

SAROJINI NAIDU VANITA MAHA VIDYALAYA

Sponsored and Managed Jointly by the Osmania Graduates' Association & Exhibition Society) Exhibition Grounds, Nampally, Hyderabad, 500 001, Telangana, INDIA. NAAC Accredited 3rd Cycle

MOTTO Vidya Vinayena Shobhate Humility adds Lustre to Education

VISION

Training Women for a Challenging Future through Value Based Education.

> MISSION Educate, Empower and Liberate

PROGRAMME OUTCOMES AND COURSE OUTCOMES

Sl. No.	Particulars	Pg. No.
	Post Graduate Programs – POs and	<u>v</u>
1	M.A.	
	English	03
2	M.B.A.	08
3	M.Com.	14
4	M.Sc.	
	Nutrition and Dietetics	18
	Botany	21
	Chemistry	24
	Physics	27
	Zoology	30
	Under Graduate Programs – POs and	l COs
5	B.A.	
	Economics	33
	History	34
	Political Science	36
	Public Administration	37
6	B.B.A.	39
7	B.Com.	
	General & Computer Applications	42
8	B.Sc. – Physical Sciences	
	Computer Science	46
	Electronics	47
	Mathematics	48
	Physics	49
9	B.Sc. – Life Sciences	
	Applied Nutrition	51
	Botany	53
	Biochemistry	54
	Chemistry	55
	Microbiology	56
	Zoology	57
10	Languages	
	Arabic	59
	English	60
	Hindi	63
	Sanskrit	64
	Telugu	66
	Urdu	67
11	French	68

INDEX

M.A. ENGLISH

Programme Outcomes

Towards the end of the programme, the students will be able to:

- **PO1:** Demonstrate advanced knowledge of language evolution, English phonetics, linguistic theories, curriculum and syllabus design, structures, approaches and methods in language teaching.
- **PO2:** Analyze different literary genres & gain insight into varied cultures of ages also critical comprehension and analytical skills in the interpretation of literary texts.
- PO3: Understand the limitations of particular academic research methodology.
- **PO4:** Create new perspectives on feminist theories, translation and film studies that will help them to understand their aesthetic qualities and insights into human experiences. It also gains knowledge of literary studies, concepts and criticism.
- **PO5:** Analyze the texts from varied contexts such as race, gender, religion, emotions, social, political, economic and historical perspectives.

Course Outcomes

SEMESTER – I:

The English Language: History, Structure & Description 101

CO1: Unit 1: Gives insight to the learners about origin and development of the language.

CO2: Unit 2: The learners will understand foreign contribution and influence on the language.

CO3: Unit 3: The Learners will get to know the evolution of standardised English, different processes of formation and change in meaning of words.

CO4: Unit 4: Helps the learners to know the grammatical structure of a sentence.

CO5: Unit 5: The learners will get to know the different Dialects, Styles, Jargon and Slang. The learners will also learn the differences between British and American English.

English Poetry 102

CO1: Unit 1: It gives awareness of different eras of English Literature.

CO2: Unit 2: The learners will be familiar with the socio-economic conditions of the 14" century England, the epic and metaphysical poetry.

CO3: Unit 3: The learners will learn about the characteristics of Romanticism.

CO4: Unit 4: The learners familiarise themselves with the consequences of industrial revolution during Victorian era.

CO5: Unit 5: The learners understand the negative effects of the two world wars on people.

English Drama 103

CO1: Unit 1: The learners learn the origin and development of British Drama.

CO2: Unit 2: This imbibes moral values in the learners and exposes them to realities of life through moral, tragic and tragic-comic plays.

CO3: Unit 3: The learners understand the feminist perspectives and the real face of materialistic world.

CO4: Unit 4: The learners perceive the psychological condition of people and unstable mindset of individuals during post world war period.

CO5: Unit 5: The learners envisage the submission before mortality and fate. The learners also discern the uniqueness of the plays.

English Language and Phonetics 104 (A)

CO1: Unit 1: The learners apprehend the features of human communication and make out the difference between human and animal communication. They also recognise the importance of verbal and non-verbal communication.

CO2: Unit 2: It enhances the learners' knowledge of speech sounds.

CO3: Unit 3: It helps the learners to speak with proper intonation and stress.

CO4: Unit 4: The learners familiarise themselves with the three main branches of linguistics-Morphology, Phonology and Syntax.

Modern Indian Literatures in Translation 105 (A)

CO1: Unit 1: The learners get an insight into the concept of Sahitya, translation, tradition and modernity. The learners also understand the Indian Dramatic tradition and the socio-cultural differences of the Indian society.

CO2: Unit 2: The learners comprehend the different forms of Bengali, Urdu, Hindi and Marathi poetry and figure out the difference between imaginary and revolutionary poetry.

CO3: Unit 3: The learners make out the social, cultural and class discrimination in the society.

CO4: Unit 4: The topics throw light on the immoral aspects of life and help the learners to realise the importance of moral values.

SEMESTER – II:

English Language Teaching: History, Approaches and Methods 201

CO1: Unit 1: The learners will familiarise themselves with different commissions of teaching English and education in pre independent India.

CO2: Unit 2: The learners will familiarise themselves with different standardised education commissions established in post independent India.

CO3: Unit 3: The learners will learn different approaches and methods of teaching English language.

CO4: Unit 4: The learners will gain the knowledge of various humanistic approaches, natural and communicative approach of learning.

CO5: Unit 5: The learners apprehend the post-method pedagogy and framework involved in learning and teaching English language.

English Prose 202

CO1: Unit 1: The learners learn the origin and development of English prose.

CO2: Unit 2: The learners follow the moral and spiritual aspects of life through the prescribed prose.

CO3: Unit 3: The learners critically appreciate the society and culture of 17th century London.

CO4: Unit 4: The learners understand the class difference of the London society.

CO5: Unit 5: The learners become familiar with the feminist perspectives and general issues of society.

English Fiction 203

CO1: Unit 1: It helps the learners to comprehend the rise of novel and different types and techniques of novels.

CO2: Unit 2: It helps to instil moral and ethical values in the learners

CO3: Unit 3: The learners figure out the socio-cultural and psychological conflict through the characters and realise the role of religion in life.

CO4: Unit 4: The learners make out the psychological impact on the relationship and change in man's behaviour based on societal change.

CO5: Unit 5: The learners understand the psychological, scientific and ironic aspects of life.

Women's Writing 204 (A)

CO1: Unit 1: It helps the learners to understand the origin of feminism and the discrimination between sex and gender in literary world.

CO2: Unit 2: Learners know the Confessional and Biblical references in poetry and also get awareness of the sufferings of the victims of Racism.

CO3: Unit 3: Learners understand the domination and superiority of White race over Black race.

CO4: Unit 4: The learners comprehend the Vindications of the Rights of Women and analyse the subverted form of traditional fables through change of gender role and transformation of weak woman delicacy into courageous one.

20th Century Literary Criticism and Theory 205 (A)

CO1: Unit 1: The learners familiarise themselves with various theories of criticism

CO2: Unit 2: The learners master the use of language in writing a literary piece.

CO3: Unit 3: It helps the learners to comprehend and analyse a literary text irrespective of the author's background.

CO4: Unit 4: The learners learn different literary theories of 20th century.

SEMESTER – III:

Major Developments in Language Acquisition & Language Learning 301

CO1: Unit 1: The learners learn the stages of language development and learning disabilities in a child. They also familiarise themselves with different psychological learning theories.

CO2: Unit 2: The learners understand different models of second language acquisition.

CO3: Unit 3: The learners gain the knowledge of different language learning strategies.

CO4: Unit 4: The learners figure out different language learning styles.

CO5: Unit 5: The learners familiarise themselves with theory of intelligences and their autonomy in learning.

American Literature-I 302

CO1: Unit 1: The learners understand different periods of American Literature.

CO2: Unit 2: The learners derive aesthetic pleasure from the poems of antebellum and postbellum poets.

CO3: Unit 3: The learners comprehend the puritan and realistic elements from the topics.

CO4: Unit 4: The learners figure out the psychological aspects and differentiate the real and virtual world.

CO5: Unit 5: The learners know how to express their ideas and put forth their point of view.

Indian Writing in English-I 303

CO1: Unit 1: Learners get to revisit Indian History and learn the struggle of Indians for freedom, difference of caste-class, rise of the Indian novel & characteristics of New Indian Woman,

CO2: Unit 2: Learners will learn the Indians struggle for liberty, traditions, childhood reminisces, Spirituality, restricted roles of woman represented in the poetry during nineties.

CO3: Unit 3: Learners will get to know the origin of Indian novels in English and different cultures, traditions and the mindset of the Indians through characters.

CO4: Unit 4: The learners will learn about the miserable plight of the untouchables, freedom movements & also the victory of good over evil.

CO5: Unit 5: The learners attain the knowledge of caste and class difference and analyse the history of India and the criticism faced by the writer activists.

Postcolonial Literature 304 (A)

CO1: Unit-1: The learners learn the postcolonial theories.

CO2: Unit-2: The learners understand the agony of the Blacks and woman during colonial rule.

CO3: Unit-3: The learners make out the identity crisis of the colonised.

CO4: Unit-4: The learners realise the problems faced by the colonised and settlers.

Literature and Film 305 (A)

CO1: Unit-1: The learners are exposed to the different techniques of film making.

CO2: Unit-2: The learners understand the aspects of Indian Cinema and the adaptation and misadaptation of script into screen.

CO3: Unit-3: The learners understand how the Dramas are adapted into films.

CO4: Unit-4: The learners comprehend how fiction is adapted into films.

SEMESTER – IV:

English Language Teaching: Curriculum Development, Teaching and Evaluation 401

CO1: Unit 1: The learners will get the in depth knowledge of steps involved in curriculum design framework of syllabus and principles of designing ESP courses.

CO2: Unit 2: The learners understand the advantages and disadvantages of using different classroom approaches, methods and techniques in teaching English language. They also realise the importance of using teaching aids and technology in teaching the language.

CO3: Unit 3: The learners learn different techniques of teaching, prose, poetry and drama and also they learn language through literature and designing language task from literary texts.

CO4: Unit 4: The learners are enhanced with the knowledge of LSRW and its sub skills, error analysis, remedial teaching and teaching of grammar and vocabulary.

CO5: Unit 5: The learners apprehend the definition, types and characteristics of testing and evaluation of language and LSRW skills.

American Literature -II 402

CO1: Unit 1: The learners understand the socio-cultural and economic conditions of twentieth century America.

CO2: Unit 2: The poems reflect the American mindset and the learners understand the different mindsets of the people.

CO3: Unit 3: The learners understand the importance of grabbing the opportunities and hard work through the characters.

CO4: Unit 4: The learners will gain the knowledge of racial discrimination and the affects of living in imaginary world.

CO5: Unit 5: The learners differentiate the conflict between socio-cultural and scientific aspects.

Indian Writing in English –II 403

CO1: Unit 1: The learners familiarise themselves with the partition literature and identity movements.

CO2: Unit 2: The learners understand the traditional, cultural, and religious aspects of Indian society.

CO3: Unit 3: The learners understand the identity crisis and feminist perspectives in the Indian context.

CO4: Unit 4: The learners understand the problems faced by the Indian settlers in a foreign land.

CO5: Unit 5: The learners perceive the cultural conflict and dominance of developed countries.

Academic Writing and Research Methodology 401 (A)

CO1: Unit 1: The learners understand the factors that influence effective writing, features and forms of Academic Writing.

CO2: Unit 2: It helps the learners to enhance their academic and study skills.

CO3: Unit 3: The learners learn the criteria of good research, types of research and research design.

CO4: Unit 4: The learners gain the knowledge of different documentation formats of research.

Project Work 405 (A)

CO1: The project work aims to provide learners with the opportunity to analyse an idea from various areas of learning and critically work on it. This process enables them to acquire skills like collaboration, communication and independent learning.

South Asian Literature 405 (B)

CO1: Unit 1: The learners understand the historical, geographical, cultural, religious and literary aspects of South Asia.

CO2: Unit 2: The learners get an exposure to the different forms of South Asian poetry.

CO3: Unit 3: The learners understand the effects of partition and war.

CO4: Unit 4: The learners get to know the after-effects of war.

M.B.A.

Programme Outcomes

PO1: Define and understand concepts in business management.

PO2: Utilize quantitative techniques and qualitative models to solve business problems.

PO3: Develop communication, leadership, negotiation and managerial skills.

PO4: Integrate concepts and tools from multiple functional areas like finance, HR and marketing to understand global business practices.

PO5: Examine and analyze the organizational problems through real life examples; live and freelance projects.

PO6: Creating an ecosystem for developing applications of new technologies, innovation, and entrepreneurship skills.

Course Outcomes

SEMESTER – I:

MB – 101: Management & Organisation Behaviour

CO1: Students will have a comprehensive understanding of management functions and its theories.

CO2: To acquaint students with decision making models.

CO3: Students will have understanding of managing the organizational setting through gaining insights into individual and inter-personal relations.

CO4: Students can gain knowledge of group dynamics and leadership.

CO5: Students can understand the emerging aspects of organizational behavior.

MB-102: Accounting for Management

CO1: To help students to acquire knowledge of the Process, Principles and Conventions of Accounting.

CO2: To acquaint students with preparation of Journal, Ledger, Trial Balance and Final Accounts.

CO3: To develop skills to analyse Financial Statements.

CO4: Students will gain knowledge about basic cost concepts, cash flow statements and taxation.

CO5: Students will gain knowledge about cost accounting to take decisions.

MB - 103: Marketing Management

CO1: Students will be equipped with marketing and selling tools.

CO2: Students will learn about segmentation, targeting, positioning, forecasting and the competition levels in the market.

CO3: Students will learn to design marketing programme considering elements of marketing mix.

CO4: Buyer behavior and perceptions are key of any business; that will be learnt thoroughly.

CO5: Better control techniques for optimum utilization of resources will be learnt.

MB - 104: Statistics for Management

CO1: To introduce basic statistics to management students like measures of central – tendency, measures of dispersion, skewness, and kurtosis and concepts of probability.

CO2: To enable learners understand probability distribution as it plays an important role in all areas of management.

CO3: To provide understanding of sampling and sampling distributions.

CO4: To make them understand the hypothesis testing framework with small samples and large samples CO 5:To show how correlation, regression techniques are integral part of planning and controlling.

MB-105: Economics for Managers

CO1: Students can learn micro factors of Economic behavior of a consumer.

CO2: Future Managers need market dynamics and the same is imparted.

CO3: Students can assess opportunities and threats of business.

CO4: Students can better understand nature of the products and demand conditions.

CO5: Understand the decision making tools and investment avenues.

MB – 106: IT Applications for Management

CO1: To acquaint the students' with the micro-level competencies with regard to contemporary Information Technology Tools in organizations.

CO2: To provide real-time insights into the fundamentals of computers as business tools

CO3: To create awareness in upcoming managers, of different types of Information Technology, Management Systems so as to enable the use of IT resources efficiently

CO4: Study IT role & Value addition in business

CO5: To enable students to develop proficiency in using certain components of the packages like MS Excel, MS Access along with practical exposure.

SEMESTER – II:

MB - 201: Human Resource Management

CO1: Transform Human beings into Human Resources

CO2: To build Global Level HR Managers

CO3: Create Agile Workforce

CO4: Innovate Winning organizations.

CO5: Learn about the emerging trends in HRM

MB – 202: Financial Management

CO1: Students can learn about the scope and goal of financial management.

CO2: Students will gain knowledge about the concepts of long term investment decisions.

CO3: Students will learn about the capital structure decisions.

CO4: To understand the corporate practices of dividend payment and current assets management.

CO5: To learn about corporate events like corporate restructuring, value based management and corporate governance etc.

MB – 203: Operations Research

CO1: Helps in formulating real life situations in organization in Quantitative form

CO2: Helps in formulating strategies for optimal use of various resources within the organization.

Co3: Application of optimization tools for decision making.

CO4: Helps as a powerful tool for planning, scheduling and controlling projects.

CO5: Develop mathematical model for interactive decision making situations where two or more players are involved under competition.

MB-204: Entrepreneurship and Development

CO1: Learn the importance of Entrepreneurship.

CO2: Learn about entrepreneurial environment.

CO3: Students can learn more about types of enterprises and growth.

CO4: Provide information about financial resources.

CO5: Impart training to raise and establish enterprises.

MB-205: Business Research Methods

CO1: To gain understanding of various types of research design.

CO2: To enable learners to be able to formulate the research problem.

CO3: To acquire basic knowledge on qualitative and quantitative research.

CO4: To have knowledge on descriptive and inferential data tools.

CO5: To be able to write and develop independent and critical analysis for report writing.

MB – 206: Business Law and Ethics

CO1: To introduce students with law of contracts.

CO2: To acquaint students with the legal aspects of business.

CO3: To enable students with Companies Act 2013.

CO4: Students can learn more about Consumer Protection and Essential Laws.

CO5: To offer insights into ethical considerations in Business entities and their responsibility towards society.

MB – 207: Seminar Presentation

CO1: Presentation Skills: Student is expected to present with clear aims and outcomes.

CO2: Argumentative and Critical Thinking: It is closely related to how student is able to relate critical thinking, thought process and reasoning.

CO3: Inter Disciplinary Approach: Relating knowledge in more than one branch.

CO4: Presentation of the text: The sequence of text presentation in order to provide logical clarity.

SEMESTER – III:

MB-301: Operations Management

CO1: To acquire knowledge in basic manufacturing processes.

CO2: Should be able to elaborate and apply the concepts of production control, capacity planning, MRP-1, MRP-2 and lean manufacturing.

CO3: Should be able to understand and apply concepts of product design; process design; work study; and sequencing. Appreciate a service facility and be able to measure the quality of the same.

CO4: Understand, correlate and explain the concepts of productivity and quality to maintenance management, TQM and SQC.

CO5: Should be able to understand concepts of inventory control and stores management.

MB-302: E- Global Business

CO1: Gain comprehensive understanding of the fundamental principles of e-commerce and its impact on the global business landscape.

CO2: To delve into the various challenges and opportunities that arise when conducting business in a digital environment, thereby equipping participants with the necessary knowledge and skills to navigate this dynamic landscape successfully

CO3: Analyzing the strategies and technologies employed in e-global business, gain insights into the most effective approaches for achieving success in this rapidly evolving field.

CO4: Foster the development of critical thinking and problem-solving abilities within the context of eglobal business, empowering to tackle complex issues and make informed decisions in this ever-changing digital realm.

CO5: Learn to streamline work processes and improve communication within the organization to meet their objectives by involving with E-Business Models.

MB-303: Total Quality Management

CO1: Orienting the students towards the importance of quality as a management tool

CO2: Towards understanding the principles and practices of total quality management

CO3: Introducing the various tools and techniques used in the measurement of quality

CO4: Understanding the importance of six sigma as a quality tool and its implementation

CO5: Sensitizing the students to the importance of quality in various sectors

MB – 304 – F – I: Investment Management

CO1: Understand the various avenues of investment with return and risk profile.

CO2: Analyse and value stocks with help of fundamental and technical analysis.

CO3: Value various financial instruments (like equity, preference shares, bonds) and take appropriate decisions.

CO4: To estimate performance of portfolio in terms of return and risk.

CO5: Understand mutual funds, their performance evaluation and regulations.

MB – 304 – F – II: Financial System & Services

CO1: Understand the importance, functions of financial system and financial services

CO2: To know about the various financial institutions in India

CO3: To understand the concept of merchant banking and its functions

CO4: To learn the venture capital financing modes used to raise finance

CO5: To understand factoring, bill discounting and credit rating services needed for businesses

MB-304-HR-I: Compensation Management

CO1: The students can learn about the concepts of HRM

CO2: To know the difficulties of HR professional in job designing

CO3: The students get the benefit of learning the concepts of payment and employee benefits

CO4: Students can learn about the issues faced by the talented employees in the organization.

CO5: They learn to analyze the process of selection and recruitment

MB-304-HR-II: Industrial Relations and Labour Laws

CO1: The management students become aware of the various actors as part of the industrial relations such as the state, ILO, trade unions and so on.

CO2: The course focuses on the managerial perspectives needed to understand industrial relations issues, labour laws, issues and implications.

CO3: Critically analyze reforms in labour legislation over labour codes.

CO4: To generate decision making of such problems and be able to generate new policies or procedure.

CO5: Learn and know about the different managerial perspectives about the Indian laws.

Cs301: Case Study

CO1: Identify the theoretical concept underlying the Case Study by applying the knowledge gained in conceptual theory.

CO2: Analyse the situation given in Case Study and describe the summary.

CO3: Elaborate the solutions to issues raised at the end of the Case Study.

RD301: Research Design

CO1: Students should identify the topic for doing project work considering originality in thinking, pedagogical aspects, clarity in their proposal and sequence etc.

CO2: Students should describe the research design in the given format.

PS301: Progress Seminar

CO1: Each student is expected to prepare progress in their project synopsis as per given outline by supervisor assigned and proceed to work on next stages of main project report preparation.

SEMESTER – IV:

MB-401: Business Process Re-engineering

CO1: To enable a holistic perspective on BPR in a contemporary context.

CO2: Learn to apply design thinking and innovation strategies in BPR).

CO3: To understand the role of technology and digital transformation in BPR.

CO4: To understand how process improvement leads to organizational improvement.

CO5: To understand the dynamics of Industry 4.0. A Paradigm shift from a manufacturing context to services.

MB - 402: Logistics and Supply Chain Management

CO1: Gain a holistic understanding of logistics management and its role in supply chain management.

CO2: To understand the concepts of integrated logistics management, reverse logistics and the role of transportation in logistics.

CO3: To understand the drivers that enhance the efficiency of the supply chain and its value delivery systems.

CO4: To Understand the role of warehousing, distribution centers, forward and backward integration in making supply chains more efficient.

CO5: Gain insight into the role of information technology and recent trends in making supply chains more efficient.

MB – 403: Business Intelligence

CO1: Recognize the significance of Business Intelligence (BI) as a valuable decision support system within an organization.

CO2: Acquire a comprehensive understanding of the various business intelligence tools available and their role in providing a holistic perspective for decision-making.

CO3: Establish a theoretical framework for comprehending the concepts and principles of data warehousing and data mining, which are essential components of BI).

CO4:Apply the knowledge gained to effectively utilize BI tools for analyzing and interpreting data, thereby supporting decision-making processes.

CO5: Develop the skills necessary to evaluate and select appropriate business intelligence solutions based on organizational requirements.

MB-404 - F-III: Banking and Insurance

CO1: To enable the students to understand the banking landscape in India and its performance.

CO2: To understand the uses and types of bank funds, the credit process, and exposure to NPAs

CO3: To learn about the regulatory environment of the banking system in India, including payment and settlement systems

CO4: To understand the role and importance of insurance, its types, principles, and regulations.

CO5: To gain insight into life and general insurance and various types of insurance instruments.

MB-404 - F-IV: International Finance

CO1: To provide an analysis of the evolution of the International Financial System and to differentiate between fixed and floating rates.

CO2: To study the Foreign Exchange Markets.

CO3: To understand parity theories and make calculations related to foreign exchange rates based on parity theories.

CO4: To learn the financial management of MNCs and make decisions relating to capital budgeting techniques in a Global Environment.

CO5: To understand the International Tax Environment.

MB – 404 - HR-III: Leadership and Change Management

CO1: To learn the conceptual groundwork of leadership.

CO2: To learn different programs and models for the development of leadership qualities.

CO3: To have a conceptual foundation to read changes in organizations.

CO4:To understand how cultural differences impact leadership and change processes

CO5: To understand methods for monitoring the progress of change initiatives.

MB – 404 - HR-IV: Performance Management

CO1: To produce Competent Executives

CO2: To transform Performance Appraisal, Performance Management

CO3: To build pivotal performance

CO4: To establish leading Human Capital

CO5: To get perspective about the application of various performance metrics and models

MB - 405: Dissertation

CO1: Students are expected to submit a dissertation with clear and scientifically drawn inferences, suggestions, and conclusions.

MB - 406: Final Presentation

CO1: Final presentation of the research/project work is mandatory.

CO2: Students are expected to have a clear understanding of conceptual questions related to the topic of study.

MB - 407: Viva Voce During Final Presentation

CO1: The viva voce in the final presentation will carry one credit and cover various aspects of research projects, as well as topics covered in the program's curriculum.

M.Com.

Programme Outcomes

PO1: The students will develop the ability to work in teams with enhanced interpersonal skills.

PO2: The students will develop the ability to apply knowledge in the fields of Managerial Economics, Financial Management, Marketing and to apply accounting standards in the preparation of financial statements.

PO3:The students will be ready for employment in functional areas like Accounting, Taxation, Computerized accounting.

PO4: The students will develop the skills in analysing a data for their research work.

PO5: To provide the skills, and application of advanced cost accounting techniques for cost control and cost reduction.

Course Outcomes

SEMESTER - I:

Managerial Economics

- CO1: Students understand the concepts of managerial economics & economic theory.
- CO2: To familiarize students with demand theory & analysis.
- CO3: To inculcate knowledge of production analysis and production function.
- CO4: To familiarize students with the concept of cost, types of cost
- CO5: Students gain knowledge of market structures.

Principles of Marketing

- CO1: To introduce the concept of marketing
- CO2: To familiarize students with marketing environment
- CO3: Students acquire knowledge about market segmentation and target marketing.
- CO4: Students understand consumer behaviour and decision-making process.
- CO5: To familiarize students with the concept of marketing planning and strategy

Organisation Theory and Behaviour

- CO1: To introduce the concept of organisation theory and behaviour.
- CO2: To familiarize students with the concept of personality and group behaviour.
- CO3: Students understand motivation, morale and organization culture.
- CO4: To familiarize students with the concept of power, conflict and communication in the organization.
- CO5: To familiarize students with the concept of leadership and organizational change.

Financial Management

- CO1: To introduce the concepts of financial management and time value of money.
- CO2: Students learn the techniques of capital budgeting & risk analysis.
- CO3: To familiarize students with concept of working capital management.
- CO4: To inculcate knowledge regarding financial decisions.
- CO5: To familiarize students with the theories of dividend.

Indian Accounting Standards

- CO1: To impart students with the concepts of accounting theory.
- CO2: To familiarize students with the overview of accounting standards.
- CO3: Students understand accounting standards.
- CO4: To familiarize students with reporting standards
- CO5: Students learn the significance of financial reporting.

SEMESTER - II:

International Business and Business Environment

- CO1: To familiarize students with the concepts of business environment and policies.
- CO2: Students gain knowledge of liberalization and globalization.
- CO3: o inculcate knowledge about public sector and private sector.
- CO4: To gain information about FDI and mergers and acquisitions.
- CO5: Students understand about WTO agreements and FTP

Marketing Management

- CO1: Students learn the concepts Product management.
- CO2: To familiarize students with the pricing policies.
- CO3: Enable the students to know product promotion management.
- CO4: To familiarize students with channel management
- CO5: Students acquire information about MIS, marketing research and digital marketing

Human Resource Management

- CO1: To inculcate knowledge of HRM and its techniques.
- CO2: To familiarize students with acquisition of human resources.
- CO3: Students develop motivating skills.
- CO4: Students are aware of compensation management and employee relations.
- CO5: Enable the students to know the significance of knowledge management and work life balance.

Investment management

- CO1: To make the students aware of investment and financial assets.
- CO2: To familiarize students with the overview of Indian capital market.
- CO3: Enable the students to acquire knowledge on risk and return analysis.
- CO4: To inculcate knowledge on portfolio analysis
- CO5: To familiarize students with portfolio selection

Advanced Managerial Accounting

- CO1: To enable the students to know the concepts of FSA.
- CO2: Students gain overview of HR and responsibility accounting.
- CO3: Students learn about inflation accounting and income measurement.
- CO4: To acquaint students with knowledge of financial measures of performance.
- CO5: To acquire skills regarding contemporary issues in management accounting

SEMESTER - III:

Research Methodology and Statistical Analysis

- CO1: The student will be well versed in the concept of QT & research.
- CO2: To acquire knowledge regarding collection & analysis of data.
- CO3: To understand the concept of interpretation & report writing.
- CO4: To familiarize the concept of statistical estimation and hypothesis testing.
- CO5: To familiarize the students about large samples and small samples.

E-Commerce

- CO1: To understand the concept of E-Commerce.
- CO2: To acquire knowledge of EDI & supply chain management.
- CO3: To familiarize the concept of EPM & web page designing.
- CO4: To train the students in computerized accounting.
- CO5: To understand the various computerized statements along with GST.

Cost Accounting and Control

- CO1: To familiarize students with the scope of cost accounting.
- CO2: Students acquire knowledge of various cost concepts.
- CO3: To familiarize students with the concepts of marginal & differential costing
- CO4: To inculcate knowledge of budgetary control.
- CO5: Students develop understanding in the concept of standard costing.

Advanced Corporate Accounting

- CO1: To familiarize the concept of holding companies.
- CO2: Students gain knowledge in investment accounting.
- CO3: To inculcate knowledge on lease accounting.
- CO4: Students are trained to prepare consolidated statements of foreign branches.
- CO5: Students will develop an understanding of Forensic accounting.

Financial Statement Analysis

- CO1: Students will be well versed in the concepts of financial statements.
- CO2: To familiarize students with the overview income statement.
- CO3: To familiarize students with the overview of balance sheet.
- CO4: To inculcate knowledge in financial statements of special organizations.
- CO5: Students are trained in various analysis techniques

SEMESTER - IV:

Quantitative Techniques for Business Decisions

- CO1: To inculcate knowledge in F- test and ANOVA.
- CO2: Students gain knowledge about association of attributes and chi-square test.
- CO3: To understand about other non-parametric tests like Whitney test, Sign test etc.
- CO4: Students will be familiar in statistical decision and game theory.
- CO5: Students will develop an understanding in linear programming

Business and Corporate Taxation

- CO1: Students will be well versed in the assessment of partnership firms and AOP.
- CO2: To familiarize students with the assessment of companies.
- CO3: To familiarize students with the assessment of companies and other taxes.
- CO4: To inculcate knowledge in the assessment of co-operative societies and trust.
- CO5: Students acquire knowledge in the fundamentals of GST and custom act.

Strategic Management

- CO1: To understand the concept of strategic management.
- CO2: To acquire knowledge of environmental analysis.
- CO3: To familiarize students in crafting strategies for organisation.
- CO4: To train the students in implementation of strategies.
- CO5: To understand evaluation of strategies implemented

Advanced Cost Accounting and Control

- CO1: The student will be well versed in the concept of ABC.
- CO2: To acquire knowledge regarding costing of service sector.
- CO3: Students understand the concept of uniform and inter firm costing.
- CO4: To inculcate the knowledge of concepts of cost audit, control and reduction.
- CO5: To familiarize students in transfer pricing and cost reporting.

Mergers and Acquisition

CO1: Students will be well versed in the concepts of mergers and acquisitions.

- CO2: To familiarize students with the overview of corporate valuation.
- CO3: To familiarize students with the legal aspects and SEBI regulatory.
- CO4: To inculcate knowledge in accounting for mergers and acquisitions.
- CO5: Students acquire knowledge about demerger.

Project Work

CO1: The Aim of the project is to give an opportunity to students to learn independently and show that they can identify, define, analyse problems in the business context.

M.Sc. NUTRITION AND DIETETICS

Programme Outcomes

This course enables to Acquire PO1: Knowledge in Health & Nutrition Sectors for wholesomeness of the community.

PO2: Global Competence through curricular and practical skills to face challenges in Nutrition & Dietetics field.

PO3: Critical Thinking and Logical Decision making in Settings up of Clinics.

PO4: Analysing Skills for Start-Up programmes and establish as Entrepreneurs

PO5: Develop Communication, Interpersonal and Soft Skills in Health, Nutrition Research sectors

PO6: Enables as an academician/dietician/nutritionist/ research scholar

PO7: Understand the skills in planning therapeutic and personalised diet charts for clinics

PO8: Develop Ethical, Moral and Human Values contributing to the well-being of the society.

Course Outcomes SEMESTER - I:

Human Nutrition (ND 101 T, ND 151 P)

- CO1: Understand, acquaint with the referral nutritional requirements for different age groups.
- CO2: Understand the nutritional requirement of different physiological changes in life cycle.
- CO3: Address the nutrition related problems, the importance of nutrients in different phases of life.
- CO4: Understand and manage the nutrients through diet for Athletes and in Geriatrics.

Nutritional Biochemistry (ND 102T, ND 152 P)

- CO1: Understand the classification, functions and metabolism of macro nutrients
- CO2: Understand the biochemical pathways for nutrient metabolism
- CO3: Enhance the skills in the students in using biochemical techniques as clinical application.
- CO4: Enable students selecting Biochemical techniques for research and apply in clinical findings

Human Physiology (ND 103 T, ND 153 P)

- CO1: Enable students to understand the functions of various systems in the body.
- CO2: Acquaint students with diseases and abnormalities of different organ systems in the humans.
- CO3: Reinforce the skills, orienting the students to tackle the field of clinical research.

CO4: Knowledge on pathological conditions associated with specific organ helps to plan therapeutic approaches

Principles of Dietetics (ND 104T, ND 154P)

CO1: Acquire knowledge regarding prevalence, aetiology, diagnosis, diet and life style management in different pathological conditions.

CO2: Gain knowledge on the methods of assessment of nutritional status and interaction of drugs with nutrients.

CO3: Acquire skills and techniques involved in planning nutrition intervention for prevention and control of chronic diseases

CO4: Advocate the skillset and attitude to adopt dietetics and community research as a profession.

SEMESTER - II:

Principles of foods (ND 201T, ND 251P)

CO1: Provide an understanding of composition and nutritive value of various foods.

CO2: Enable students with changes occurring as a result of processing and cooking in food groups.

CO3: Gain the knowledge on the process involved in the spoilage of foods.

CO4: Acquire skills and techniques involved in the sensory evaluation process of food products.

Nutritional Biochemistry -II (ND202T, ND252P)

CO1: Enable the students to understand the role of nutrients in various metabolic processes involved in Human body.

CO2: Impart knowledge on the biosynthesis and regulation of various nutrients.

CO3: Know the classification, functions and metabolism of Lipids, Vitamins and Minerals.

CO4: Understand the imbalances and Physiological disorders associated with deficiency of nutrients

Research methodology (ND 203T, ND 253P)

CO1: Impart knowledge and skills associated with Research design and sample selection.

CO2: Enable the students to understand the basics of Data Collection and research design

CO3: Enhance the statistical analysis skills for the purpose of Data Interpretation and Analysis.

CO4: Familiarise the students with the ability to write reports, Research abstracts and Thesis

Diet in disease (ND 204T, ND254P)

CO1: Understand the structure and functions of various organs in the human body.

CO2: Gain knowledge on appropriate nutritional care for prevention or treatment of diseases.

CO3: Impart knowledge on prevalence, aetiology, diagnosis, Diet and Lifestyle management of Acute and Chronic diseases.

CO4: Acquire knowledge on impact of metabolic disorders on the functioning of organ systems.

SEMESTER – III:

Community Nutrition (ND 301 T, ND 305 P):

CO1: Understand the concepts of Nutritional Assessment

CO2: Knowledge on Nutritional Security, hierarchy in the health administration in implementing nutritional interventions in the community.

CO3: Develop insight in planning, implementing, monitoring and evaluating nutrition programs.

CO4: Familiarize with in dietary and nutritional management in natural calamities and disasters

Food Microbiolgy (ND 302T, ND 306 P)

CO1: Knowledge on different microorganisms, and factors affecting microbial growth.

CO2: Familiarise with different methods of food to prevent the spread of food-borne illnesses.

CO3: Know the microbes that causes contamination, spoilage and fermentation in different food groups,

CO4: Enable to use appropriate laboratory techniques to develop food products that are safe for human consumption.

Food service management (Elective)(ND 303 T, ND 307 P)

CO1: Knowledge on types, the scientific principles, techniques of food service institutions

CO2: Know the structural designing, installation and operation of specific equipment in the food service management.

CO3: Acquire skills to establish a food service adopting different menu plans.

CO4: Knowledge in food cost, menu planning process in large scale serving and in food costing.

Food Hygiene and Sanitation (Elective) (ND 304T, ND 308P)

CO1: Knowledge on the basic principles and concepts during food handling process

CO2: Acquire awareness on different controlling measures in common house microbes to maintain the safety of food.

CO3: Familiarize with natural resources, responsible and preventive factors for the pollution of the environment.

CO4: Acquire knowledge to choose appropriate cleaning and disinfection method in different food service outlets

SEMESTER – IV:

Advanced Nutrition (ND 401T)

CO1: Familiarize with recent advances in Nutrition, trends in advances in foods for the benefit of Human being.

CO2: Impart knowledge on bioavailability of nutrients, for the benefit of community health.

CO3: Understand the role of nutrients, in maintaining the immunity by immunoglobulins

CO4: Awareness on Nutrition labelling and food packaging materials and the laws related with

Paediatric Nutrition (ND 402T)

CO1: Understand the growth, development and nutritional requirements of children during various stages of life.

CO2: Gain insight knowledge on inborn errors of metabolism and paediatric critical care.

CO3: Impart skills associated with dietary management in various disorders.

CO4: Understand the pathogenesis and diagnostic techniques involved in therapeutic phases in the paediatric age group

Clinical Nutrition and Immunology (Elective) (ND 403T)

CO1: Get an insight in the nutritional care process involved in hospitalised and outdoor patients.

CO2: Familiarise with recent advances in medical nutritional management techniques

CO3: Enable students on the aspects of immune system and its associated disorders.

CO4: To highlight the role of nutrition in immunity, stress management and allergic reactions.

Nutrition in fitness and sports (Elective) (ND 404T)

CO1: Acquire knowledge on special nutritional requirements for physical fitness and sports.

CO2: Familiarize with - nutrition to improve the performance of sports person.

CO3: Get an insight in the sports physiology and exercise on various human systems.

CO4: Enable students with sport specific nutrient requirement for optimal exercise performance in athletes.

M.Sc. BOTANY

Programme Outcomes

PO1: Students will recall the theoretical and practical knowledge about the plant diversity, their importance, and define the types of life cycles.

PO2: Students shall recognize the research oriented learning, try to correlate with their applications.

PO3: Students will acquire enhanced skills in handling scientific instruments, planning and executing biological research with environmentally safe materials

PO4: Students learn about individual competency and group work skills in conducting experiments.

PO5: Students will be enriched with theory and practical knowledge of the topics included in the curriculum.

PO6: Students shall formulate the evidences of the subject, evaluate and improve their understanding on various concepts of evolution

PO7: Students develop research skills by completing a scientific project and publications.

PO8: Students develop entrepreneurship with various applied aspects of the subject in eco-friendly manner.

Course Outcomes SEMESTER – I:

Phycology and Mycology

CO1: Students will learn-Introduction, general characters and comparative study of Algae.

CO2: Life history and classification of the Cyanophyceae, Chlorophyceae and Charophyceae.

CO3: Introduction to Mycology and General Characters

CO4: Systematic position, life cycle and brief account of the Microsporidia, Ascomycota, Basidiomycota etc...

Bryophyta and Pteridophyta

CO1: Students gain knowledge of Classification systems of Bryophytes, Distrubution, Structure and Reproduction

CO2: Structure and evolution of Gametophytes, Sporophytes and Fossil Bryophytes

CO3: Classification systems of Pteridophytes, their distribution, structure, and reproduction, telome theory and stellar evolution in Pteridophytes.

CO4: The Paleobotany introduction, fossil bryophytes, geological time scale, and carbon dating origin and evolution of early vascular plants and different orders of fossils.

Taxonomy of Angiosperms and Medicinal Botany

CO1: Students learn various aspects in taxonomy like principle systems of classification, evidence and techniques used in CO1: Morphology, Cytology, Phytochemistry etc,

CO2: Nomenclature and Biosystematics

CO3: A comparative study of different families and Origin of Angiosperms

CO4: Medicinal Botany and Flora of Telangana

Plant Biochemistry

CO1: Students will learn Bioenergetics, thermodynamic principles, applicable to bioenergetics, Enzyme properties, regulation and mechanism.

CO2: Carbohydrates structure, functions and classification

CO3: General characteristics, classification of amino-acids, proteins and nucleic acids CO4: Structure and function of membranes, cell-wall, secondary metabolites, Introduction, classification, distribution and functions.

SEMESTER – II:

Applied Phycology and Mycology

CO1: Students learn in detail about General characters and life history of the Bacillariophyceae, Euglenophyceae, Phaeophyceae, and Rhodophyceae.

- CO2: A Brief account of Algal blooms, Toxic algae, Bio-fertilizers, and Fossil algae
- CO3: Fungi in Industry, Medicine, Agriculture and as Food
- CO4: General account of Bacteria, Viruses and Mollicutes.

Gymnosperms & Embryology

- CO1: Students acquire the knowledge of Fossil and extant gymnosperms
- CO2: Study of Gymnospermic taxa and their economic importance.
- CO3: Reproductive study of Gymnosperms
- CO4: Study of Embryology.

Plant Anatomy and Palynology

CO1: Students will come across various aspects like Introduction, importance of shoot and root development theories.

CO2: Structural composition of epidermal cell complex. Stomatal complex, Trichome complex and transfer cells.

CO3: Secondary growth of dicot stem, morphology of vessels, axial ray parenchyma, fibers and wood identification.

CO4: Palynology scope and importance, methods in Palynology

Plant Physiology

CO1: Student will learn the Concept of water relations, physiology of mineral nutrients and their assimilation.

CO2: Students will gain adequate knowledge of photosynthesis in plants

CO3: Students will learn in detail regarding respiration in plants.

CO4: Plant hormones, physiology of flowering and seed dormancy

SEMESTER – III:

Cell Biology, Genetics and Biostatistics

CO1: Students will learn Microscopy principles and Gene expression

CO2: Students will acquire knowledge of Gene mutations, chromosomal aberrations, DNA damage and repair.

CO3: Inherited human diseases and recombinant DNA technology and uses.

CO4: Basic concepts of gene sequencing and bioinformatics.

Environmental Pollution and Protection

CO1: Students learn about The Kinds of Pollution, Air pollution, Effects, Noise pollution and Acid-rains.

CO2: Water pollution sources, effects and control measures

CO3: Soil pollution, sources, effects, control measures, Bioremediations and Phytoremediation.

CO4: Classification of solid wastes and Environmental Protection Act 1986

Biodiversity of Angiosperms

CO1: Students will be familiar with the concept and origin, development of Biodiversity, aims objectives and characterization of Biodiversity.

CO2: Magnitude, Botanical regions, Hotspots and Distribution and Endemism of Biodiversity

CO3: Inventorying Monitoring for conservation RAMSAR convention, Red data books

CO4: Economic value and utilization of Biodiversity, Conventions, Rio conference

Cultivation and Post – Harvest Technology of Medicinal Plants

CO1: Students will learn in detail regarding the origin of Medicinal Botany and the concepts of different traditional systems.

CO2: Principles and recognize the plants used in traditional systems of medicine, cultivation methods of various medicinal plants, their medicinal uses.

CO3: Aromatic Plants Cultivation and Significance of Organic Farming, Distillation.

CO4: Conservation methods, Crude drug preparation, financial aspects and patenting the medicinal plants.

SEMESTER – IV:

Ecology and Phytogeography

CO1: Student will learn about The Environment, Habitat and Niche and Ecosystem Ecology

- CO2: Population Ecology and Species Interactions
- CO3: Community Ecology and its Characteristics and Ecological Succession

CO4: Biogeography, Applied Ecology, Conservation Biology

Horticulture and Plant breeding

CO1: Students will learn Horticultural Plants and their Nutrient, Management, Propagation through Cuttings and Graftings.

CO2: Disease and Pest management of Horticultural Plants, Mass Production through Tissue culture and Micropropagation.

CO3: Plant Breeding Objectives, Biotic, Abiotic Stresses, Back Cross Breeding, Marker Assisted selection Inbred cultivars, Commercial hybrids

CO4: Mutation Breeding, Induced Polyploids, Haploids and Dihaploids, Bt-Brinjal, Golden-rice, PCR based Zygosity and ELISA

Taxonomy of Angiosperms and Ethnobotany.

CO1: Students learn the contribution of R.M.T Dahlgren, R.F. Thorne and Kubtizki to the growth of taxonomy and identify the unknown plants genus and species and are able to prepare the keys.

CO2: Students learn the role of BSI, Kew Botanical Gardens and Smithsonian Institution in promoting taxonomy. the phylogenetic aspects of floral morphology in certain families

CO3: Seed morphology and Corner's classification. distinguish various Families and also explore their role in Modern economy

CO4: Students learn basic concept, Scope, Objectives and Methodology of Ethno-Botanical Studies followed by Role of Ethno-Botany in Modern medicine

Pharmacognosy

CO1: Students will acquire knowledge of pharmacognosy and relate its role in modern medicine, various sources of crude drugs, and classifications of crude drugs and emphasize the difference.

CO2: Students will learn Pharmacognostic studies of different plant drugs

CO3: Various drug constituents such as Acacia gum, Phyllantus, Coleus etc, understand, experiment, estimate and enumerate the different methods of drug evaluation.

CO4: The Powdered characters, the active principles and non-active principles and their synergy as a drug. Identify types and methods of adulteration and contamination.

M.Sc. CHEMISTRY

Programme Outcomes

PO1: Students acquire knowledge in the subject and develop critical thinking, reasoning which enables them to work in projects, research as well as academic institutions.

PO2: Students get acquainted with fundamental concepts in atomic structure, spectroscopy, natural product chemistry and heterocyclic chemistry.

PO3: They perceive the factual knowledge of complex chemical structures, molecular rearrangements, reaction mechanisms, quantum mechanics, electrochemistry and their relevant importance.

PO4: They will be able to recognize, formulate and analyze the complex problems using the knowledge gained in various aspects of chemistry like supramolecular chemistry, nanotechnology, asymmetric synthesis, chemical kinetics etc.

PO5:They augment the recent development in the field of green synthesis, organic synthesis, pharmaceuticals, bioinorganic and bio- organic chemistry.

PO6: Students will be aware of responsibilities towards environment and apply knowledge to solve issues related to environmental pollution.

PO7: They comprehend the importance of various heteroatom, structure, their coordination and bonding in metal complexes.

PO8: Students enhance their skills in devising chemical experiments, chemical synthesis, elucidating the structure of compound using chemical entities and spectral characterization techniques.

Course Outcomes SEMESTER-I:

A. Inorganic Chemistry

CO1: Students develop skill to identify, analyze and understand symmetry of every task in daily life.

CO2: Learns to demonstrate, analyze and apply fundamental knowledge in bonding in metal complexes.

CO3: They acquire and enhance skills in metal ligand interactions and their stability constants.

CO4: Students procure knowledge in diatomic ligands and ligational aspects.

B. Organic Chemistry

CO1: Understand to discern the relationship between stereochemical molecules that plays a role in drug design.

CO2: They develop skills to build pathway of reaction mechanism.

CO3: Students perceive the importance of conformational analysis of acyclic molecules.

CO4: They understand the importance of natural products as drugs.

C. Physical Chemistry

CO1: Students develop ability to learn the basic and advanced concepts of entropy, understand the various applications of thermodynamics.

CO2: They acquire the knowledge and applications of EMF electrochemical cells.

CO3: They understand the quantum mechanical concepts of various microscopic entities.

CO4: Students will be able to demonstrate the reaction rates for various chemical reactions.

D. Analytical Techniques and spectroscopy- I

CO1: Students develop ability to identify, determine different organic samples nutritional quality in food, crime sense testing, forensic pathology.

CO2: They acquire ability to determine the structure of organic molecules in solution and study of molecular crystals.

CO3: Learns to demonstrate, analyze and identify different structures and functional groups of organic compounds used in research.

CO4: They comprehend the experimental application of electronic structure.

SEMESTER-II:

A. Inorganic Chemistry

CO1: Students acquire knowledge and understand the reaction mechanism in metal complexes.

CO2: Learns to demonstrate, analyze and apply knowledge to calculate microstates, terms related to complexes.

CO3: They acquire knowledge about the stability and structural patterns of metal clusters.

CO4: They develop skills to identify role of metal ions in the biological and physiological systems.

B. Organic Chemistry

CO1: Understand the reaction mechanism and determine NGP effects on rates of reactions.

CO2: Students will be able to differentiate the thermal and photochemical conditions of pericyclic reactions, solve the problems related to it.

CO3: They acquire knowledge in photochemistry, analyze and solve the problems.

CO4: Learns to recognize intermediate formed in various molecular rearrangements.

C. Physical Chemistry

CO1: Students gain applicative knowledge of thermodynamics to distinguish ideal and non ideal systems.

CO2: They develop ability to calculate different states of molecules and study about various photochemical reactions.

CO3: They acquire theoretical knowledge on different aspects of quantum chemistry.

CO4: They understand the unique importance of solids and technological applications in the advancement of human life.

D. Analytical Techniques and spectroscopy- II

CO1: Students will be able to analyze the quality of the drug in tablets.

CO2: They develop potential to interpret structure of compounds by NMR.

CO3: They develop potential to interpret structure of compounds by Mass spectrometry.

CO4: They gain ability to analyze the structure of compounds by PES and ESR

SEMESTER-III:

A. Synthetic Reagents, Advanced NMR, Conformational Analysis and ORD

CO1: Students comprehend the use of protecting groups to obtain chemoselectivity in a chemical reaction.

CO2: They will be able to differentiate the oxidation and reduction reactions that help in understanding chemical processes.

CO3: Learns to interpret the structure of unknown compounds using 13C & 2D- NMR spectra.

CO4: They gain insight on conformational characteristics of molecules and understanding ORD helps to solve stereochemical problems (Steroids).

B. Modern Organic Synthesis

CO1: This course aims to classify the generation of asymmetric synthesis and gain insight on their importance in medicinal chemistry.

CO2: Students recall the terminology used for target selection and identify the retrosynthetic approach to synthesize molecules.

CO3: They compare new synthetic reactions involving C-C & C-X coupling and ring formation reactions.

CO4: They procure knowledge on new techniques and concepts in organic synthesis.

C. Bioorganic Chemistry

CO1: They develop knowledge on reactions involving carbohydrates.

CO2: They will be able to differentiate the structure of DNA and RNA, perceive various biological phenomenons associated with it.

CO3: This course assimilates knowledge on the role of enzymes as a biocatalyst for various chemical reactions.

CO4: Students apprehend the role of vitamins as a coenzyme to catalyze certain reactions.

D. Green Chemistry & Organic materials

CO1: Students appreciate the importance of green synthesis, technologies in sustainable growth of industry and society.

CO2: They adopt alternative methods and solvents for green synthesis.

CO3: They understand the applications of nanotechnology in various fields.

CO4: This course imbibes the importance of intermolecular interactions in supramolecular system..

SEMESTER-IV:

A. Drug Design and Drug Discovery

CO1: Students delineate the process of drug discovery and development.

- CO2: They procure knowledge on the challenges faced in drug discovery process.
- CO3: They gain insight on computational methods in drug discovery.
- CO4: Students appreciate the role of combinatorial chemistry in drug discovery process.

B. Drug Synthesis and Mechanism of action

- CO1: Students will be able to recall the different drug target systems.
- CO2: They recognize the drug structure and predict its pharmacological action.
- CO3: They gain insight on the mode of action of drugs on target pathways.

CO4: Students appraise the role of chiral drugs in pharmaceutical industry.

C. Advanced Heterocyclic Chemistry

CO1: Students recall the background of heterocyclic chemistry and compares aromatic and non- aromatic heterocycles.

CO2: They will be able to differentiate 5 and 6 membered heterocyclic compounds.

CO3: This course comprehends the importance of more than 3 heteroatoms in pharmaceutical industry.

CO4: Students recognize the larger ring heterocycles and their importance.

D. Advanced Natural Products

CO1: Students comprehend the importance of natural compounds as lead molecule for drug discovery and key pathways for biosynthesis of natural products.

CO2: They compare different classes of natural product through structural elucidation and evaluate the method of synthesis.

CO3: They gain potential to interpret the complex structure of natural products using advanced spectral methods.

CO4: They understand the planning of total stereoselective synthesis of natural products.

M.Sc. PHYSICS

Programme Outcomes

Specialisation: Electronic Instrumentation

PO1: Gain conceptual knowledge in General Physics and Electronic Instrumentation.

PO2: Identify, formulate and analyse complex scientific problems for higher studies and to excel in competitive examinations.

PO3: Apply appropriate techniques with computational tools.

PO4: Apply and demonstrate the basic physics in environmental context for sustainable development.

PO5: Enhance and adopt skills through lab experiments and field trips will promote confidence to pursue research for the benefit of mankind within the framework of respecting professional ethics and value system.

PO6: Have fundamental and advanced level knowledge in the field of Microprocessors and Microcontrollers, Embedded systems, Instrumentation and General Physics with their applications.

PO7: Gain skills in interfacing various components with Microprocessors and Microcontroller.

Course Outcomes SEMESTER - I: Mathematical Physics

CO1: Analyse & understands the Legendre's and Bessel's Differential Equations.

CO2: Gain Knowledge in Hermite and Laugueree Differential Equations.

CO3: Gain conceptual knowledge in the difference between Laplace and Fourier Transform and Tensors and Matrices.

Classical Mechanics

CO1: Gain knowledge in Newtonian Mechanics, Lorentz Transformation .

CO2: Understands the concepts of Lagrangian mechanics, basic mechanical concepts related to discrete and continuous mechanical systems.

CO3: Gain conceptual knowledge about Hamiltonian mechanics.

Quantum Mechanics-I

CO1: Analyse mathematical space that contains all possible states of a physical system using Dirac's notation.

CO2: Students computes the energy eigen values and evolution of the quantum simple harmonic oscillator, space and time displacements equations.

CO3: Student finds the commutation relations for linear angular momentum.

Electronics

CO1: Gain Knowledge about analog circuits and their applications.

CO2: Understands basic functions of OP-Amp and its applications and gain knowledge about IC 555.

CO3: Gain knowledge about Digital systems and its applications & understand basic architecture of 8-bit microprocessor, develop skills in assembly language programme.

C-Programming

CO1: Gain knowledge about basics of C-Programing.

CO2: Implement numerical methods in C-Programming.

Optics

CO1: Understand diffraction and interference patterns of monochromatic light.

CO2: Understand double refraction of light and obtain minimum deviation for polychromatic light passing through the prism.

SEMESTER – II:

Electromagnetic Theory

CO1: Understands various concepts of static fields and time varying electromagnetic systems.

CO2: Analyse the propagation of plane em waves in different media and gain knowledge of reflection and refraction of plane em waves at boundaries.

CO3: Understands Fresnel's equations, metallic reflection & oscillating source.

Statistical Mechanics

CO1: Understands the basic idea of phase space, micro state, macro state and provides the idea of probability to the particles.

CO2: Analyse the insight of postulates of statistical physics and learn which particles follow which statistics and why.

CO3: Apply the statistical distribution in real life problem.

Quantum Mechanics -II

CO1: Understands & able to explain the Dirac equation and its free-particle solutions.

CO2: Analyse the WKB approximation method and understand time independent perturbation theory.

CO3: Applications to relativistic quantum mechanics.

Solid State Physics

CO1: Gain basic knowledge of crystal systems and spatial symmetries and crystal growth techniques.

CO2: Understands crystal imperfections, vibrational properties of solid state system, their dispersive and thermal properties.

CO3: Gain knowledge about energy bands, fundamental principles of semiconductors and to estimate the charge carrier mobility and density.

SEMESTER – III:

Modern Optics

CO1: Understands the requirements for a system to act as a laser.

CO2: To differentiate the various types of lasers, assess which laser would best meet the need for a particular industrial or research task.

CO3: Understands the fundamentals, techniques and applications of holography and Fourier optics.

CO4: Gain knowledge about the fundamental concepts of non linear optics.

Advanced Solid State Physics

CO1: Gain Knowledge on Fermi surfaces and effect of electric and magnetic fields on it.

CO2: Understands about dielectrics and their behaviour, ferroelectric crystals classification.

CO3: Analyse the magnetic properties of solids along with the theoretical methods

CO4: Gain conceptual knowledge about super conductivity, and its applications.

Electronic Instrumentation

CO1: Understands and analyse the errors occurring in measuring system and to test the system performance.

CO2: Gain knowledge of amplifiers & filters and their importance in instrument design.

CO3: Understands various signal generators and spectrum analysers.

CO4: Analyse different types of measuring, recording instruments and displays.

Microprocessors, DSPS & Interfacing

CO1: Gain knowledge about architecture of 8086 microprocessor and its interfacing in system design and implementing assembly language programs.

CO2: Understands how to interface various ICs to 8086 µp while designing systems and to differentiate 16-bit, 32-bit µp.

CO3: Gain conceptual knowledge about special purpose DSP processor and its usage in day to day life.

CO4: Ability to understand various addressing modes and Instructions of DSP processor.

SEMESTER – IV:

Nuclear Physics

CO1: Gain knowledge about nuclear forces and nuclear models, able to calculate spin and parity of nucleus.

CO2: Understand the theories of three types of radioactive decay.

CO3: To compare the relative penetrating power of three types of nuclear radiations and gain knowledge about nuclear detectors.

CO4: Gain knowledge about nuclear reactions and information about nuclear structure.

Spectroscopy

CO1: Gain knowledge of atomic spectra of one and two valence electrons of atoms.

CO2: Analyse the Molecular Spectra and its salient features and explains Rotational Vibrational spectra of atoms.

CO3: Gain knowledge about Raman and IR spectra and how Fourier principle used in spectrometer.

CO4: Gain information about ESR & NMR spectra & its applications.

Instrumentation For Measurement And Data Transmission

CO1: Gain knowledge of concept of transducers and their usage in measuring physical parameters.

CO2: Analyse pressure, measuring transducers and flow measurement meters.

CO3: Analyse of open and closed loop control systems in designing various process control systems.

CO4: Understands various data transmission and telemetry systems.

Embedded Systems And Their Applications

CO1: Gain knowledge on various types of architectures, CISC and RISC processors, 8051 microcontroller and its importance.

CO2: Ability to write Programmes of 8051 & the importance of interrupts and also serial communication. CO3: Gain conceptual knowledge on PIC microcontrollers, architecture and pin diagram of different types of PIC controllers.

CO4: Learn to interface various ICs to microcontrollers in designing embedded systems .

M.Sc. ZOOLOGY

Programme Outcomes

PO1: Students understand the need of acquiring the heterogeneous knowledge of classification methods and its application in the study of diverse fauna for a comprehensive inference of its evolutionary relation and existence

PO2: Students understand the similarities, differences and distinctive aspects in the morphological, physiological, biochemical, anatomical, hormonal, developmental, immunological, cytological, genetical, ethological and molecular biology levels among invertebrates and vertebrates

PO3: Students learn to statistically analyse, interpret and devise simulation methods to encounter the challenges posed by the biotic and abiotic factors of the environment.

PO4: Students understand the importance of ecological balance and take sustainable steps in restoration and conservation of environment resources and life forms.

PO5: Students develop technical skills and implement practical techniques in assessing, analysing and solving problems from sectors of health and agriculture.

PO6: Students integrate the enriched technical knowledge gained in the subjects of molecular, developmental, genetics to construct research problems for medical interventions in mitigating the maladies of the health.

PO7: Students improve their employability and entrepreneurial prospects from the applied subject's knowledge like Aquaculture, Fisheries, Sericulture, Animal Care and Research Fields.

PO8: Students develop holistic perspective in formulating research designs and finding appropriate solutions contributing to the society and betterment of human kind.

Course Outcomes SEMESTER – I:

Advances in Taxonomy and Invertebrate Biology (ATIB)

CO1: ICZN (International Commission on Zoological Nomenclature) principles, conventional and new methods of taxonomical classification of animals comprehended

CO2: Knowledge of physiological processes of life in invertebrates is acquired

CO3: Understanding about minor phyla, parasites, larval forms and connecting links in invertebrates

Environmental and Conservation Biology (ECB)

CO1: Cognizance achieved of complexities in ecosystems and population studies

CO2: Assimilation attained of biodiversity indices, environmental impact assessment and avenues of mitigation

CO3: Sensitization earned about ecological conservation and Legislation of natural resources

Structural Biology (SB)

CO1: Identified the comprehensive aspects of biomolecules and enzymes

CO2: Molecular organization based communication mechanisms and molecular events of cell cycle comprehended

CO3: Knowledge gained of sequential steps in Central Dogma of molecular biology and therapeutic interventions to cancer

Biological Instrumentation and Techniques (BIT)

CO1: Knowledge about working principles and applications of biological instruments is acquired

CO2: Acquired understanding of molecular identification techniques and Imaging techniques

CO3: Awareness about diagnostic techniques in the detection of diseases is attained.

SEMESTER – II:

Evolution and Vertebrate Biology (EVB)

CO1: Evolutionary descendancy of vertebrates comprehended

CO2: Attainment of ability to distinguish between skeletal, digestive, respiratory and integumentary systems of vertebrates

CO3: Knowledge acquired to distinguish between nervous, excretory and reproductive systems of vertebrates

Immunology

CO1: To understand evolution, types, cells and organs of immune system

CO2: To assemble knowledge of antigens, antibodies, MHC and complement system of immune system

CO3: To identify the mechanisms involved in autoimmunity, transplantation and tumour immunology

Animal Physiology

CO1: To study physiological adjustments in mammals exposed to diverse media

CO2: To comprehend various detoxification pathways and mechanisms involved - osmoregulation and thermoregulation in animals

CO3: To study different functional aspects and physiological mechanisms involved in nervous, muscular and endocrine systems of organisms

Genetics and Developmental biology (GDB)

CO1: Knowledge about gene Interaction, molecular markers, genetic and linkage mapping methods is acquired.

CO2: Sequential processes of gametogenesis, fertilization and early development of organisms is comprehended

CO3: Knowledge attained about axis formation, organogenesis, teratogenesis and stem cells

SEMESTER – III:

Systems Biology

CO1: Students understand the emphasis of perceiving individual as whole and not as parts.

CO2: Understand the need for systems approach to study health disorders, agricultural pests and bioremediation.

CO3: Acquire knowledge about simulation models, data formats and their use in predictive modeling

CO4: Comprehend the benefits of systems biology applications in fields of medical, agriculture and evolution

Research Methodology

CO1: Understand the essential steps and types in scientific research.

CO2: Develops the skills of applying computer application in biology, data processing and probability distribution statistical modules

CO3: Learn about different inferential statistical tools in research

CO4: Acquires knowledge about literature collection, plagiarism, report writing, Intellectual property rights and laboratory safety methods

Comparative Animal Physiology-I

CO1: Learn about dietary requirements and mechanism involved in regulation of digestion in different animals

CO2: Acquire knowledge about respiratory pigments and comprehensive aspects of oxygen in animals

CO3: Gain extensive information about excretion, osmoregulation and thermoregulation in animals of different phyla

CO4: Learn about the effects of deranged metabolism

Applied Toxicology

CO1: Acquire knowledge about toxicants-its classification, dose, routes of entry, bioaccumulation and elimination

CO2: Gain knowledge about the toxicant effect at biochemical level of an organism

CO3: Acquire extensive information about toxicant effect at organ system level in animals

CO4: Understands the detrimental effects of toxicant in the organism and environment. Regulation and legislation enforced by government regarding toxicants usage and elimination.

SEMESTER – IV:

Animal Biotechnology

CO1: Learn about the scope of biotechnology in improvement of animal and human life

- CO2: Acquire knowledge about the techniques involved in invitro culture of cells and tissues
- CO3: Learn the methods of transgenesis in animals and down streaming process of recombinant products
- CO4: Learn about the biotechnological applications in the fields of medicine, agriculture and aquaculture

Fish Biology

CO1: Acquire knowledge about evolution, characteristics and integumentary system of Fishes

- CO2: Learn about locomotion, feeding, osmoregulation and migration in fishes
- CO3: Acquire knowledge about functioning of different organ systems in fishes.

CO4: Learn about systems of nervous, endocrine, reproduction and embryology of fishes.

Comparative Animal physiology-II

CO1: Acquire knowledge about CNS, receptors and cognitive behavior in invertebrates and vertebrates.

CO2: Gain comprehensive knowledge about muscle-types, physiology and its role in movement

CO3: Learn about differences in circulatory system in invertebrates and vertebrates

CO4: Learn about hormonal control on the sexual behavior, chromatophore system and developmental process in insects and vertebrates.

Project

CO1: Students acquire the skill to design and execute the research dissertations

B.A.

Programme Outcomes

PO1: The students acquire knowledge in the field of Social, Political, Economics, Historical, Geographical, Ideological and Philosophical tradition and thinking which make them sensitive and sensible enough. Students should be able to connect with local to global issues and debate and infer.

PO2: Principle of Reflection – Students will be able to gain knowledge ask questions develop skills and form conclusions through reflective thinking.

PO3: Program makes students a responsible citizen. Understand the rights and duties provided in the constitution and Universal Human Rights. Develop knowledge about social and economic growth.

PO4: The program enables the students to acquire the knowledge with the human values framing the base to deal with various problem in life with courage and humanity. Student should integrate the acquired knowledge into their day to day life and apply to situations.

PO5: The students will be ignited enough to think and act over for the solution of various issues prevalent in the Society to make this world sustainable.

PO6: Interpret, compare, and contrast ideas in the social sciences. Demonstrate knowledge of the methods, techniques, concepts, and vocabularies of the social sciences. Demonstrate knowledge of historical and contemporary issues in the social sciences.

PO7: Principle of solidarity and Kinship- Enable students to integrate varying perspectives that link local and global realities.

PO8: The program also empowers the graduates to appear for various competitive examinations.

ECONOMICS

Course Outcomes SEMESTER – I: I.DSC 101: Micro Economics

CO1: Students will learn about consumer behavior and how the consumer tries for maximum

satisfaction.

CO2: Students will discover various methods of production analysis and how to maximize profit with minimum cost.

CO3: Students will learn the nature of different types of cost and revenue analysis.

CO4: Students will get the information about the market and price determination under imperfect competition market.

CO5: Students will learn profit maximation strategies of business firms.

SEMESTER – II:

1.DSC 102: Macro Economics

CO1: It provides knowledge regarding the formulation of macroeconomic policies to increase National Income.

CO2: Students can understand the various theories of income and employment.

CO3: Students will understand the relationship between Investment and rate of interest.

CO4: Students will analyze the factors that determine the supply and demand for money.

SEMESTER – III:

DSC 103: Statistics for Economics

CO1: Students will know to use statistics as a tool to prepare economic policies.

CO2: Students will know the different methods of calculating averages and measures of dispersion.

CO3: Students will understand the functional and mathematical relationship between two variables after studying correlation and regression.

CO4: Students will learn the knowledge of base period and current period price, in index numbers.

CO5: Understanding Analysis of Time Series, Students will understand the arrangement of values of a variable over successive time periods.

SEMESTER – IV:

DSC 104: Indian Economy

- CO1: Students will observe structural changes and problems of Indian Economy.
- CO2: Students will understand the role of Agriculture sector in Indian Economy.
- CO3: Students can identify the trends of Industrial Production and services in India.

CO4: Students acquire knowledge of NITI Aayog.

CO5: Students will understand the role service sector in development of Indian Economy.

SEMESTER – V:

DSC 105: Public Economics

- CO1: Students will be able to learn the scope and importance of Public Finance.
- CO2: Students will discover the theories of public expenditure.
- CO3: Students will understand about different types of taxes and redemption methods of Public Debt
- CO4: Students will evaluate how Fiscal policy and Federal finance, influences on the Economic stability.
- CO5: Students will know how to prepare the Budget.

SEMESTER – VI:

DSC 106: International Economics

- CO1: Students will compare classical and modern theories of international trade.
- CO2: Students will know that international trade is the engine of Economic growth.
- CO3: Students will analyze tariffs and non-tariff barriers of international trade.
- CO4: Students gain the knowledge of BOP, BOT and its components.
- CO5: Students will understand the International factors movement.

HISTORY

Course Outcomes SEMESTER-I:

History of India [from Earliest times to 700 CE]

CO1: Students perceive various sources to study Ancient India.

CO2: Understand the glory of Indian history in the age of Harappan Civilization.

CO3: Knowledge of the philosophy of Jainism and Buddhism.

CO4: Students understand that the Mauryan empire was the first Pan-Indian empire that covered the Indian region.

CO5: Knowledge about the Golden Age of Gupta's for Sciences of Astronomy, Mathematics and Metallurgy.

SEMESTER-II:

History of India [C.700-1526CE]

CO1: Understanding about the clans of Rajputs, Chauhans, Rathores, Sisodias and Chandallas. Bhakti Movement in South India.

CO2: Knowledge of Administrative set-up of Sultanate and early difficulties of Sultans in India.

CO3: Knowledge pf the Bhakti and Sufi Movements in Hinduism and Islam.

CO4: Gain Knowledge of the architecture of Ramappa temple and Thousand pillar temple.

CO5: Understanding of Reconstruction of Hindu life and Administration of Vijayanagar rulers in 12th and 13th Centuries.

SEMESTER- III: History of India [1526-1857 CE]

CO1: Understanding of Babur's invasion and establishment of Mughal Empire- Mughal concept of Kinship and state.

CO2: To know about the military organisation of Shivaji Maharaj. Marathas under the Peshwas.

CO3: To gain the Knowledge about the advent of Europeans and their administration.

CO4: Understand the three stages of colonialism and mercantilism.

CO5: Causes and consequences of the first uprising of the War of Independence. Indian economy-Railways.

SEMESTER- IV: History of India [1858-1964 CE]

CO1: This Chapter marks the end of British East India Company's Rule and the beginning of British Crown's administration in India.

CO2: To know the Socio-religious reform movements and about Dr. Ambedkar, our architect of Indian Constitution.

CO3: Rise of Gandhiji and his contribution to the freedom struggle. Role of moderates and extremists.

CO4: Role of Bipin Chandra Pal, Bhagat Singh and Chandra Sekhar Azad and others in the Revolutionary Movement.

CO5: Understanding of formation of Pakistan and Mohammed Ali Jinnah and Building of Modern India by Nehru.

SEMESTER- V:

History of Modern World [1453-1964 CE]

CO1: Students gain knowledge of the Geographical discoveries and the Renaissance movement. Significance of reformation and counter reformation movements in Europe.

CO2: Realize the causes and results of Glorious, American, French and Industrial Revolutions. Achievements of Napoleon Bonaparte.

CO3: Visualize the importance of the revolt of 1830 and 1848 in France and the efforts of Bismarck for the unification of Germany.

CO4: Understand the causes and results of the First World War, Russian Revolution, rise of Nazism and Fascism in Germany and Italy.

CO5: Students will be able to learn the causes and results of the Second World War and the establishment of UNO.

SEMESTER-VI:

History and Culture of Telangana [from Earliest times to 2014 CE]

CO1: To understand the Geo-historical aspects- religious movements, Art and Architecture- Folk and tribal art, Handicrafts- heritage and culture of Telangana.

CO2: Knowledge of Asaf Jahi Dynasty- development and modernization of Hyderabad.

CO3: The State of Hyderabad during 1900-1942 and the major events that contributed to the National Movement for Freedom.

CO4: Students will be able to learn about the major events leading to Telangana statehood Movement.

CO5: Students can identify the second phase of movement for separate Telangana. Role of various associations- formation of Telangana [2014].

POLITICAL SCIENCE

Course Outcomes

SEMESTER – I:

Understanding Political Theory

CO1: Introduction of the subject of Political Science

CO2: Gives knowledge about an approach to the study of origin and theories of the state

CO3: Gives awareness on concepts like Liberty, Equality and Justice – Liberal, Marxist and Feminist Views

CO4: Creates interest among the students about the different ideologies

CO5: Gives in-depth knowledge about the Political Institutions/Organs of Government

SEMESTER – II:

Western Political Thought

CO1: Introduction of Greek Political Thought - Plato & Aristotle

- CO2: Understand about Medieval and early Modern Political Thought Aquinas & Machiavelli
- CO3: Learn about Social Contract Theory and understand Absolute, Limited and Popular Sovereignty
- CO4: To foster the students with the importance and relevance of Utilitarianism
- CO5: Understand Philosophy of Dialectics Learn about Hegel and Karl Marx

SEMESTER – III:

Indian Political Thought

CO1: Understand State and Society in Ancient India and Philosophy of Manu - Manusmriti, Buddha and Kautilya - Statecraft

CO2: Knowledge of medieval political thinkers like Basava – Gender Equality and Ziauddin Barani – Ideal Polity

CO3: Understand the Renaissance period in Indian Political thought through Raja Ram Mohan Roy and Jyothi Rao Phule

CO4: Learn the Reformative contribution of Mahatma Gandhi and Dr. B. R. Ambedkar

CO5: Gain knowledge about the Socialist ideas of M N Roy, Jawahar Lal Nehru and R M Lohia.

SEMESTER – IV:

Constitution in Politics of India

CO1: Overview of Indian National Movement, evolution and Philosophical foundations of Indian Constitution

CO2: Knowledge of the Union and State Government - Legislature, Executive and Judiciary

CO3: Understand the federal Politics - Union and State relations – Legislative, Administrative, Financial and recent trends in their relations

CO4: Analyze the Electoral Politics in India, Political Parties, Election Commission and Electoral Reforms

CO5: Enlighten the students about various issues in the Indian Politics – Religion, Caste, Gender & Minorities

SEMESTER – V:

International Relations

CO1: Understand International Relations, Rise of Sovereign State system – State and Non-State actors

CO2: Analyze European colonialism, causes and consequences of First and Second World War and Rise of Developing world - Decolonization.

CO3: Knowledge of rise of Super Powers - Cold War, Détente, end of Cold War and consequences

CO4: Analyze the Determinants and Features of India's Foreign Policy and Non-Alignment

CO5: Evaluate India's Relations with USA, China, Pakistan, Sri Lanka and Nepal

SEMESTER – VI:

Global Politics

CO1: Learn about the Concept of Power, Elements of National Power, Balance of Power and Soft Power CO2: Understand the concept of Security – types, Collective Security, Unipolarity, Bipolarity and Multipolarity

CO3: Gives knowledge about Environmental Problems and how they can protect their Rights

CO4: Knowledge about World Bank, IMF & WTO, North-South Dialogue and South-South Cooperation

CO5: Knowledge of Disarmament & Arms Control, NPT, CTBT, MTCR, WMDs

PUBLIC ADMINISTRATION

Course Outcomes SEMESTER – I:

Basics Of Public Administration

CO1: Introduction to Public Administration - Meaning, importance, state and evolution

CO2: It gives insights of Public Administration and its relation with other social sciences.

CO3: In depth knowledge of oriental, classical, scientific and bureaucratic approaches.

CO4: Understanding of human relations and behaviour approach and socio-psychological approach to Administrative actions.

CO5: Knowledge of administrative ecology and social justice approach- Dr.B.R.Ambedkar and Jyothi Rao Phule.

SEMESTER – II:

Development Dynamics And Emerging Trends

CO1: Comparative and Development Administration: Understanding comparative and development administration and changing dynamics of development administration.

CO2: New Public Administration: Knowledge Minnowbrook conferences I, II, III and advent of New Public Administration.

CO3: Market Theories: It explains the changes in choice and management systems.

CO4: Emerging Trends-I: Understanding of Public Policy and Governance and the role of public services in emergence and development of new state of Telangana.

CO5: Emerging Trends-II: Understanding Globalization and Public Administration and present status of Public Administration in the context of Globalization.

SEMESTER – III:

Indian Administration: Union Government

CO1: Historical Background: Evolution of Indian Administration pre and post-Independence-continuity and change, constitution and administration.

CO2: Union Administration: Knowledge of central political executive and central secretariat and other offices.

CO3: Centre-State Relations: Knowledge administrative relations, central personnel agencies – All India Services.

CO4: Constitutional and National Bodies: Knowledge of UPSC, Election Commission, C&AG and NITI Aayog

CO5: Public Enterprises in India: Knowledge of Forms of Public enterprises – Department, Corporation, Company. Performance and Disinvestment.

SEMESTER – IV:

State Administration

CO1: State Administration: Understanding Administrative history of Telangana and state political executive.

CO2: State Administrative Mechanism: State Secretariat, Directorates, Local Governance and District Administration in Telangana.

CO3: Emerging Issues: Understanding the need and importance of Administrative reforms and the features and recommendations of 2nd Administrative Reforms Commission..

CO4: Technology and Integrity in Administration: Understanding e-Government and Values and Ethics in Administration.

CO5: Control over Administration: Redressal of Citizen Grievances, Transparency, Accountability and RTI. Administrative accountability- Legislative and Judicial control.

SEMESTER – V:

Human Resource Management

CO1: Meaning and significance of Human Resource Management and Human Resource Planning.

CO2: Understanding of Human Resource – Jobs, Recruitment, Promotion, Compensation administration and Pay commissions

CO3: Knowledge of Capacity building - performance, competency, strategies and sensitivity

CO4: Insight into reforms – employee grievance redressal, Right sizing, outsourcing, consultancies and interpersonal skills.

CO5: Emerging Trends – Human Resource audit, total quality management and productivity management.

SEMESTER – VI:

Financial And Material Management

CO1: Understanding the Meaning, Scope and importance of Financial Management

CO2: Knowledge of concept and principles of budget; preparation, enactments and execution of budget; gender and green budget.

CO3: Financial institutions: Organization and functioning of Finance Ministry; Finance commission; Union-State financial relations..

CO4: Knowledge of Parliamentary financial committees: Financial control mechanisms; Public Accounts Committee, Estimates Committee and Committee on Public Undertakings.

CO5: Understanding the meaning and concept of materials management; procurement, storage and distribution; inventory control ad management.

B.B.A.

Programme Outcomes

PO1: To apply the learned principles and concepts of Business administration, basic concepts and allied aspects of administration.

PO2: Students will acquire thorough knowledge in the chosen subjects and course specialisation.

PO3: Students can start up their own business using the information technology, marketing and management aspects.

PO4: To apply the gained knowledge, in their chosen area of specialisation namely, well developed professional skills.

Course Outcomes SEMESTER –I:

1.DSC – 101:Principles of Management:

CO1: To analyse the concepts of Principles of Management and its different levels.

- Co2: To understand the process of planning.
- CO3: To learn organising process in organisations.
- CO4: To gain knowledge in selection, controlling processes.
- CO5: To gain knowledge in TQM and organizational change.

2. DSC – 102: Basics of Marketing:

- CO1: To learn the scope of marketing and its core concepts.
- CO2: To learn the product positioning & market segmentation.
- CO3: To gain knowledge about NPD and its techniques.
- CO4: To analyse the concepts of pricing.
- CO5: To understand the significance of product pricing decision.

3. DSC-103: Business Economics

- CO1: To acquire knowledge for opportunity cost and time perspective.
- CO2: To understand the demand concept and elasticity of demand.
- CO3: To apply cost and production concepts.
- CO4: To understand the concepts of economies and diseconomies of scale.
- CO5: To learn the market structures and price positioning

SEMESTER – II:

1. DSC-201: Organizational Behaviour

- CO1: To acquire knowledge on organizational behaviour.
- CO2: Understand the motivation concepts and leadership skills.
- CO3: Acquire knowledge on group cohesiveness and group dynamics.
- CO4: Inderstand factors contributing to organizational changes.
- CO5: Analyze the culture and conflict and effectiveness of organisation culture.

2. DSC-202: Business Statistics

- CO1: Acquire knowledge about statistical tools.
- CO2: Analyse the various techniques to calculate the various statistical measures.
- CO3: Understand and critically discuss the issues surrounding deviations.
- CO4: To acquire knowledge about skewness and kurtosis.
- CO5: Acquire the knowledge of correlation and regression.

3. DSC-203: Financial Accounting

- CO1: To understand basic concepts of accounting.
- CO2: To demonstrate recording and posting of the transaction.
- CO3: To classify and compare various subsidiary books.
- CO4: To calculate the various ratios of balance sheet.
- CO5: To understand Indian and International Accounting Standards and Reporting.

SEMESTER – III:

4. DSC- 301: Human Resources Management

- CO1: To understand theory and practices in HRM.
- CO2: To know the HR planning process & selection procedure.
- CO3: To analyse the training and development methods to upgrade the skills of employees.
- CO4: To apply the techniques for evaluating and examining wages and salary administration.
- CO5: To examine innovative HRM strategies in contemporary organization

5.DSC- 302: Introduction to Information Technology

- CO1: To familiarize the business and management studies in IT
- CO2: Analyse the expert system like EIS, IS etc.
- CO3: Analyse the multimedia techniques.
- CO4: To analyse the internet security & online business security.
- CO5: To familiarize the database application.

6. DSC- 303: Financial Management

- CO1: To understand traditional & modern Financial Management decisions.
- CO2: To familiarize the various concepts of time value of money.
- CO3: To enable the long term finance and its determinants
- CO4: To acquaint knowledge of working capital management.
- CO5: To understand receivables management and levels of safety.

SEMESTER – IV:

4. DSC- 401: Business Law and Ethics

- CO1: To understand the concept of Agreement ,Contract & Essentials of contracts.
- CO2: To identify the essentials of consideration and free consent.
- CO3: To understand various negotiable instruments.
- CO4: To study the consumer protection laws in India.
- CO5: To understand the moral & ethical values of business.

5. DSC -402: Marketing Research

- CO1: To understand the role of market research in decision making.
- CO2: To analyze the sources of data
- CO3: To learn the type of scales.
- CO4: To familiarize the criteria for evaluation sources of data.
- CO5: To learn the various sampling techniques.

6. DSC-403: Management Science

- CO1: To understand and analyse the production and operations management.
- CO2: To formulate strategies for optimal use of resources.
- CO3: To understand the concept of purchase and stores management.
- CO4: To understand about operation research.
- CO5: To enable the student to understand the managerial applications of transportation problems.

SEMESTER – V:

7.DSE-501(A): Entrepreneurship Development [HR]

- CO1: To learn the cues and motives of entrepreneurship.
- CO2: To understand different types of enterprises and growth.
- CO3: To enable the students with knowledge of entrepreneurship.
- CO4: To understand the problems and perspective of the entrepreneurship.
- CO5: To understand about venture capital fund.

8. DSC-502 (C): Organisational Development [HR]

- CO1: To understand the conceptual clarity of OD and its process
- CO2: To learn the concept of planned change in organisation.
- CO3: To familiarise on various techniques and interventions of OD.
- CO4: To learn about the OD consultation process.
- CO5: To apply various uses of OD applications in organisation.

9.DSE-503(C): Performance Appraisal and counselling (HR)

- CO1: To understand the performance appraisal and benefits.
- CO2: To understand the employee appraisal process and appraisal design.
- CO3: To familiarize the pros and cons of performance measurement
- CO4: To analyse the legal issues in performance appraisal.
- CO5: To understand the role of counselling

SEMESTER – VI:

7. DSE -601(A): Supply Chain Management

- CO1: To understand the concept of SCM and role of logistics.
- CO2: To familiarize the basic drivers of performance of SCM.
- CO3: To acquire knowledge in global sourcing in making supply chain cost effective.
- CO4: To learn the different distributions and inventory strategy of business.
- CO5: To understand different distribution channels.

8.DSE-602(C):Leadership change and management (HR)

- CO1: To enable students to develop critical skills.
- CO2: To enhance leadership and management skills.
- CO3: To acquire knowledge about change process.
- CO4: To understand the influencing factors of change process.
- CO5: To understand the concept of organisational culture and change management.

9. DSE-603(C): Compensation management (HR)

- CO1: To understand the concept of strategic compensation management.
- CO2: To gain knowledge about different pay systems
- CO3: To understand the Indian wage administration.
- CO4: To acquire knowledge on employee benefits and service programs.
- CO5: To gain insight in executive compensation process.

DSC-601 :Project Report and Viva-Voice

CO1: To acquaint the students with project research work.

B.Com. GENERAL & COMPUTER APPLICATIONS

Programme Outcomes

PO1: To enhance the ability of students to apply the learned principles and concepts of commerce and Accountancy.

PO2: To acquire thorough knowledge in the chosen subjects and course specialization.

PO3: To develop Entrepreneurship skills among the students.

PO4: To apply the gained knowledge and skills in the area of Business and Finance.

PO5: To apply the gained knowledge for career progression.

PO6: To develop professional skills in the field of commerce and Information technology skills

COURSE OUTCOMES

SEMESTER – I:

1. DSC 101: Financial Accounting –I

- CO1: To understand basic concepts of accounting.
- CO2: To demonstrate recording and posting of the transaction.
- CO3: To classify and compare various subsidiary books.
- CO4: To eliminate differences in cash book and pass book.
- CO5: Students are equipped with skills in financial statement/balance sheet

2. DSC 102: Business Organisation and Management

- CO1: Understand the basic concepts of business organizations.
- CO2: Identifying the factors involved in determining the formation of business units.
- CO3: Applying the ethics of business in the ordinary trade.
- CO4: To gain knowledge about Planning, Organising, Staffing & Control.
- CO5: To understand authority, power and accountability.

3. DSC 103: Foreign Trade (General)

- CO1: To understand the concept of international trade.
- CO2: To familiarize the concepts of BOP and BOT
- CO3: To analyse the policies of export and imports.
- CO4: To learn the growth of free, preferential trade areas TPP and monetary unions.
- CO5: To understand the agreements of, economic NBD, AIIB, UNCTAD, WTO agreements

4. DSC 103: Fundamentals of Information Technology (Computer Applications)

- CO1: To understand the Computer system and Generations
- CO2: To familiarize with arithmetic and storage of computers
- CO3: To acquire knowledge about types of software and computer language
- CO4: To familiarize with concepts of operating system
- CO5: To enable the students to know about modes of data communications.

SEMESTER – II:

1. DSC 201: Financial Accounting-II

CO1: To understand business and its role in society.

- CO2: To have an understanding of business ethics and CSR.
- CO3: Understanding the financial statements of various types of business units other than corporate.
- CO4: Calculate profits or losses from incomplete records.
- CO5: Prepare accounts of consignment.

2. DSC 202: Business Law

- CO1: Understand the concept of agreement, contract, essentials and classification of contracts.
- CO2: Identify the essentials of consideration and free consent including agreement with minor.
- CO3: Examine the circumstances and the object can be considered in intellectual property rights.
- CO4: To understand the consumer protection law.
- CO5: To understand the winding up of company, insolvency and bankruptcy.

3. DSC 203: Banking & Financial Services (General)

- CO1: To understand commercial banking in India
- CO2: To know the relationship between customer and banker
- CO3: To understand the concept of negotiable instruments
- CO4: To understand the activities of fund based and non-fund based
- CO5: To understand the pros & cons of banking & financial services.

4. DSC 203: C Language and C++ (Computer Applications)

- CO1: To understand the basics of C language.
- CO2: To Acquire statements in C language.
- CO3: To acquire knowledge about functions & arrays and strings in C language
- CO4: To understand the pointers, structures and unions.
- CO5: To learn object oriented programming with C++

SEMESTER – III:

1. DSC 301: Advanced Accounting

- CO1: Identify the rules relating to partnership accounts revaluation partners' capital balance sheet.
- CO2: Apply accounting treatment for retirement and death of the partners, & dissolution of firms.
- CO3: To understand the issues of shares debentures, bonus shares and under writing.
- CO4: To examining company final accounts and profits prior to incorporation
- CO5: To understand valuation of goodwill and shares.

2. DSC 302: Business Statistics -I

- CO1: To understand the importance of statistics, sampling methods.
- CO2: To Understand different diagrammatic and graphical presentation and its importance.
- CO3: To know the importance and method of measure of central tendency.
- CO4: To Know different types of dispersion, skewness and kurtosis.
- CO5: To understand and find out the relationships between two variables.

3. DSC 303: Financial Institutions & Markets (General)

- CO1: To understand the Indian financial system.
- CO2: To understand commercial banks and non-financial companies
- CO3: To know the money market instruments
- CO4: To familiarize with debt markets in India
- CO5: To understand stock exchanges and stock market indices

4. DSC 303: RDBMS (Computer Applications)

- CO1: To learn the creation, compilation and execution of SQL programs.
- CO2: To understand various DDL, DML, DCL programme commands.
- CO3: To familiarize students about Structured Query Language (SQL).

- CO4: To understand about transactions and consurrency management.
- CO5: To understand Distributed and Client Server Database.

SEMESTER – IV:

1. DSC 401: Income Tax

- CO1: To understand the scope and application of direct taxes and agricultural income in India.
- CO2: Computation of income from head income from salary.
- CO3: Computation of income from head income from house property.
- CO4: Computation of income from head income from business and profession.
- CO5: Computation of income from other sources

2. DSC402: Business Statistics-II

- CO1: To understand regression analysis of dependent and independent variable.
- CO2: To understand the weighted and unweighted index numbers and test of consistency.
- CO3: To know the components of time series and its methods.
- CO4: To understand probability theories.
- CO5: To learn different theoretical distribution without find out the expected frequency.

3. DSC403:Corporate Accounting (General)

- CO1: To Prepare company financial statement of affairs and liquidation.
- CO2: To prepare accounting treatment of merger and amalgamation.
- CO3: To learn the accounting treatment for internal reconstruction and acquisition of business.
- CO4: To learn the legal provision of banking companies.
- CO5: To calculate insurance companies accounts and its claims.

4. DSC403: Web Technologies (Computer Applications)

- CO1: Able to write programmes saves and open color /full web page.
- CO2: To learn dynamic changing reduces the steps.
- CO3: To learn Java script & reduces the size of the code.
- CO4: To learn Mouse, Keyboard, window action events.
- Co5: To understand application of XML file

SEMESTER – V:

1. GE: (b) Advanced Aspects of Income Tax

- CO1: Calculate tax liability using tax rates.
- CO2: Compute basic capital gains/losses.
- CO3: Ascertain the special deduction that may affect taxable income.
- CO4: Computation of individual tax liability.
- CO5: Outline individual tax return filing and estimated tax payment requirements & judgements

2. DSE -501 (a) Cost Accounting

- CO1: Understand the fundamental aspects of cost accounting and preparation of cost sheet.
- CO2: Comprehend the various methods and techniques of material costing.
- CO3: Analyse and ascertain the cost of labour and overhead
- CO4: Demonstrate skilled expertise in Unit Costing & Job costing.
- CO5: To learn the computation of cost using contract and Process costing

3. DSE 502 (a) Computerized Accounting

- CO1: To introduce the students to basic of accounts and the usage of tally for accounting purpose.
- CO2: To work on accounting software i.e. Tally.
- CO3: To learn creation of a company, enter accounting voucher entries.

- CO4: To develop an understanding of inventory vouchers and generation of invoices.
- CO5: To understand the maintenance of payroll register and statutory forms and reports.

4. DSE 503(a) Auditing

- CO1: Perceiving the basic concepts of auditing and working of an auditor.
- CO2: Understanding the recent trends in auditing and activities.
- CO3: Analysing the verifications and valuation of assets and liabilities
- CO4: Gaining knowledge on audit of share capital and share transfer
- CO5: To understand the concepts of report writing.

5. DSE 503(b) E – Commerce (Computer Applications)

- CO1: To understand the impact of e-commerce on business models and application of e-commerce.
- CO2: To analysis the framework of e-commerce data encryption and cryptography.
- CO3: To gain insights of different process models of e-commerce.
- CO4: To familiarize with EDI standard and software implementation.
- CO5: To acquire knowledge about e-marketing techniques.

SEMESTER – VI:

1. PR: Research methodology & project report:

- CO1: A comprehensive understand in to on all aspects of research
- CO2: A guide on how to conduct research in a systematic way
- CO3: A guide to solve and analyze data and results
- CO4: A guide on writing techniques and presentation skills.

2. DSE 601 (a) Cost Control and Management Accounting

- CO1: To understand basic concepts of cost and management accounting.
- CO2: To apply the techniques of standard costing and variance analysis for cost control.
- CO3: To make use of marginal costing techniques for analyzing the financial position of business.
- CO4: To analyze the financial statement using comparative, common size, & financial ratios.
- CO5: To learn the preparation of Cash flow & fund flow statements.

3. DSE 602 - (a): Theory and Practice of GST

- CO1: To Understand various concepts of goods & service tax.
- CO2: To Understand the impact of new regulation and changes to be made.
- Co3: To learn the recording and analysing of transactions for GST compliance
- CO4: Getting familiar with the flow of return filing under GST.
- CO5: Knowing "place of supply rules" and applicability of the same under GST.

4. DSE 603 - (a): Accounting Standard

- CO1: To Understand the Accounting Theory and evolution of standard.
- CO2: To familiarize standard relating to financial reporting and disclosure.
- CO3: To analyses the standard providing guidance on financial statements items.
- CO4: To learn the business acquisitions and consolidations.
- CO5: To acquire knowledge on financial reporting.

5. DSE 603 - (b): Cyber Security (Computer Applications)

- CO1: To familiarize students about Cyber Security and its Vulnerabilities.
- CO2: To understand about Security Protocols.
- CO3: Students acquire knowledge to detect and prevent viruses.
- CO4: Students gain information about Network Security.
- CO5: To understand Cyber Security Laws.

B.Sc. – PHYSICAL SCIENCES

Programme Outcomes

PO1: Apply fundamental knowledge in concepts of Physical Sciences and its applications used in analysis, preparation of new materials and models in industry and daily life.

PO2: Acquired knowledge with facts related to Mathematics, Physics, Electronics, Chemistry & Computer Sciences and understand the basic concepts, fundamental principles, scientific theories related to various scientific phenomena and their relevance in day to day life.

PO3: Acquire hands-on practical skills will promote confidence and develop critical thinking skills to identify, analyse and solve the problems in their core areas using modern tools.

PO4: All the skills illustrated provide equal opportunity across the genders in handling scientific instruments, lab techniques, writing programmes & analyse data to meet industry needs.

PO5: Gain knowledge and skills required for pursuing research and higher education in India and abroad.

PO6: Promote rational thinking, using the scientific knowledge for the benefit of mankind and sustainable development in research with in the frame work of respecting environmental issues, professional ethics and value system.

COMPUTER SCIENCE

Course Outcomes SEMESTER – I:

101 Programming in C

CO1: Introduction to computer basics, programming languages and it's importance.

CO2: Understand the structure of C program, various control structures, arrays and strings.

CO3: Develop the basics of functions, pointers & the effective usage of C language concepts.

CO4: Understand the user defined data types and their application to develop C programs.

SEMESTER – II:

102 Programming in C ++

CO1: Introduction to C++ language, functions and Object Oriented Programming concepts.

- CO2: Summarizing the use and constructing C++ programs using concepts.
- CO3: Analyzing and evaluating OOP concepts like inheritance and polymorphism and C++ streams.
- CO4: Incorporating Exceptions and templates for constructing real time C++ programs.

SEMESTER – III:

103 Data structures in C++

CO1: Outlining the basics of data structures, algorithms, pseudo code and introduction and implementation of stacks.

CO2: Understanding, implementing recursion, queues and linked lists.

CO3: Understanding, analyzing, evaluating and designing of C++ programs implementing trees, different searching and sorting techniques.

CO4: Introduction, implementation and application of graphs, hashing techniques and heaps.

SEMESTER – IV:

104 Database Management System

CO1: Understanding and recognizing the design, purpose and applications of database system and introduction to relational model.

CO2: Recognizing and applying E-R model, relational database design and different normal forms.

CO3: Introduction to basics of SQL to advanced SQL hypothesizing on implementation of SQL queries from programming language.

CO4: Focuses on transaction management, concurrency control, and database recovery and database security

SEMESTER – V:

105 Programming in Java

CO1: To define problems computationally through applications and acquire knowledge to write coding to Java program.

CO2: Understand the structure of Java program and various control structures associated with Java language and developing packages, extends classes and interfaces.

CO3: Applying the basics of exception handling techniques, the purpose of files and how to implement the Multiple inheritance .

CO4: Design and analysis of patterns and Apps development and carry on to industrial applications.

SEMESTER – VI:

106 Web Technologies

CO1: Understand and apply the fundamental concepts of HTML and CSS to design webpages.

CO2: Understand and apply the fundamental concepts of JavaScript to create dynamic web pages.

CO3: Acquired knowledge to develop dynamic web pages using JavaScript Objects, Arrays and event handling mechanisms.

CO4: Design and develop modern interactive web applications using XML and AJAX.

SEMESTER – VI:

106 PHP with MYSQL(Optional)

CO1: To define problems computationally through applications and acquire knowledge to design web pages.

CO2: Understand the structure of PHP's built in server to serve static resources and to upload files in website.

CO3: Apply design patterns of web pages and App development.

ELECTRONICS

Course Outcomes SEMESTER – I:

Circuit Analysis

CO1: Analyse the electric circuit using kirchoff's laws and Network theorems.

CO2: Evaluate transient response and steady state responses of RC & RL Circuit.

CO3: Analyse the frequency response of RC & RL Circuits.

CO4: Understand the working and applications of CRO.

SEMESTER – II: Electronic Devices

- CO1: Study and analyse the behaviour of semiconductor materials.
- CO2: Understand the behaviour of BJT in CC, CB & CE configuration.
- CO3: Use Diodes, BJT, FET, UJT, SCR in simple applications.
- CO4: Understand the behaviour and characteristics of Photo electric devices

SEMESTER – III:

Analog Circuits

- CO1: Construct and Design rectifiers and filters.
- CO2: Construct and Design a better and regulated power supply.
- CO3: Understand the working of amplifiers, frequency response and observe the effect of feedback.
- CO4: Explain and compare the working of Oscillators and Multivibrators.

SEMESTER – IV:

Linear Integrated circuits and basics of communication.

CO1: Gain Knowledge of Operational Amplifiers and understands the basic Operational Amplifier circuits.

CO2: Understand the applications of Operational Amplifiers.

CO3: Study of Amplitude Modulation and Demodulation.

CO4: Study of Frequency Modulation and its advantages .

SEMESTER – V:

Digital Electronics

CO1: Familiarise with the digital signal, positive and negative logic, Boolean algebra, Logic gates, logical variables, truth tables, number systems, codes and their conversions.

CO2: Learn the minimization techniques to simplify the hardware requirements of digital circuits and implement it in real time digital system design.

CO3: Understand and analyse the working mechanism and design guidelines of different combinational, sequential circuits and their role in the digital system design.

CO4: Identify basic requirements for a design application and propose a cost effective solution.

SEMESTER – VI:

8051 Microcontroller and Applications -VIB

CO1: Understand the architecture, memory organization of 8085 microprocessor and 16 bit microcontrollers.

Co2: Understand programming using assembly language in microprocessors and microcontrollers for simple arithmetic, logical, string and real time applications.

CO3: Analyse and apply the interfacing concept of different programmable interfacing modules with microprocessors and controllers for real time applications.

CO4: Develop and generate a code for applications using microprocessors and microcontrollers to meet the societal/ user requirements.

MATHEMATICS

Course Outcomes SEMESTER – I:

Differential And Integral Calculus 101

CO1: Learn and analyse continuity, differentiation and partial differentiation.

CO2: Acquire knowledge and elaborate total differentiation equation and maxima and minima.

CO3: Understand the concepts of curvature, evolutes and its applications.

CO4: Apply the integral calculus to find length of a curve area under curve surface, area and volume of revolution.

SEMESTER – II:

Differential Equations 201

CO1: Recognize DES that can be solved by method separation of variables, integrating method and use them to solve.

CO2: Learn and understand to solve problems involving the exponential growth and decay by the application of ODE and by the method of orthogonal trajectories.

CO3: After learning they will be equipped with various tools to solve few types DES, that arise in several branches of science.

CO4: The techniques of solving DES which help, to apply their skills in engineering and science.

SEMESTER – III:

Real Analysis 301

CO1: To understand the basic concepts of sequence, series, convergence and divergence.

CO2: To demonstrate the Rolls theorem, MVT and its applications.

CO3: To familiarize with the concepts of differentiation and learn L'Hospital Rule to find the limits

CO4: Analyse the definition of Riemann Integral, Fundamental theorem of calculus, and learn the skills to apply in real life.

SEMESTER – IV:

Abstract Algebra 401

CO1: Analyse the definition of group by using mathematical tools such as Addition and Multiplication. CO2: Able to identify cyclic group, Permutations, cosets and learn about order of group by Lagranges theorem.

CO3: Gain knowledge and structure preserving maps between groups.

CO4: Learn about Normal subgroups, Rings ideals and how to use algebraic structure in advanced level.

SEMESTER – V:

Linear Algebra 501

CO1: Understand and analyse the concepts of vector space, sub space, bases, dimensions and their properties.

CO2: Relate matrices to compute Eigen values and Eigen vectors.

Co3: Gain skills on Linear Transformations and ability to compute complex Eigen values and applications to different Equation

CO4: Learn properties of inner product space and apply Gram-Schmidth process to find orthogonal projections.

SEMESTER – VI:

Analytical Solid Geometry 601

CO1: Learn about sphere and circle inculcate knowledge to solve problems in analytical geometry.

CO2: Gain knowledge about cones and learn to apply theoretical, analytical knowledge to solve the problems.

CO3: Understand the geometrical terminology in cylinder.

CO4: Learn about Central conicoids and its applications.

PHYSICS

Course Outcomes SEMESTER – I: Mechanics & Oscillations CO1: Apply the basics of vectors in understanding and analysing concepts of Physics and related theorems.

CO2: Understand translational and rotational dynamics and their applications.

CO3: Gain knowledge on central forces and special theory of relativity.

CO4: Understand SHM and Lissajou's figures to find out frequencies of waves.

SEMESTER – II:

Thermal Physics

CO1: Gain knowledge in Kinetic theory of gases.

CO2: Evaluate entropy changes in a wide range of process.

CO3: Understand the significance of laws of thermal radiation.

CO4: Analyse in depth about statistical distribution and basic ideas about Boltzmann Fermi-Dirac and Bose-Einstein statistics.

SEMESTER – III:

Electromagnetic theory

CO1: Gain knowledge on basic laws and concepts in Electrostatics and Magnetostatics.

CO2: Analyse Biot -Savart's law and apply to closed loop, solenoid and long straight conductor.

CO3: Understand the concepts of Electromagnetic induction and applications.

CO4: Understand the concepts of Network Transformations & Network theorems.

SEMESTER – IV:

Waves and Optics

CO1: Understand the significance of longitudinal and transverse waves in strings and bars.

CO2: To solve wave equation and derive boundary condition of longitudinal waves in bars.

CO3: Understand the concept of interference and analyse the methods of reflection, refraction & scattering.

CO4: Study the concept of diffraction and differentiate between Fresnel's and Fraunhoufer's diffraction.

SEMESTER – V:

Modern Physics

CO1: Understand the atomic and molecular spectroscopies.

CO2: Understand the dual nature of matter and derive Schrodinger time dependent and independent wave equations.

CO3: Get an insight to basic nuclear structure and models.

CO4: Gain knowledge on crystallography, X-ray diffraction and super conduction.

SEMESTER – VI:

Electronics-VI A

CO1: Study the basics of semiconductor devices & their applications.

CO2: Understand the operation of diodes & transistors and utilize their concepts to design Rectifiers, Amplifiers and Oscillators.

CO3: Gain knowledge on different number systems, their conversions from one system to another and solve the binary arithmetic problems.

CO4: Get an insight to analyse and design various logic gates & combinational gates.

B.Sc. – LIFE SCIENCES

Programme Outcomes

PO1: Bachelor of Science focuses in inculcating theoretical as well as practical knowledge about living organisms and their nutritional needs. Students will learn how to treat plants and animals humanitarianly and ethically.

PO2: Students will be able to associate with the biological sciences and choose the specific areas in their career.

PO3: Students will gain an understanding of organic, inorganic, physical and analytical chemistry, the chemical reactions and various methods to balance them.

PO4: Students learn to analyse and gain knowledge and skills through courses such as Immunology, Hematology, Pathology, Microbial Ecology, Genetics and Biotechnology.

PO5: Students can critically analyse and evaluate environmental and health related problems.

PO6: Students get an understanding of the application of knowledge related to nutrition, food, human health and disease.

PO7: Students are enriched with the understanding of the structure and behaviour of Bio-molecules covering everything regarding organisms and their existence.

PO8: Students will extend the knowledge gained for self-evaluation and formulate methods to consistently contribute towards research and up-skill themselves.

APPLIED NUTRITION

Course Outcomes SEMESTER – I:

Basics of Biochemistry (B S 104)

CO1: Thorough understanding of nutrition basics-food groups, body needs of nutrients in carbohydrates- sources, process of digestion, metabolism and utilisation.

CO1: Understand proteins and their role and utilization in body processes, functional importance of nucleic acids

CO1: Lipid metabolism and implications of excessive consumption of fats in the diet as also importance of lipids in human nutrition

CO1: Rationale for differences in energy requirement of different physiological groups. Maintaining energy balance and ideal body weight.

SEMESTER – II:

Nutritional Biochemistry (B S 204)

CO1: Understand importance of Vitamins- Classification, sources, impact of excess and deficiency in human nutrition.

CO1: Understand importance of Minerals - Classification, sources, impact of excess and deficiency in human nutrition.

CO1: Water as a nutrient, water and electrolyte imbalance, its regulation and diseases associated.

SEMESTER – III:

Food Science and Technology (B S 305)

CO1: Thorough understanding of the role of food in human nutrition, cooking methods, minimising nutrient losses during cooking, structure, importance of functional foods. Importance and role of cereals and millets in cookery.

CO1: Understanding the importance and role of pulses, legumes, milk and milk products in cookery.

CO1: Understand the importance and role of fleshy foods, spices, condiments and beverages.

CO1: Understand the importance and role of vegetables and fruits, sugar and jaggery, fats and oils.

SEMESTER – IV:

Family and Community Nutrition (BS405)

CO1: Thorough understanding of the concept of balanced diet, RDA - its rationale, principles of menu planning and requirements of different physiological age groups.

CO1: Understand the nutritional needs of pregnant and lactating women and infants.

CO1: Understand the nutritional concerns during pre-school, school going and adolescent ages, planning of packed lunches.

CO1: Understanding the physiological changes and nutritional needs of the elderly, basics and importance of nutritional assessment in clinical practice.

SEMESTER – V:

Clinical Dietetics (B S 504)

CO1: Thorough understanding of diet therapy, role of dietitian in community, therapeutic diets, care of critically ill patients. Dietary concerns in fever, typhoid, TB.

CO1: Thorough understanding of aetiology, symptoms, screening, medications and dietary regimen for-Obesity, Underweight, Diabetes, CVD and Hypertension.

CO1: Thorough understanding of aetiology, symptoms, screening, medications and dietary regimen for GI diseases- Peptic Ulcer, Constipation, Diarrhoea, IBS.

CO1: Thorough understanding of aetiology, symptoms, screening, medications and dietary regimen for Renal and Liver Disorders.

SEMESTER – VI:

Public Health, Food Hygiene and Sanitation(B S 104)

CO1: Thorough understanding of concept of public health as an emerging field in nutrition. Importance of epidemiology and its role in nutrition research. Disease transmission and control of causative factors. Role of vectors in disease transmission and control measures to check the same.

CO1: Understanding the causative factors for food borne illnesses, role of food handler in causing food borne diseases. Understanding of disease transmission in food borne infections, intoxication and role of microbial toxins in causing food borne illnesses.

CO1: Gaining knowledge about the effectiveness of A.V aids in nutrition education. Emerging role of PHC in rural areas with special emphasis on maternal and child health care. Government programmes to eradicate vector borne diseases. Thorough understanding of immunity and related aspects.

CO1: Thorough understanding of the causative factors of food adulteration and the role of various agencies in controlling the same. Role of FSSAI in curbing food adulteration and agencies in support of consumer guidance and scope and role of food inspectors

BOTANY

Course Outcomes SEMESTER – I:

Study of microbial diversity and lower plants

- CO1: Study of bacteria viruses, Mycoplasma
- CO2: Study of general characters of Algae
- CO3: Study of fungi
- CO4: Study of bryophyte and pteridophyta

SEMESTER – II:

Gymnosperms, Taxonomy of Angiosperms and Ecology

- CO1: Study of Gymnosperms, geological time scale, fossilizations, paleobotany
- CO2: Study of Principles of plant taxonomy
- CO3: Study of Dicotyledons and Monocotyledons plants.
- CO4: Study of Ecology, resource conservation environmental pollution and its protection .

SEMESTER – III:

Plant Anatomy and Embryology

- CO1: Study of plant tissues, adaptations of hydrophytes and xerophytes
- CO2: Study of Stem and root anatomy, anomalous secondary growth and wood structure.
- CO3: Study of plant Embryology
- CO4: Study of Palynology, seed structure and embryo structure, polyembryony and apomixes.

SEMESTER – IV:

Cell biology, genetics and plant physiology

- CO1: Study of plant cell structure, cell division
- CO2: Study of Mendelism ,linkage & Crossingover
- CO3: Study of water relations, mineral nutrition, transpiration, phloem transport and enzymes.
- CO4: Study of photosynthesis, respiration, nitrogen metabolism protein synthesis and phytohormones.

SEMESTER – V:

Economic Botany

- CO1: Study of origin of cultivated plants , vegetables, cereals and millets.
- CO2: Study of legumes fruits nuts sugars starches and spices
- CO3: Study of beverages, edible oils essential oils and rubber.
- CO4: Study of drug yielding plants, tobacco, timber and fibre

SEMESTER – VI:

Tissue culture and Biotechnology

- CO1: Study of tissue culture, organ culture, callus culture, organogenesis and embryogenesis.
- CO2: Study of applications of tissue culture, induction of hairy roots, haploids, triploids, somatic hybrids and cybrids. embryogenesis.
- CO3: Study of biotechnology, R-DNA technology and gene cloning.
- CO4: Study of gene libraries, gene transfer methods and applications of transgenic plant.

BIOCHEMISTRY

Course Outcomes SEMESTER – I:

Chemistry of Biomolecules (101)

CO1: Understand the importance of biochemistry in applied fields

CO2: Learn the structure, functions, properties and classifications of amino acids and proteins

CO3: Acquire detailed knowledge about carbohydrates - classification and its function

CO4: Learn the structure, functions, properties and classifications of lipids

SEMESTER – II:

Chemistry of Nucleic acid and Biochemical Techniques(102)

CO1: Acquire knowledge of basic structures of nitrogenous bases

CO2: Learn the molecular structure of DNA &RNA, importance, types and their functions

CO3: Compares the principles, instrumentation & application in various biophysical techniques

CO4: Explain biophysical techniques to analyze biomolecules in terms of structure, functions, purification and their relationship

SEMESTER – III:

Bioenergetics, Biological Oxidation and Enzymology (103)

CO1: Learn the importance of Bioenergetics.

- CO2: Understand the basic concepts of biological oxidation
- CO3: Outline the detailed concepts of enzyme and their catalytic functions

CO4: Analyze enzyme kinetics and enzyme actions

SEMESTER – IV:

Intermediary of Metabolism(104)

CO1: Understand the general reactions of amino acids , metabolic pathways of amino acids & its inborn errors.

CO2: Learn the metabolic pathway of carbohydrates and photosynthesis.

CO3: Learn the metabolic pathway of lipids & its inborn errors.

CO4: Learn the metabolic pathway of nucleic acids & its inborn errors.

SEMESTER – V:

Physiology, Nutrition and Clinical Biochemistry (105)

CO1: Understand the role of physiology in humans and its importance.

CO2: Learn the role of hormones & relate its deficiencies with clinical significance.

CO3: Understand about the fundamental concepts & processes underlying the field of nutritional biochemistry and malnutrition.

CO4: Study the values of food & nutrients in health & disease & principles of clinical biochemistry in diagnosis of diseases.

SEMESTER – VI:

Molecular Biology and Immunology (106)

CO1: Gain knowledge of DNA replication, transcription and translation & its inhibitors.

- CO2: Understand the regulation of prokaryotic gene expression.
- CO3: Learn about the components of immune systems and mechanisms.
- CO4: Apply the concepts of immune response and immun. diagnostics and its immunodeficiency.

Biochemistry in Health and Diseases (Optional Paper 107)

- CO1: Compare and comprehend various metabolic disorders of Biomolecules
- CO2: Understand the genetic disorders
- CO3: Learn the metabolic disorders of endocrine glands
- CO4: Learn the concepts of molecular basis of cancers

CHEMISTRY

Course Outcomes SEMESTER – I:

Chemistry - I

CO1: Understand VSEPR Theory, LCAO method and analyze the p- block elements.

CO2: Acquire the knowledge about the Alicyclic and Aromatic Hydrocarbons.

CO3: Describes structure of an atom and the characteristics of three states of matter, learn about the effect of pressure, volume, temperature on them.

CO4: Ability to differentiate the anions, cations using semi micro qualitative analysis and learns the types of isomerism.

SEMESTER – II:

Chemistry - II

CO1: Ability to classify and correlate the properties of p-block, d-block and zero group elements of the periodic table.

CO2: Understand the importance of Hydroxy, carbonyl compounds and SN1 and SN2 mechanism.

CO3: Examine & analyze types of electrodes and their working used in different experiments.

CO4: Illustrate the stereo chemistry of different compounds, understands quantitative analysis and colligative properties of different solutions.

SEMESTER – III:

Chemistry - III

CO1: Study of f- block elements, understands the different aspects of Co-ordination compounds and analyzes the metal carbonyls, OMC's

CO2: Acquire the knowledge about Carboxylic acids, Nitro hydro carbons, Amines, Cyanides and Isocyanides

CO3: Evaluate concepts of thermodynamics (I, II Law) and efficiency using Carnot's cycle.

CO4: Analyze the data and understands the different reactions of Carbanions and phases of Compounds.

SEMESTER – IV:

Chemistry - IV

CO1: Understand splitting patterns of d-orbital's in various complexes, learns HSAB Principles & Biological Significance of elements

CO2: Interpret & infer the structure of carbohydrates with reference to structure and configuration &learns the various heterocyclic compounds.

CO3: Observe the adverse effect of temperature on rate of reaction & Understands about emission and absorption of radiations.

CO4: Analyze the thermodynamic & kinetic aspects of metal carbonyls & Learns about colloids.

SEMESTER V Chemistry V (Spectroscopy & Chromatography)

CO1: Evaluate & identify the structure of organic compounds by Rotational, Vibrational & Electronic Spectra

CO2: Determine the structure and molecular weight of organic compounds by Mass & NMR spectroscopy

CO3: Learn about solvent extraction and the use of Thin Layer Chromatography & Paper Chromatography.

CO4: Understand the various chromatography techniques to identify different compounds.

SEMESTER VI

Chemistry – VI (Agricultural & Fuel Chemistry)

CO1: Compare and correlates pesticides based on their preparation, use, toxicity, structure, adverse effects of pesticides and its impact on environmental pollution.

CO2: Negotiate the study of Organic farming by Understanding principal methods, Crop rotation, green manures and compost and learns its uses

CO3: Analyze the Petroleum products and summarize its applications, Petro chemicals and their uses, Lubricants – types, properties and mechanism of lubrication.

CO4: Understand Coal gasification, coal liquefaction and solvent refining, fractionation of coal thar and its uses.

MICROBIOLOGY

Course Outcomes SEMESTER – I:

PaperI: General microbiology

CO1: Knowing the contributions of eminent scientists in the development of Microbiology & scope of various branches & it's application

CO2: Understand the structure of bacteria, virus & their isolation and cultivation.

CO3: Understand various processes of carbohydrates metabolism.

CO4: Knowledge about sterilization techniques and phases of microbial growth phases

SEMESTER – II:

PaperII: Microbial diversity

CO1: Knowledge about different elements of biodiversity and classification of living organisms

CO2: Understand various groups of eubacteria including bacteria, rickettsia & mycoplasma.

CO3: Understand structure, functional & metabolic characteristics of algal, fungal & protozoa.

CO4: Illustrates the microbes in environment & their interaction with eachother, learn about methods to cultivate them to assess microbial diversity.

SEMESTER – III:

Paper III: Food and Environmental Microbiology

CO1: Knowledge about different microorganism involved in production of different fermented foods, dairy products.

CO2: Learn different food preservation methods, spoilage & the food quality control.

CO3: Understand the role played by different microorganism in relation with air and water.

CO4: Study the Properties of soil & plants and microbes interaction, Significance of C, N cycles and bioremediation of pollutants.

SEMESTER – IV: Paper IV: Medical Microbiology and Immunology

CO1: Understand the different normal human flora & bacteria causing different diseases

CO2: Knowledge of various viruses & parasites causing different disease.

CO3: Understand the fundamental basis of immune system & immune response.

CO4: Knowledge of different Ag-Ab reactions, explains different immunological disorders.

SEMESTER – V:

Paper V: Molecular biology and microbial genetics

CO1: Knowledge of structure and function of DNA as genetic material, extra chromosoming genetic elements

CO2: Understanding & analysis of the changes occurring in the gene and how the genes are transferred.

CO3: Knowledge about how the information present on the gene can be expressed

CO4: Illustrate the different methods of genetic material transferred.

SEMESTER – VI:

Paper VI: Industrial Microbiology

CO1: Understand the industrial importance of microorganisms, maintenance of seed culture & techniques applied to improve strain & product yield.

CO2: Illustrate a bioreactor, different parameters of bioreactor, understand the different types of fermenters, media for production of different microbial products.

CO3: Understanding the different types of fermentations

CO4: Describes the industrial production of different products.

Optional: Applied Microbiology

CO1: Understand the different microorganisms in soil and analyse different microorganisms useful in increasing soil fertility.

CO2: Know different methods for microbial production of pigments, flavoring, aroma agent, etc.

CO3: Summarize the steps involved in disease diagnosing, analyse the disease caused &its use in monitoring sanitation in community.

ZOOLOGY

Course Outcomes SEMESTER – I:

Course 101: Animal Diversity - Invertebrates

CO1: Students will appreciate the importance, value and diversity of the invertebrates.

CO2: Students will be able to get an understanding of the host parasite interactions.

CO3: Students are enriched with knowledge about life from unicellular to multicellular level of organisation.

CO4: Students acquire the skill of practical knowledge to correlate with theory.

SEMESTER – II:

Course 102: Animal Diversity - Vertebrates

CO1: Students will be able to understand different categories and the level of organization of vertebrates.

CO2: Students learn about migration and parental care.

CO3: Students will be able to appreciate how to differentiate between poisonous and non poisonous snakes and flight adaptations in birds.

CO4: Students gain knowledge about Mammals and their aquatic adaptations.

SEMESTER – III: Course 103: Animal Physiology and Animal Behaviour

CO1: Students are enlightened about how digestion, excretion and osmoregulation work as physiological processes.

CO2: Students understand about respiration and circulatory systems and also role of homeostasis.

CO3: Students learn about muscle contraction and nerve conduction functions and also the role of endocrine glands and their secretions.

CO4: Students acquire the Practical skill to understand the physiological processes.

SEMESTER – IV:

Course 104: Cell Biology, Genetics, Development Biology

CO1: Cell Biology gives the Student an understanding of various cell organelles and their functions.

CO2: Students can learn the molecular basis of biological activity between biomolecules in the various metabolic processes.

CO3: Gives an understanding of genetic information and chemical basis of heredity.

CO4: Students will gain the knowledge about developmental biology and understand the process of regeneration.

SEMESTER – V:

Course 105: Immunology and Animal Biotechnology

Co1: Students acquire knowledge about different types of immune cells, innate and acquired immunity.

CO2: Students will be enlightened about various antigen antibody reactions.

CO3: Helps to understand the scope and application of Biotechnology.

CO4: Students get knowledge about Biopesticides, Bioremediation and Biofertilizers.

SEMESTER – VI:

Course 106: Ecology, Zoogeography and Evolution

CO1: Students get the knowledge about different types of ecosystems.

CO2: Ecological studies in wild life conservation and protecting endangered species.

CO3: Students are enriched with knowledge of distribution of animals in various zoogeographic regions.

Co4: Students get to know about the evolutionary process.

LANGUAGES

Programme Outcomes

PO1: Learning a language enhances brain functioning and individuals academic performance.

PO2: Students learn to read, analyze and interpret the works of the authors in prose and poetry.

PO3: Students will be able to learn about human values in present scenario and reflect themselves in critical thinking and analysis.

PO4: The learners learn grammar rules to gain proficiency in communication skills, vocabulary and soft skills.

PO5: Through literature students can learn the ancient culture, tradition and relation that teach the learners to use the language for real life communicational needs.

PO6: Effectively presents opportunities for personal growth, expands perspectives, a deeper understanding and observe the world around them.

PO7: Students can examine and appreciate the role of the gender by socio-cultural, economic context in defining women.

PO8: Learner learns useful tips, techniques to write letters, C.V, Resume, Review and Report writing, Emails and prepare for the job opportunities and competitive exams.

ARABIC

COURSE OUTCOMES SEMESTER – I:

AL-QIRA'AT AL-ARABIA AL-OSMANIA 101

CO1: Almighty removed our burdens so when we are free turn to Allah, who believe & do righteous deeds

CO2: Understood how to talk in Arabic, Understood hygienic habits

CO3: Understood how to make a sentences

CO4: Understood the language phonology, morphology & syntax, & understood the literature

SEMESTER – II:

AL-QIRA'AT AL-ARABIA AL-OSMANIA 102

CO1: Understood the night of Glory, & Hasher ground & how people will come out of the graves

CO2: Understood the main purpose of the exhibition, Biography of Meer Osman Ali Khan

CO3: Understood the complete and incomplete sentences

CO4: Understood influence of the Holy Quran on Arabic Literature

SEMESTER – III:

AL-QIRA'AT AL-ARABIA AL-OSMANIA 103

CO1: Understood the background of Holy Quran and Hades -E-Nabawi

CO2: Understood the tenses

CO3: Understood the Umayyad Age in Arabic Literature

SEMESTER – IV: AL-OIRA'AT AL-ARABIA AL-OSMANIA 104

CO1: Understood the life of Nabi Sallahu Alihi Wa Salam & famous women companions of Prophet SAWS

CO3: Understood the poetry in Abbasi period

SEMESTER – V: AL-QIRA'AT AL-ARABIA AL-OSMANIA 105

CO1: Understood how the freedom got and importance of human equality

CO2: Understood importance of knowledge and Book

CO3: Understood the literature in abbasi period

SEMESTER – VI: AL-QIRA'AT AL-ARABIA AL-OSMANIA 106

CO1: Understood the Heritage Of Telangana & Biography Of Sarojini Naidu

CO2: Understood the purpose of life & they understand the power of Allah

CO3: Understood the Islamic Literature in Abbasi Period

ENGLISH

Course Outcomes SEMESTER – I:

C101.1 [UNIT-I]

• Through the poem 'The Bazaars of Hyderabad', (Sarojini Naidu) students learn about nationalism, swadeshi goods and spirit of patriotism.

• Through the prose 'The Eyes are Not Here', (Ruskin Bond) Learners seek the imaginative life of visually challenged people.

C101.2 [UNIT-II]

• From the 'If ', (Rudyard Kipling) poem students learn conditions & challenges of life, how to overcome them and succeed in life.

• 'On Saying Please', (A.G.Gardiner) students learn soft skills with a focus on socio- cultural etiquette. C101.3 [UNIT-III]

• 'Ulysses' (Alfred Tennyson) is an inspirational poem; motivates students to follow knowledge beyond the utmost bounds of human thoughts & not to become complacent.

'Seeing People Off', (Max Beerbohm), through this prose, students will know where they want to fit in & try all opportunities in life.

C101.4 [UNIT-IV]

'• On His Having Arrived at the Age of Twenty – Three', (John Milton) students will explore the poem about the passing of time & to question themselves if he/she is fulfilling God's plan (goals) or wasting precious time.

• 'Shyness My Shield', (M.K. Gandhi) the essay is learnt to profile LSRW skills & reinforce the need for restraint & patience.

• Grammar & Vocabulary help students to set the target language with grammar rules & enhance communication skills.

SEMESTER – II:

C101.1 [UNIT-I]

• Through the poem 'The Felling of the Banyan Tree', (Dilip Chitre) students learn about ecosystem and their destruction, specifically that of felling trees for profits, on the pretext of progress

• The story 'The Bet', (Anton Chekhov) focuses the spotlight on time and priorities in life.

• Grammar: Tenses help to learn the different forms of verb which tell them when the action referred to happens- before, at the time of or the moment of speech.

Vocabulary: Oxymoron helps them to highlight absurdities or to explain complicated feeling. Hyperbole produces a strong impression on the mind.

C101.2 [UNIT-II]

• Through the poem 'A Walk by Moonlight' (Henry Derozio) students will elevate the power and beauty of nature.

The essay 'How the Corona virus Sparked a Wave of Innovation in India', (Sreevas Sahasranamam) it exposes students to new writing & debate on pandemic, depressing situation, an opportunity to transform the moment constructively and creatively.

C101.3 [UNIT-III]

• Sujata Bhatt's 'A Different History' poem, details the impact of colonization on cultures & languages. The focus of students is on language polemics.

Toni Morrison's 'Noble Prize' lecture, reflects on vital socio- political &cultural issues.

C101.4 [UNIT-IV]

• 'Lady Macbeth's Speech from Macbeth', (William Shakespeare), the speech includes Gender roles, stereotypes & Gender neutral languages. Evil spirits that influence human thoughts.

• 'How I Became a Public Speaker', (G.B.Shaw) will help students to learn in detail about the art of public speaking & tips on how to cultivate the habit of public speaking.

• Soft Skills help the students to set clear goals, adopt growth mindset & use active learning strategies.

SEMESTER – III:

CO1: UNIT-I

• The poem 'Life' by Charlotte Bronte is about the positive attitude and not to be disheartened by temporary setbacks.

• Prose: 'A Wrong Man in Workers' Paradise' by Rabindranath Tagore, expresses the idea that true art needs no justification and the only objective of art is the pursuit of pure beauty.

• Vocabulary will help learners to enable and enhance new words and can substitute for commonly used words in their communication.

• A grammatical skills help the learners to learn prepositions by connecting people, objects and locations.

CO2: UNIT-II

• 'Punishment in Kindergarten' by Kamala Das, the poem juxtaposes the past and the present - childhood innocence and adult experience.

• Prose: 'Toasted English' by R.K Narayan, is about the impact on the Indian mindset and the cultural implications of English dominance to follow 'Bharat Brand of English'.

• Vocabulary: British and American English: the learners will identify literary techniques and creative uses of language in written and oral ways.

• Grammar: Voice: the learners identify the subject and verb in a sentence to comprehend quickly and accurately.

CO3: UNIT-III

• Essay Writing: Discursive and Argumentative Essay: by promoting critical thinking skills, the students will develop their ideas and arguments in writing and organize their thoughts in a logical and coherent manner.

• Vocabulary: Idioms gives the students the true essence of knowledge and construct meaningful words.

• Grammar: Connectives will help the learners in establishing connections within sentences effectively.

SEMESTER – IV:

CO1: UNIT-I

• Poem: 'As I Grew Older' by Langston Hughes, the students will learn, how to retrieve one's dream and strong willingness to achieve their goals by facing the obstacles and challenges in life.

• Prose: 'The Grammar of Anarchy' by Dr. B.R Ambedkar, the students will learn how to strive for freedom and building up a nation on the basis of social equality and to avoid casteism and hero-worship.

• Vocabulary: Phrasal Verbs: it enhances the learner's fluency and better communication skills, increases expressiveness and allows for adaptability in different contexts.

• Grammar: Concord: students will be able to create their own sentences using proper subject and verb agreement.

CO2:UNIT-II

• Poem: 'The Flower' by Alfred Tennyson, the students will find out different people's reaction on something new and original. They will learn how to be courageous and act in accordance with one's faith as well as how to face critics positively.

• Prose: 'The Kite Maker' by Ruskin Bond, the students will get aesthetic sense to patronise crafts such as kitemaking, in the hustle and bustle of modern materialistic life.

• Vocabulary: Commonly Confused Words: the students will be familiarised with several words that look alike or sound similar that have completely different meanings and spellings.

• Grammar: Determiners: the learners learn to understand and clarify the meaning of noun which can be specific or general.

CO3:UNIT-III

• Report Writing: Business Reports and Media Reports: the students will learn how to prepare formal reports and how to craft a strong lead, choose interesting details, write topics, concluding sentences and how to structure paragraphs.

• Vocabulary: Technical, Business and Media Vocabulary: the students will learn how to explain concepts, unique or specific to a particular area.

• Grammar: Reported Speech: In indirect speech, we report the speaker's words without using quotation marks, the actual words of the original speaker are changed. In direct speech we repeat the speaker's actual words without any grammatical changes by using quotation marks.

SEMESTER – V:

CO1:UNIT-I

• Poem: 'Ecology'by AK Ramanujan, highlights the inextricable relationship between human beings and nature and conveys the need for protecting our environment.

• Prose: "What's the Language of the Future?" by Henry Hitchings spreads the message of English in the past, present and the future of the language.

- Vocabulary: Indianisms words, phrases, expressions, sentences used widely in India.
- Grammar: Framing Questions: learners learn the art of framing questions.
- CO2:UNIT-II

• Poem: 'Girl' by Jamaica Kincaid, stress the need for equal treatment of a daughter by the mother.

• Prose: 'Gender Equality Is Your Issue Too' by Emma Watson, equality, rights, freedom is not only the issue of females but also of males.

• Vocabulary: Analogy and Odd Word Out enriches vocabulary similarities between pairs of words, multiple meanings for aptitude test, competitive and professional exams.

• Grammar: Verbs: learner will gain knowledge of types of verbs and its usage for correct formation of sentences.

CO3:UNIT-III

- Review Writing: Enhances reading, writing and critical thinking Skills and vocabulary.
- Vocabulary: Technical Vocabulary helps learner gain proficiency and knowledge

of words, phrases in all specific domains.

• Grammar: Conditionals, helps to express things that may happen in the present and future.

SEMESTER – VI:

CO1:UNIT-I

• Poem: 'Television' by Roald Dahl, Never ever allow children to watch TV, instead promote Reading skills.

• Prose: 'The Fringe Benefits of Failure and the Importance of Imagination' by JK Rowling, gives a message to accept and face life's challenges, and be optimistic and imaginative.

• Vocabulary: One-word Substitutes: the essential features of vocabulary building, helps in crisp and precise writing.

• Grammar: Relative Clauses, learners will learn to give information about the persons, things and demonstrate through relative clauses.

CO2:UNIT-II

• Poem: 'Accomplishments' by Elizabeth Mertz, learner will know the role and importance of gender, understand woman's role behind a man's success.

• Prose: 'Third Suggestion' by Chimamanda Ngozi Adichie, advises. the brought up of a girl child without discrimination.

• Vocabulary: Formal and Informal Vocabulary, proper utilisation of words, related to academics, professions, business etc in a formal and informal way.

• Grammar: Types of Sentences - gives knowledge to frame sentences, express, Themselves write and speak correctly.

CO3:UNIT-III

• CV Writing: Learner learns types of CVs and its usage in getting good job opportunities and success in career.

• Vocabulary: Appropriacy, learner acquires the knowledge of words usage and using the words in the right order (accuracy) and using the right word in the right context (appropriacy).

• Grammar: Common Errors, learners learn correct forms and rules to speak and write good, error free sentences, also enhance communication skills.

हिन्दी विभाग

पाठ्यक्रम के परिणाम

सेमेस्टर 1

1) विद्यार्थियों को जातिगत भेदभाव से दूर रहना चाहिए! जीवन मे उदारता, धैर्य, सहकारिता, सत्य बोलना, चरित्र के गुणों का वर्णन किया जाता है!

2) भावात्मक अनुग्रह विभिन्न मामले में संस्कृति पर चर्चा करते हैं, और जीवन जीने की शिक्षा देते हैं!

3) वाक्य निर्माण के लिए व्याकरण की भाषा का बहुत महत्वपूर्ण अंग है!

सेमेस्टर 2

हिंदी भाषा पढ़ने और सीखने से छात्रों को मानवीय व्यक्तित्व विकसित करने मे मदद मिलती है!
राजनीतिक में नैतिक गुणों के विकास में विचलन का वर्णन!
प्रकृति और जल प्रदूषण की अवधारणा छात्रों को प्रकृति और पर्यावरण के प्रति जिम्मेदार बनने में मदद करेगी !

सेमेस्टर 3

 1) छात्र हिंदी साहित्य के इतिहास का विश्लेषण करना सिखते हैं, जैसे भगवान कृष्ण का बचपन, और राम की प्रेरणा से, भरत जैसे साहसी पुत्र से ,सभ्य जीवन जीने की प्रेरणा मिलती है!
2) हिंदी साहित्य से विद्यार्थी भक्ति की प्राचीन स्थिति को जान सकते हैं!
3) छात्रों में प्राचीन भारत के इतिहास और साहित्य के निबंध से एक मजबूत और अवधारणा विकसित होगी !

सेमेस्टर 4

भक्तिपूर्ण प्रेम छात्रों में भावनात्मक मूल्यों को विकसित करता है ,जैसे मीराबाई रहीम आदि!
प्राचीन कहानियाँ छात्रों को भारतीय संस्कृति, परंपरा और संबंध के बारे में सिखाती है!
गद्य पाठ से आत्मविश्वास बढ़ता है, जीवन के प्रति सकारात्मक दृष्टिकोण से शैक्षणिक को बढ़ता है!

सेमेस्टर 5

 हिंदी का राष्ट्रीय एवं अंतर्राष्ट्रीय स्तर पर परिचय, हिंदी के प्रकार जैसे प्रयोजनमूलक हिंदी कार्यालयीन हिंदी, तकनीकी हिंदी आदि का परिचय कंप्यूटर के रूप में किया जाता है!
2) छात्रों को हिंदी साहित्य की विभिन्न विधाओ जैसे उपन्यास, नाटक, कहानी , कविताओं से जीवन परिचय का ज्ञान प्राप्त होगा!

3) जनसंचार कौशल सीखने से छात्रों को भविष्य के करियर आदि में मदद मिलेगी!

सेमेस्टर 6

1) अनुवाद को लिखने , पढ़ने से संचार कौशल सीखने में मदद मिलेगी!

2) पत्रकारिता हिंदी में सीखने से राष्ट्रीय और अंतरराष्ट्रीय नौकरियों मे अवसर मिलतें है!

3) छात्र हिंदी साहित्य के लिए सांस्कृतिक मूल्य और नैतिकता सीखेंगे और उन्हें नौकरी का एक बड़ा अवसर मिलेगा!

SANSKRIT

Course Outcomes SEMESTER – I: Saraswathi Sushama-1 (101)

CO1: Reading and learning sanskrit language helps students develop brain power.

CO2: Discribing of moral stories will helps to students get moral values in the present society.

CO3: Explaining ethical issues will develop honesty, integrity professional and personal ethics among the students.

SEMESTER – II:

Saraswathi Sushama-2 (102)

CO1: Narrate the ancient literature is useful for learning culture, customs & values among students. CO2: Provide techniques will improve science and skills in students if focus on famous indian scientists. CO3: Bhagavadgita will teaches about how to balance our charcter, situation handling & conflicts management in our life.

SEMESTER – III:

Saraswathi Sushama-3 (103)

CO1: Students will develop a strong concept of ancient indian history, philosophy & literature.

CO2: Prehistoric stories like ramadasa explains purity, devotion, faith in god.

CO3: Analysing of Grammer is very important part of language for the making of sentences.

SEMESTER – IV:

Saraswathi Sushama-2 (104)

CO1: Educate a inspiration persons stories will improve bhakti karma and rajayoga.

CO2: Persistent people stories will change the life of human beings.

CO3: Students will Learn a grammer for oral communication & perfection of language.

SEMESTER – V:

Saraswathi Sushama-3 (105)

CO1: Students will be able to write devanagari scripts which provide them paleographical knowledge . CO2: Students would know about the vedic mantras their application, vedic grammer socio-cultural life. CO3: Listening, reading, writing and speaking of sanskrit grammer will help to enhance the communication skills in students.

SEMESTER – VI: Saraswathi Sushama-3 (106)

CO1: Patriotism is makes to students attachment to country adapts the culture and develops the integrity. CO2: Upanishads are treasure store of profound life experiences and wisdom.

CO3: The great authors or scientists shastra or literature learned students will get a great job opportunities.

తెలుగు శాఖ కోర్ము ఫలితాలు

సెమిస్టర్ 🛛

- CO1 : మహిళా గొప్పతనం మరియు హిందూ సంస్కృతికి సంభందించిన విధేయతనువిశ్వాసాన్ని కాపాడుకోవడం.
- CO2 : కవి విలువల వర్ణనను అధిక ఆశయాలను కర్గి వాటి విలువలను ప్రోత్సహించడం.
- CO3 : సమాజం యొక్క చరిత్రను మరియు సాధించిన విజయాలను చెప్పడం
- CO4 : బాషను సేర్చుకోవడానికి భాష యొక్క గొప్పతనాన్ని అర్ధం చేసుకోవడానికి బాషాబాగాల యొక్క ప్రాముఖ్యత చాలా ముఖ్యమైనది.

సెమిస్టర్ II

- CO1 : పద విద్యార్థులు సైతిక విలువల గురించి వాటిలోని సామరస్యాన్ని గురించి తెలుసుకోవడం
- CO2 : మానవీయ వివులువలు సంస్కృతి మరియు వాటి యొక్క లక్ష డాలను గురించి అర్ధం చేసుకోవడం.
- CO3 : భావ ప్రకటనలను వాటి మధ్య గల సంబంధాలను గుర్తు చేసుకుంటూ వాటిని సెమరు పేసుకోవడం.
- CO4 : వ్యాకరణ నియమాలు మరియు పదజాలం మరియు సబ్యత్వాలనుతెలుసు కోవడం.

సెమిస్టర్ III

- CO1 : విద్య ద్వారా సహాయక పనితీరును సేర్చుకోవచ్చు
- CO2 : సహజ లక్షణాలు మరియు క్రమశిక్షణ భారతీయ సంస్థలో వ్యవసాయ సంస్థలను గురించి తెలుసుకోవడం.
- CO3 : వ్యాకరణ నియమాలను వాటి యొక్క ప్రాముఖ్యత ద్వారా భాషా ప్రాముఖ్యతను తెలుసుకోవడం.

సెమిస్టర్ IV

- CO1 : విద్యార్థి కవిత్వంలోని సైపుణ్యాలను విశ్లీషించి హిందూ సంప్రదాయ విలువలన గురించి తెలుసుకొని వాటిని వర్గీకరించడం
- CO2 : కవిఅబార్ట్ కొండల చరిత్రలను కవితా రూపకంగా వర్ణించాడు.
- CO3 : మానవుడు తన చుట్టూ ఉన్న ప్రపంచంలోని విషయాలను గమనించడం. వాటిని గురించి సేర్చుకోవడం. మెదడు యొక్క పనితీరును మేరుపరుస్తుంది. వాటి యొక్క జ్ఞాపకాలను సి. సి. ట్రౌన్ వర్ణించారు.

సెమిస్టర్ V

- CO1 : అక్షరాస్యత సైపుణ్యాన్ని పెంపొందించడంలో విద్యార్థి యొక్క భాషా జ్ఞానాన్ని సులభతరం చేయడం.
- CO2 : భాషాభాగాలు సాధారన్మగా సమాచార ప్రసారం విద్యార్థులకు ఉపయోగపడతాయి.
- CO3 : పుస్తక పఠనం ద్వారా పుస్తకంలోని గణనను సామాజిక సంస్థుతిని మరియు పుస్తక సమీక్షల ద్వారా తెలుసుకోవచ్చు.

సెమిస్టర్ VI

- CO1 : జీవిత చరిత్ర మరియు నవల అనేది వారి యొక్క ఊహాత్మక విషయాలను వారి యొక్క అనుభవాలను కలిగి ఉన్న ఒక పుస్తకం
- CO2 : ప్రసార సాధనాల ద్వారా కొత్త కథనాలూ, నిపేదనాలను వాటి యొక్క పనితీరును గురించి తెలియజేయడం.
- CO3 : ఒక సంస్థ యొక్క నిపేదికలను క్లిష్టమైన విషయం జ్ఞానాన్ని గురించి వివరిస్తుంది.

URDU

Course Outcomes SEMESTER – I:

Mutal-E- Adab PART -I-A

CO1: Understand Urdu Ghazaliyat CO2: Understand Urdu Poems CO3: Understand Asnaf-E-Nasr & Hikayat CO4: Understand Urdu Drama CO5: Understand Urdu Safar Nama

SEMESTER – II: Mutal-E- Adab PART -I-B

CO1: Understand Urdu Ghazaliyat CO2: Understand Urdu Poems CO3: Understand Poet's Biography CO4: Understand Urdu Essay CO5: Understand Urdu Afsana

SEMESTER - III:

Mutal-E- Adab Part II-A

CO1: Understand Urdu Poem Masnavi CO2: Understand Urdu Poem Qasida CO3: Understand Urdu Nasar Dastaan CO4: Understand Urdu Nasar Novel CO5: Understand Urdu Insha

SEMESTER – IV:

Mutal-E- Adab PART-II-B

CO1: Understand Urdu Poem MarsiyaCO2: Understand Urdu Poem Rubaiyat & QatayatCO3: Understand Urdu Offical LettersCO4: Understand Urdu Function And Essay WritingCO5: Learn & Write Urdu Reportage

SEMESTER – V: URDU SHAFAT

CO1: Learn Mass Media & History CO2: Learn News Paper & Journalism CO3: Learn Communication Skills & Importance

SEMESTER – VI: URDU COMPUTER &

URDU COMPUTER & TRANSLATION

CO1: Learn importance of Urdu Computer CO2: Learn Urdu Soft Ware & Hard Ware Programs

CO3: Learn Translations its types

FRENCH

Programme Outcomes

PO1: To meet the growing demand for learning a foreign language, especially French, which is the most widely taught foreign language, by far in India and the second in the world after English. France, being the largest investor in Indian industry and technology in the years to come, learning French is beneficial for the Indian students for their future job prospects. Keeping in view these objectives and also to be at par with the Common European Framework of learning a Foreign Language, the Department of French, in collaboration with Alliance Francaise, has introduced "Cosmopolite A1 and A2 (Textbook and Workbook) since last academic year and "A Propos" (Textbook and Workbook) A1 is being continued for the final year.

PO2: The main aim of the Common European Framework is to provide a method of learning, teaching and assessing which is applicable to all languages in Europe. Keeping the common reference levels in mind, our students, at the end of the third year, would have achieved the A2 level of French, wherein the student can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. The learner is taught to adapt himself/ herself to the given sociolinguistic situation use his/her linguistic competences to encode or decode the sentence structures.

Course Outcomes SEMESTER – I: COSMOPOLITE A1 (Dossier 0-3)

CO1: Discover French, to spell your name, to count, to know the names of countries, to communicate in class, to greet, to introduce oneself and to take leave. To ask and give information.

CO2: To give personal information, to introduce and identify a person, to ask about someone's identity and speak about your classmates. To get acquainted with the objectives of learning French. To talk about countries and cities and the different localities in a city.

CO3: To locate a locality and talk about the means of transport. To speak and to exchange information about types of housing. Speak about your family.

CO4: Describe a person and talk about your likes and dislikes. Speak about oneself, your profession, your passions and your dreams. Speak about your activities and explain about your health.

SEMESTER – II:

COSMOPOLITE A1 (Dossier 4-6)

CO1: Indicate time and time-table. Speak about your daily habits and activities. Talk about your routine work and the outings (about your job and give/ seek information about the trips and visits)

CO2: Propose an outing, to invite, accept and refuse an invitation. Narrate past events. Speak about recent experiences and projects. Understand biographical information. Learn to describe a person.

CO3: Speak about past and present events. Learn to give advice. Learn to understand the programme of your stay. Choose a destination and the itinerary.

CO4: To describe a city and locality and the nature of residence. Speak about seasons and climate. Express emotions and sensations.

SEMESTER – III: COSMOPOLITE A1 (Dossier: 7 and 8) & A2 (Dossier 1)

CO1: Understand a menu and give your opinion. Learn to do shopping. Identify comparing practices, to speak about evolution. Buying clothes and to appreciate positively and negatively

CO2: Speak about progress in learning French. To describe a restaurant and to order a meal. Choosing your clothes.

CO3: Describe a thing or a person. To advise on a film or a show. Organise an evening get-together.

Compare language study holiday. To learn about administrative procedures and to organize a trip To find out about lodging, describe a place and give precise information.

SEMESTER – IV:

COSMOPOLITE A2 (Dossier 2-4 (Leçons 1-2)

CO1Narrate an experience. Understand the rules of security. Speak about one's emotions and sentiments. Organize a thematic week-end. Describe a freak journey.

CO2: Describe your route. Understand an employment offer. Search for employment. Propose services.

CO3: Speak about your professional journey. Reply to formal questions. Explain in detail and precisely facts. To speak in detail about an event.

SEMESTER – V:

À Propos A2 (Dossier 4-6)

CO1:Describe a landscape, to complain against neighbours, speak about the advantages / disadvantages of city/countryside, express a distance, buy a ticket, ask / indicate an itinerary.

CO2: Propose, invite, accept, refuse, postpone an invitation, speak about one's leisure and cultural activities, cancel an appointment, ask and give opinion on a show/event, express displeasure.

CO3: Write an informal letter, express obligation, prohibition and feelings, excuse oneself, ask for forgiveness, ask for help, console somebody.

SEMESTER – VI:

À Propos A2 (Dossier: 7-8)

CO1: Ask information regarding tourism, express and insist on one's point of view, advice, recollect, ask permission.

CO2: Understand and learn to define, understand the SMS language, differentiate oral and written French, make sure that the interlocutor has understood, ask to repeat/ specify.

CO3: Propose an outing, invite, refuse, reschedule an invitation, express opinions, advise, express feelings, give information, to recollect, ask permission.