCE

B.A. POLITICAL SCIENCE (HONOURS)

SEMESTER- I

POLITICAL THEORY AND CONCEPTS

Course outcomes:

1. It develops a comprehensive understanding of the major political theories, concepts and ideologies that have shaped political thought.
2. Develops the skills to engage in reasoned debate and construct well - supported arguments.
3. To analyse complex ideas, think critically and to communicate thoughts effectively through oral and written assignments.
4. It explores the ethical and normative dimensions of political theory.

SEMESTER- I

INDIAN GOVERNMENT AND POLITICS

Course outcomes:

- Understanding the Indian National movement and important acts of British time
- Understand the characteristics of Indian Constitution
- Understand in details with application, if applicable ,federalism
- Identify the classification and characteristics of power structure in India
- Identify the details of fundamental rights and Directive Principles

SEMESTER- I

INDIAN CONSTITUTION AND GOVERNMENT

Course outcomes:

- Understanding the Indian National movement and important acts of British time
- Understand the characteristics of Indian Constitution
- Understand in details with application, if applicable ,federalism
- Identify the classification and characteristics of power structure in India
- Identify the details of fundamental rights and Directive Principles

SEMESTER- I

POLITICAL INSTITUTIONS AND THEIR HISTORY

Course outcomes:

1. Develops to understand various political institutions
2. To make comparative analysis of political institutions across different countries and regions.
3. To analyse how institutional arrangements influence decision making processes, the allocation of resources and the distribution of authority and influence.
4. To develop analytical and critical thinking skills in assessing the strengths and weaknesses of different political institutions.

SEMESTER- II

INDIAN POLITICAL PROCESS

Course outcomes:

1. It develops the knowledge of formation of government, formulation and implementation of policies.
2. Develops the knowledge of opposition role in shaping public opinion and influencing policy debates.
3. To develop the knowledge of legislative decisions.

SEMESTER- II

MODERN POLITICAL ANALYSIS

Course outcomes:

1. To analyse the motivations, decision making processes and strategies employed by political actors.
2. Develops skills in assessing policy options, conducting cost benefit analysis and understanding the political factors that shape policy decisions.
3. To analyse similarities and differences in governance structures, political ideologies, party systems, electoral systems and public policies.
4. To develop the skills in utilising software and tools for data analysis for carrying out quantitative and qualitative research.

SEMESTER- II

WESTERN POLITICAL THOUGHT

Course outcomes:

1. It develops the comprehensive understanding of fundamental political concepts.
2. To explore various political ideologies that have emerged from western political thought and to examine the core principles, values and policy implications of these ideologies.
3. To develop argumentative and writing skills.

DEPARTMENT OF PUBLIC ADMINISTRATION

SEMESTER-I

Basics of Public Administration

Course code : PUB103

Course outcomes:

- To understand the nature and scope of Public Administration;
- To appreciate the methodological pluralism and synthesizing nature of knowledge in Public Administration;
- To comprehend the changing paradigms of Public Administration;
- To acquaint with the theories, approaches, concepts and principles of Public Administration;
- To understand the administrative theories and concepts to make sense of administrative practices.
- To understand the role of public services in the emergence and development of Telangana state

SEMESTER-II

Development Dynamics and Emerging Trends

Course Code: PUB 203 Course

outcomes

- To understand the comparative studies and changing dynamics of development Administration;
- To comprehend the new public administration concepts and processes in Public Administration;
- To comprehend the changing paradigms of new Public Administration;
- To acquaint with the market theories, approaches, concepts and principles of Public choice theory;
- To understand the administrative theories and concepts to make sense of administrative management practices.
- To understand the impact of globalization on Indian administration

SEMESTER -III

Union Administration

Course code : PUB303

Course outcomes:

- To understand the historical evolution and socio-economic, political, cultural and global context of Indian Administration;
- To identify the transformative role of Indian Administration;
- To make out the multi-dimensionality of problems and processes of Indian Administration;
- To understand the form and substance of Indian Administration; and
- To appreciate the emerging issues in Indian Administration in the context of changing role of state, market and civil society.

SEMESTER-IV
State Administration

Course Code PUB403

Course outcomes:

- Discern the connects and disconnects between structure, purpose and process and results in Indian Administration;
- Understand the Indian Administration role as the main instrument of State to achieve its developmental goals;
- Appreciate the varying historical, socio-economic, political and other conditioning factors that gave Indian Administration its distinct nature to the learner

SEMESTER – V

General Elective

Indian Constitution and Administration

Course Code : PUB503

Course outcome:

- To learn in details of the Constitution of India, the basic objectives and functioning of the government.
- To understand about the social change, defining the relationship between citizen and the state.
- To examine in-depth analysis of various basic areas of constitution of India.
- To learn in details of the Indian constitution, functioning of government in general and accountability and citizen control over administration in particular.

SEMESTER-V

Human Resource Management

Course Code PUB503

Course outcomes:

- To comprehend the nature, scope, structure & processes of human resource management;
- To identify the systems and processes of financial and material management;
- To appreciate institutional capacity building strategies and programmes; and
- To understand the changing paradigms of Resources management.

SEMESTER-VI

Financial and Material Management

Course Code PUB603

Course outcomes:

- Understand the way in which the public power is exercised and public resources are managed and expanded;
- Unravel the varying methods of performance assessment of public institutions; and
- Appreciate the changing paradigms of human resource management

DEPARTMENT OF PSYCHOLOGY

SEMESTER-I

GENERAL PSYCHOLOGY

Course Code :101

Course outcomes:

- 1) Students will come to know about the foundations of psychology.
- 2) Students will understand the approaches to Psychology.
- 3) Students will understand the Methods of Psychology
- 4) Students will be able to classify the types of emotions and motivation.
- 5) Students are able to understand the concepts of intelligence.
- 6) Students will be able to Outline the types of thinking and personality.
- 7) Students are able to apply the theories of learning.
- 8) Students are able to enhance their knowledge about learning, skills and techniques in daily life.

SEMESTER-II

PERSONALITY THEORIES AND ASSESSMENT

Course Code :201

Course outcomes:

- 1) Students are able to understand behavior process through psychoanalytic approach.
- 2) Students will understand the Freudian and Neo-freudian approaches to Psychology.
- 3) Students are able to understand various approaches to Psychosocial stages of development in human life.
- 4) Students are introduced to theoretical knowledge and methods of Personality assessments.
- 5) Students will be able to understand the methods of psychological testing.
- 6) Students able to understand the characteristics of a good test.
- 7) Students are able to understand the classification of personality tests.

SEMESTER-III

SOCIAL PSYCHOLOGY

Course Code :301

Course outcomes:

- 1) Developing skills pertaining to mapping of social reality and understanding how people evaluate social situations.
- 2) Familiarizing with the concepts of social affect and affective processes including people's harming and helping behaviours.
- 3) Developing an understanding pertaining to social influence processes particularly the influence of others on individual behaviour and performance.
- 4) Students develop an understanding of the social psychological concepts like attitudes, attributions and significance of communication in social situations.
- 5) Students inculcate in the students, pro social behaviour, helps in understanding the steps in developing prosocial behaviour and emphasizes on the determinants of prosocial behaviour.
- 6) Students will develop an understanding on group structure and group functioning and about the concepts related to group dynamics like obedience, conformity, cooperation and competition.

SEMESTER-IV

ABNORMAL PSYCHOLOGY

Course Code :401

Course outcomes:

- 1) Students will distinguish between Normality and abnormality in behaviour.
- 2) Students will come to know about various types of psychological disorders.
- 3) Students will understand the Neuro-development and neuro-cognitive disorders and other approaches.
- 4) Students will become familiar with research methods and ethical considerations appropriate for the study of abnormal psychology.
- 5) Knowledge of the psychological theories and models for the field of abnormal psychology.

SEMESTER-V

GENERIC ELECTIVE

PSYCHOLOGICAL COMPETENCIES

Course Code :501

Course outcomes:

- To help students understand the importance of enhancing psychological competencies for better living

SEMESTER-V

CHILD PSYCHOLOGY

Course Code :501

Course outcomes:

- To equip the learner with an understanding of the concept and process of child development
- To impart an understanding of the various domains of child development
- To inculcate sensitivity to socio-cultural context of child development

SEMESTER-VI

HEALTH PSYCHOLOGY

Course Code :601

Course outcomes:

- To help students understand the spectrum of health and illness for better health management
- To help students gain insight into mind-body relationship

DEPARTMENT OF PHYSICS

SEMESTER-I

MECHANICS

Course code : 101

Course Outcome:

- CO1. Deliberate the characteristics of oscillations of a system of particles
- CO2. Write down in details with application, if applicable, strings and rods vibrations
- CO3. Learn the characteristics of small oscillations of mechanical system

SEMESTER-II

THERMODYNAMICS

course code : PHY201

Course Outcome:

CO1.Deliberate the characteristics of GEOMETRICAL OPTICS

CO2.Write down in details with application, in Interference , Diffraction and polarization and optical fibers

CO3.Learn the characteristics of interference ,diffraction and polarization

SEMESTER-III

WAVES AND OSCILLATIONS

course code : PHY301

Course Outcome:

CO1.Deliberate the characteristics of Thermodynamic potentials and parameters

CO2.Write down in details with application, if low temperature and radiation pyrometers

CO3.Learn the characteristics of statistical distributions of MB,FD AND BE STATISTICAL system

SEMESTER-IV

OPTICS PHYSICS

Course code : PHY401

Course Outcome:

CO1.Deliberate the characteristics of Electrostatics, magnetostatics and electromagnetism

CO2.Write down in details with application, in Electrostatics, magnetostatics and electromagnetism

CO3.Learn the characteristics of Electrostatics, magnetostatics and electromagnetism

SEMESTER-V

MODERN PHYSICS

Course Outcome:

- CO1. Deliberate the characteristics of NETWORKTHEOREMS, SEMICONDUCTOR PHYSICS
- CO2. Write down in details with application, in Material sciences
- CO3. Learn the Digital electronics using Gates.

DEPARTMENT OF SANSKRIT
B.A B.SC & B.COM WITH SANSKRIT

COURSE CODE :(101,201,201,301)

Course outcomes:

- To create awareness about knowledge in the field of humanities.
- To be well-educated – well cultured citizen of India.
- To imbibe Ethical values of Indian culture and tradition..
- To trigger interest in communication and soft skills
- To create social consciousness.
- To mould and improve the personality of learners.

DEPARTMENT OF SOCIOLOGY

SEMESTER- I

FUNDAMENTALS OF SOCIOLOGY

Course Code:Soc101

Course Outcomes:

- Understanding in brief knowledge of human society and structure and also sociology.
- Get to know the nature of society.
- Understand the structure of social culture and socialization.
- Understand the function of social institutions
- To learn in details about sociological perspectives and ideologies of sociological thinkers on society.

SEMESTER- II

INDIAN SOCIETY: STRUCTURE AND CHANGE

Course Code:Soc201

Course Outcomes:

- Explore the roots of Indian civilization.
- Know economy, polity and society of ancient, medieval and modern India.
- Understand and analyze the key concepts of Hinduism, Jainism, Buddhism, Islam and impact of these religions on society.
- Demonstrate social, economic, political transformation of Indian society under colonial rule.
- Realize the basic issues of Indian society like unity in diversity, problems of nationalism and principles of Indian Constitution.

SEMESTER- III

RURAL AND URBAN SOCIOLOGY

Course Code:Soc301

Course Outcomes:

- Understand the profile of rural and urban community.
- Introduce the basic concepts of Rural Community and Rural Development.
- Create awareness among government schemes in rural and urban developments.
- Define urban sociology and demonstrate the nature and scope of urban sociology.
- Develop an understanding about trends of urbanization in India and impact of urbanization on Indian society.
- Develop awareness about urban problems and policies adopted to solve such problems.

SEMESTER- IV

RESEARCH METHODOLOGY

Course Code: Soc401

Course Outcomes:

- Understand the meaning of social research, processes and steps in social research
- Understand the meaning of quantitative and qualitative social research and its scientific orientation
- Understand the methods of data collection and sampling techniques
- Understand the process of analysis and interpretation in qualitative research
- Perform the analytical operation through social statistics and report writing.

GOVERNMENT DEGREE COLLEGE FOR WOMEN (A),
BEGUMPET

HYDERABAD-500016

(AUTONOMOUS)

DEPARTMENT OF TELUGU



SEMESTER-1

Course Code: TEL101

Course outcomes

- CO 1) How secured a woman needs to be in society
- CO 2) How must she deal with the injustice done to her
- CO 3) Logical Defense
- CO 4) Innocence in Children
- CO 5)Determination
- CO 6) Purity
- CO 7) Obedience

SEMESTER-II

Course Code: TEL201

Course outcomes:

CO 1) One shouldn't have pride

CO 2) Only god could save us on verge of death

CO 3) Behavior

CO 4) Personality Development CO 5)

Significance of Education CO 6) Stay

away from the wicked CO 7) Greatness

of our motherland

CO 8) Being conscious about the nation's development CO 9)

Letting the whole world know its glory

SEMESTER-III

Course Code: TEL301

Course outcomes:

CO 1) Communication skills

CO 2) How to tackle tough situations

CO 3) Parenting

CO 4) Pampering

CO 5) Problems faced by such kids

CO 6) Students focus must be on their teacher

CO 7) A payback must teach a lesson but it shouldn't turn into a bloodshedding revenge

SEMESTER-IV

Course Code: TEL401

Course outcomes:

- CO 1) Jealous must gear up the competitive spirit among students
- CO 2) None should think that they are undefeatable
- CO 3) God graces knowledge upon us all
- CO 4) Personality development
- CO 5) Social responsibility
- CO 6) Responsibility of the household
- CO 7) We must will for the wellbeing of others
- CO 8) Compassionate for people
- CO 9) Humanity is the most important of all
- CO 10) Grievance in our society has to be seen
- CO 11) We need to realize what we are doing now without glorifying the past history

DEPARTMENT OF ZOOLOGY

SEMESTER –I

Animal Diversity – Invertebrates

COURSE OUTCOMES

- CO1. Knowledge about the Diversity and Phylogeny of Invertebrate Phyla
- CO2. Discuss the Diversity of Invertebrate and their Economic Significance
- CO3. Know about some of the important and common Protozoans and Helminthes of parasitic nature causing diseases in human beings.
- CO4. Understood the diversity and classification and functional aspects of different systems of Arthropoda, Mollusca and Echinodermata.
- CO5. Identify the resemblance and evolutionary significance of larval forms of Echinoderms

SEMESTER –II

Animal Diversity- Vertebrates

COURSE CODE: 201

COURSE OUTCOMES

- CO1. Knowledge about the Diversity and Phylogeny of Vertebrates Phyla
- CO2. Understand the Nomenclature and Classification of the Major Vertebrate Phyla
- CO3. Describe the Morphology and Anatomy of various Vertebrates through type Study
- CO4. Understand the Evolutionary importance of Temporal Fossae in Reptiles
- CO5. Knowledge about the significance of various types of Adaptations in different Phyla.

SEMESTER –III

ANIMAL PHYSIOLOGY AND ANIMAL BEHAVIOUR

course code : 301

COURSE OUTCOMES

CO1. Understand the composition of food and mechanism of digestion absorption and assimilation.

CO2. Describe the mechanism of circulation and composition and functions of blood

CO3. Knowledge of Neuromuscular coordination, Osmoregulation in animals and Endocrine system and their functions

CO4. Understand the process of respiration and excretion and the mechanism of transport of gases

CO5. Analyze various types of Animal Behaviour and their significance in their Learning, Memory, Social Behaviour and Communication

SEMESTER-IV

CELL BIOLOGY, GENETICS & DEVELOPMENTAL BIOLOGY

Course code: 401

COURSE OUTCOMES

- CO1. Describe the composition of prokaryotic and eukaryotic cells.
- CO2. Understand the structure of cells and cell organelles in relation to their functional aspects.
- CO3. Understand the Structure and functions of Nucleic acids and their role in Protein Synthesis
- CO4. Apply the various concepts of Genetics in Problem Solving .
- CO5. Understand the Process of Gametogenesis and its significance in the development of an Organism

SEMESTER-V

IMMUNOLOGY AND ANIMAL BIOTECHNOLOGY

Course code: 501

COURSE OUTCOMES

- Understand the role of immune system in maintaining Health
- Knowledge of structure and function of major organs of Immune system
- Understand the application of Animal Biotechnology and implications of Organ transplantation
- Apply the biotechnological techniques in the field of medicine, diagnostics, pharmaceutical industry

SEMESTER-V

GENERIC ELECTIVE

PREVENTIVE MEDICINE

COURSE OUTCOMES

- Recognize the concept and evaluation of Public Health
- Relate food to nutrition Health, balanced diet, deficiencies and its prevention
- Identify avoidable habits for personal hygiene.
- Explain the principles of prevention and control of communicable and non communicable diseases.
- Identify National Health programmes , its objectives, functioning and outcomes.

SEMESTER-VI

ECOLOGY, ZOOGEOGRAPHY AND EVOLUTION

Course code: 601

COURSE OUTCOMES

- Study of nature of ecosystem
- Understand the various kinds of animal adaptations
- Knowledge about wild life conservation and management
- Knowledge about the faunal peculiarities of various Zoogeographic regions
- Knowledge of concepts and theories of organic evolution