



Cell : 9346251441
☎ 08814-222128

SRI DASARI NARAYANA RAO

GOVERNMENT DEGREE COLLEGE FOR WOMEN

(Affiliated to Adikavi Nannaya University, Rajamahendravaram)
An ISO Certified Organisation

Beside Municipal Office, Main Road, PALAKOL-534260, W.G.Dt., A.P.
e-mail : dnrjkc@gmail.com website : www.sridnrgdcw.ac.in



Dr. P. Sobha Rani
M.A., M.Phil., Ph.D., PGDTE
Principal

Course Outcomes (COs)

DEPARTMENT OF MATHEMATICS

SEMESTER-II

TITLE OF PAPER: DIFFERENTIAL EQUATIONS

- CO1: Solve linear differential equations
- CO2: Convert non-exact homogeneous equations to exact differential equations by using Integrating Factors.
- CO3: Know the methods of finding solutions of differential equations of the first order but not Of the First degree.
- CO4: Solve higher-order linear differential equations both homogeneous and non homogeneous With constant co efficient.
- CO5: Understand the concept and apply appropriate methods for solving differential equations.

SEMESTER-II

TITLE OF PAPER: ANALYTICAL SOLID GEOMETRY

- CO1: Acquire a level of proficiency in particular in using equation of plane in terms of its intercepts on axis. Equation of the planes through the given point length of the Perpendicular from a given point to a given plane.
- CO2: Explore the basic concept of the equation of a line, angle between the line and a plane, and the shortest distance between two lines.
- CO3: Develop their knowledge and apply the skills in the study of the sphere.
- CO4: Gain a broader understanding on cones.
- CO5: Use the facts formulas and techniques learned in this course to prove applications to cones

SEMESTER-III

TITLE OF PAPER: ABSTRACT ALGEBRA

- CO1: Able to study the properties of sets, and check whether the given set are groups or not and Study various theorems which can be applied to study various algebraic structures.
- CO2: Learn certain necessary and sufficient conditions for a non-empty subset of a group to

become a subgroup and develop skills in solving problems in groups which facilitate, solving of problems in cosets.

CO3: Able to advance their ability to apply the necessary and sufficient conditions studied, to solve the problems in Normal Subgroups and learn the concept of Quotient group.

CO4: Learn fundamental theorem of Homomorphism, and will be able to deduce other homomorphism theorems and also learn the concept of automorphisms and related theorems.

CO5: Able to understand the concepts of permutation groups, cyclic groups, finding the number of generators of a cyclic group.

SEMESTER-IV

TITLE OF PAPER: REAL ANALYSIS

CO1: Get clear idea about the real numbers and real valued functions.

CO2: Obtain the skills of analyzing the concepts and applying appropriate methods for testing convergence of a sequence/series.

CO3: Test the continuity and differentiability of various functions.

CO4: Know the geometrical interpretation of mean value theorems.

CO5: Identify and verify Riemann integrable functions.

SEMESTER-IV

TITLE OF PAPER: LINEAR ALGEBRA

CO1: Able to understand Euclidean Vector spaces, their inherent and algebraic structure and the accompanying geometry.

CO2: Able to acquire Knowledge on basis, dimension of vector spaces and their applications.

CO3: Able to acquire facility working with general vector spaces, linear transformations coordinate vectors and the changing of basis.

CO4: Able to gain proficiency in solving systems of Linear equations using matrices and find the characteristic equation, eigenvalues and corresponding eigenvectors of a given matrix.

CO 5. Identify examples of inner product spaces that are different from Euclidean n space. Applying the properties of the inner product, the norm, the distance function, and the Cauchy Schwartz inequality in an inner product space.

SEMESTER-V

TITLE OF PAPER: NUMERICAL METHODS

CO1 : Acquire knowledge in solving forward ,back ward difference problems

CO2: Acquire basic knowledge in solving interpolation with equal interval problems by various

numerical methods. Estimate the missing data through interpolation methods.

CO3 : Acquire basic knowledge in solving problems using difference operators and various methods involving difference operators

CO4: Develop skills in analyzing the methods of interpolating a given data, properties of interpolation with unequal intervals and derive conclusions.

CO 5: Use relevant numerical techniques for develop numerical skills in solving the problems involving algebraic and transcendental equations.

SEMESTER-V

TITLE OF PAPER: SPECIAL FUNCTIONS

CO1: Use relevant numerical techniques for Integrals involving Hermite Polynomial, Hermite's equation and its solution.

CO2: Develop numerical skills in solving the problems involving Laguerre equation and its solution. Learn Properties of Laguerre polynomials and Rodrigue's formula, Orthogonality of Laguerre polynomial

CO3: Develop skills in designing mathematical models for Legendre's Polynomials, the Generating Function for Legendre's Polynomials, Orthogonally of Legendre's Polynomials, Legendre's Equation and its solutions.

CO4: Develop skills in analyzing the Properties of Bessel Function, Recurrence relationships, Generating functions, Bessel's Equation and its Solutions.

CO5: Acquire basic knowledge in Integral Definition of Gamma and Beta Functions. Properties of Gamma and Beta Functions. Relations between Gamma and Beta Functions.

DEPARTMENT OF COMPUTER SCIENCE

SEMESTER-I

TITLE OF PAPER: ESSENTIALS AND APPLICATIONS OF MATHEMATICAL, PHYSICAL AND CHEMICAL SCIENCES

CO1: Apply critical thinking skills to solve complex problems involving complex numbers, trigonometric ratios, vectors, and statistical measures.

CO2: To Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to Connect their knowledge of physics to everyday situations

CO3: To Explain the basic principles and concepts underlying a broad range of fundamental areas of chemistry and to Connect their knowledge of chemistry to daily life.

CO4: Understand the interplay and connections between mathematics, physics, and chemistry in various applications. Recognize how mathematical models and physical and chemical principles can be used to explain and predict phenomena in different contexts.

CO5: To explore the history and evolution of the Internet and to gain an understanding of network security concepts, including threats, vulnerabilities, and countermeasures.

SEMESTER-I

TITLE OF PAPER: ADVANCES IN MATHEMATICAL, PHYSICAL AND CHEMICAL SCIENCES

CO1: Explore the applications of mathematics in various fields of physics and chemistry, to understand how mathematical concepts are used to model and solve real-world problems.

CO2: To Explain the basic principles and concepts underlying a broad range of fundamental areas of physics and to Connect their knowledge of physics to everyday situations.

CO3: Understand the different sources of renewable energy and their generation processes and advances in nano materials and their properties, with a focus on quantum dots. To study the emerging field of quantum communication and its potential applications. To gain an understanding of the principles of biophysics in studying biological systems. Explore the properties and applications of shape memory materials.

CO4: Understand the principles and techniques used in computer-aided drug design and drug delivery systems, to understand the fabrication techniques and working principles of nano sensors. Explore the effects of chemical pollutants on ecosystems and human health.

CO5: Understand the interplay and connections between mathematics, physics, and chemistry in various advanced applications. Recognize how mathematical models and physical and chemical principles can be used to explain and predict phenomena in different contexts.

CO6: Understand and convert between different number systems, such as binary, octal, decimal, and hexadecimal. Differentiate between analog and digital signals and understand their characteristics. Gain knowledge of different types of transmission media, such as wired (e.g., copper cables, fiber optics) and wireless (e.g., radio waves, microwave, satellite).

SEMESTER-II

TITLE OF PAPER: PROBLEM SOLVING USING C

CO 1: Understand the evolution and functionality of a Digital Computer

CO 2: Apply logical skills to analyze a given problem

CO 3: Develop an algorithm for solving a given problem.

CO 4: Understand 'C' language constructs like Iterative statements, Array processing, Pointers.

CO 5: Apply 'C' language constructs to the algorithms to write a 'C' language program.

SEMESTER-II

TITLE OF PAPER: DIGITAL LOGIC DESIGN

CO1: Understand how to Convert numbers from one radix to another radix and perform
Arithmetic operations.

CO2: Simplify Boolean functions using Boolean algebra and k- maps

CO3: Design adders and subtractions circuits

CO4: Design combinational logic circuits such as decoders, encoders, multiplexers and
demultiplexers.

CO5: Use flip flops to design registers and counters.

SEMESTER-III

TITLE OF PAPER: DATABASE MANAGEMENTSYSTEM

1. Gain knowledge of Database and DBMS.
2. Understand the fundamental concepts of DBMS with special emphasis on relational data model.
3. Demonstrate an understanding of normalization theory and apply such knowledge to the normalization of a database
4. Model data base using ER Diagrams and design database schemas based on the model.
4. Create a small database using SQL.Store, Retrieve data in database

SEMESTER-IV

TITLE OF PAPER: OBJECT ORIENTED PROGRAMMING USING JAVA

1. Understand the benefits of a well-structured program Understand different computer programming paradigms
2. Understand underlying principles of Object-Oriented Programming in Java
3. Develop problem-solving and programming skills using OOP concepts
4. Develop the ability to solve real-world problems through software development in high-level programming language like Java

SEMESTER-IV

TITLE OF PAPER: OPERATING SYSTEMS

1. Know Computer system resources and the role of operating system in resource management with algorithms
2. Understand Operating System Architectural design and its services.
3. Gain knowledge of various types of operating systems including Unix and Android.
4. Understand various process management concepts including scheduling, synchronization, and deadlocks.
5. Have a basic knowledge about multithreading.
6. Comprehend different approaches for memory management.
7. Understand and identify potential threats to operating systems and the security features design to guard against them.
8. Specify objectives of modern operating systems and describe how operating systems have evolved over time.

SEMESTER-V

TITLE OF PAPER: WEB INTERFACE DESIGNING TECHNOLOGIES

1. Understand and appreciate the web architecture and services.
2. 2. Gain knowledge about various components of a website.
3. Demonstrate skills regarding creation of a static website and an interface to dynamic website.
4. Learn how to install word press and gain the knowledge of installing various plugins to use in their websites.

SEMESTER-V

TITLE OF PAPER: WEB APPLICATIONS DEVELOPMENT USING PHP& MYSQL

1. Write simple programs in PHP.
2. Understand how to use regular expressions, handle exceptions, and validate data using PHP.
3. Apply In-Built functions and Create User defined functions in PHP programming.
4. Write PHP scripts to handle HTML forms.
5. Write programs to create dynamic and interactive web based applications using PHP and MYSQL.

DEPARTMENT OF COMMERCE

SEMESTER-I

TITLE OF PAPER: FUNDAMENTALS OF COMMERCE

CO1: Identify the role commerce in Economic Development and Societal Development.

CO 2: Equip with the knowledge of imports and exports and Balance of Payments.

CO3: Develop the skill of accounting and accounting principles.

CO4 They acquire knowledge on micro and macro economics and factors determine demand and supply.

CO5: An idea of Indian Tax system and various taxes levied on in India.

CO6: They will acquire skills on web design and digital marketing.

SEMESTER-I

TITLE OF PAPER: BUSINESS ORGANIZATION

CO1: Ability to understand the concept of Business Organization along with the basic laws and norms of Business Organization.

CO2: The ability to understand the terminologies associated with the field of Business Organization along with their relevance and to identify the appropriate types and functioning of Business Organization for solving different problems.

CO3: The application of Business Organization principles to solve business and industry related problems and to understand the concept of Sole Proprietorship, Partnership and Joint Stock Company etc.

SEMESTER-II

TITLE OF PAPER: FINANCIAL ACCOUNTING

1. Able to identify transactions and events that needs to be recorded in the books of accounts. Equip with the knowledge of accounting process and preparation of final accounts of sole trader.
2. Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP.
3. Know the difference between Joint Ventures and Consignment

SEMESTER-II

TITLE OF PAPER: OFFICE AUTOMATION TOOLS

CO1: Understand concept of Word Processor and use its features.

CO2: To use the advanced features of Ms-Word to make day to day usage easier.

CO3: To work comfortably with Ms-Excel Environment.

CO4: To create work sheets and user advanced feature of Excel.

CO5: To create make presentations and inserting multimedia in them.

SEMESTER-III

TITLE OF PAPER: ADVANCED ACCOUNTING

1. Understand the concept of Non-profit organizations and its accounting process.
2. Comprehend the concept of single-entry system and preparation of statement of affairs.
3. Familiarize with the legal formalities at the time of dissolution of the firm.
4. Prepare financial statements for partnership firm on dissolution of the firm and Employ critical thinking skills to understand the difference between the dissolution of the firm and dissolution of partnership.

SEMESTER-III

TITLE OF PAPER: BUSINESS STATISTICS

- Describe and discuss the key terminology, concepts, tools and techniques used in business statistical analysis.
- Use statistical, graphical and algebraic techniques wherever relevant.
- Deal with numerical and quantitative issues in business.
- Understand statistical applications in Economics and managements.

SEMESTER-III

TITLE OF PAPER: PROGRAMMING WITH C & C++

CO1: Describe oops concepts.

Co2: Use functions and pointers in your c++ program.

Co3: Understand tokens, expressions, and control structures.

Co4: Explain arrays and strings and create programs using them.

Co5: Describe and use constructors and destructors.

Co6: Understand and employ file management.

SEMESTER-IV

TITLE OF PAPER: CORPORATE ACCOUNTING

- Equip with the knowledge relating to the accounting procedures followed by the companies.
- Know about the valuation of shares and good will.
- Understand various provisions of the companies Act 2013. Prepare final accounts of the companies using computers.

SEMESTER-IV

TITLE OF PAPER: COST AND MANAGEMENT ACCOUNTING

- Acquire conceptual knowledge relating to accounting of various costs.
- Get good training in finding the cost of products using different methods of costing.
- Know the method of recording income and expenditure relating to production of goods and services.
- Learn about cost ascertainment, cost control and cost reduction.

SEMESTER-IV

TITLE OF PAPER: INCOME TAX

CO1: Acquire the knowledge regarding Income Tax.

CO2: Understand the concepts of exempted incomes and provisions of agricultural income.

CO3: Compute the income under the head “Income from salary”, “Income from house property” and “Capital Gains”. Learn the concept of Deductions U/S 80.

SEMESTER-IV

TITLE OF PAPER: BUSINESS LAWS

- Equip with the knowledge of legal environment and legal principles.
- Identify the fundamental legal principles behind contractual agreements.
- Understand the legal and fiscal structure of different forms of business organizations.
- Acquire problem solving techniques and present coherent legal argument.

SEMESTER-IV

TITLE OF PAPER: AUDITING

- Equip with the conceptual knowledge relating to audit procedures and practices.
- Know about different types of audits and rights and duties of Auditors.
- Learn how to examine the books of accounts and express an opinion on financial statements.
- Demonstrate the accounting knowledge and skills in auditing.

SEMESTER-IV

TITLE OF PAPER: DATABASE MANAGEMENT SYSTEM

CO1 Understand the basic concepts of database management systems

CO2 Apply SQL to find solutions to a broad range of queries

CO3 Apply normalization techniques to improve database design

CO4 Analyze a given database application scenario to use ER model for conceptual design of the database

SEMESTER-V

TITLE OF PAPER: MANAGEMENT ACCOUNTING AND PRACTICE

- Understand the importance of management accounting system and Role of Management Accountant.
- Know about uses and limitations of Financial Statements.
- Know about classification and advantages of Ratio analysis.
- Learn about preparation of Funds Flow statement and Cash flow statement

SEMESTER-V

TITLE OF PAPER: COST CONTROL TECHNIQUES

1. Differentiate cost control, cost reduction concepts and identify effective techniques.
2. Allocate overheads on the basis of Activity Based Costing.
3. Evaluate techniques of cost audit and rules for cost record.
4. Appraise the application of marginal costing techniques to evaluate performances, fix selling price, make or buy decisions.

SEMESTER-V

TITLE OF PAPER: LIFE INSURANCE WITH PRACTICE

1. Understand the Features of Life Insurance, schemes and policies and insurance companies in India.
2. Analyze various schemes and policies related to Life Insurance sector
3. Choose suitable insurance policy for given situation and respective persons.

SEMESTER-V

TITLE OF PAPER: GENERAL INSURANCE WITH PRACTICE

1. Understand the Features of General Insurance and Insurance Companies in India.
2. Analyze various schemes and policies related to General Insurance sector
3. Choose suitable insurance policy under Health, Fire, Motor, and Marine Insurances.

SEMESTER-V**TITLE OF PAPER: MOBILE APPLICATION DEVELOPMENT**

1. Identify basic terms, tools and software related to android systems
2. Describe components of IDE, understand features of android development tools
3. Describe the layouts and controls
4. Explain the significance of displays using the given view
5. Explain the features of services and able to publish android App lic

SEMESTER-V**TITLE OF PAPER: CYBER SECURITY AND MALWARE ANALYSIS**

1. Understand the computer networks, networking tools and cyber security
2. Learn about NIST Cyber Security Framework
3. Understand the OWASP Vulnerabilities
4. Implement various Malware analysis tools
5. Understand about Information Technology act 2000

SEMESTER-V**TITLE OF PAPER: DIGITAL MARKETING**

1. Analyze online Micro and Macro Environment.
2. Design and create website.
3. Discuss search engine marketing.
4. Create blogs, videos, and share

SEMESTER-V**TITLE OF PAPER: SERVICE MARKETING**

1. Discussing the reasons for growth of service sector.
2. Examine the marketing strategies of Banking Services, insurance and education services.
3. Describe segmentation strategies in service marketing.

DEPARTMENT OF BOTONY

SEMESTER-II

TITLE OF PAPER: NONVASCULAR PLANTS

CO1: Demonstrate the techniques of use of lab equipment, preparing slides and identify the material and draw diagrams exactly as it appears.

CO2: Observe and identify microbes and lower groups of plants on their own.

CO3: Demonstrate the techniques of inoculation, preparation of media etc.

CO4: Identify the material in the permanent slides etc.

SEMESTER-III

TITLE OF PAPER: BIO DIVERSITY PHYTHO GEOGRAPHY

CO1: Classify and compare Pteridophytes and Gymnosperms based on their morphology, anatomy, reproduction and life cycles.

☐ CO2: Justify evolutionary trends in tracheophytes to adapt for land habitat.

☐ CO3: Explain the process of fossilization and compare the characteristics of extinct and extant plants.

CO4: Critically understand various taxonomical aids for identification of Angiosperms.

☐ CO5: Analyze the morphology of the most common Angiosperm plants of their localities and recognize their families.

☐ CO6: Evaluate the ecological, ethnic and economic value of different tracheophytes and summarize their goods and services for human welfare.

☐ CO7: Locate different phyto geographical regions of the world and India and can analyze their floristic wealth.

SEMESTER-IV

TITLE OF PAPER: PLANT PHYSIOLOGY

☐ 1. Comprehend the importance of water in plant life and mechanisms for transport of water and solutes in plants.

☐ 2. Evaluate the role of minerals in plant nutrition and their deficiency symptoms. Interpret the role of enzymes in plant metabolism.

☐ 3. Critically understand the light reactions and carbon assimilation processes

responsible for synthesis of food in plants.

- ☐ 4. Analyze the biochemical reactions in relation to Nitrogen and lipid metabolisms.
- ☐ 5. Evaluate the physiological factors that regulate growth and development in plants.
- ☐ 6. Examine the role of light on flowering and explain physiology of plants under stress conditions
- 7. Conduct lab and field experiments pertaining to Plant Physiology, that is, biophysical and biochemical processes using related glassware, equipment, chemicals and plant material.
- ☐ 8. Estimate the quantities and qualitative expressions using experimental results and calculations
- ☐ 9. Demonstrate the factors responsible for growth and development in plants.

SEMESTER-IV

TITLE OF PAPER: CELL BIOLOGY & PLANT GENETICS

- ☐ Distinguish prokaryotic and eukaryotic cells and design the model of a cell.
- ☐ Explain the organization of a eukaryotic chromosome and the structure of genetic material.
- ☐ Demonstrate techniques to observe the cell and its components under a microscope.
- ☐ Discuss the basics of Mendelian genetics, its variations and interpret inheritance of traits in living beings.
- ☐ Elucidate the role of extra-chromosomal genetic material for inheritance of characters.
- ☐ Evaluate the structure, function and regulation of genetic material.
- ☐ Understand the application of principles and modern techniques in plant breeding.
- ☐ Explain the procedures of selection and hybridization for improvement of crops.

SEMESTER-V

TITLE OF PAPER: PLANT PROPAGATION

1. Explain various plant propagation structures and their utilization.
2. Understand advantages and disadvantages of vegetative, asexual and sexual plant propagation methods.
3. Assess the benefits of asexual propagation of certain economically valuable plants using apomictics and adventive polyembryony.
4. Demonstrate skills related to vegetative plant propagation techniques such as cuttings, layering, grafting and budding.
5. Apply a specific macro-propagation technique for a given plant species.

SEMESTER-V

TITLE OF PAPER: SEED TECHNOLOGY

1. Explain the causes for seed dormancy and methods to break dormancy.
2. Understand critical concepts of seed processing and seed storage procedures.
3. Acquire skills related to various seed testing methods.
4. Identify seed borne pathogens and prescribe methods to control them.
5. Understand the legislations on seed production and procedure of seed certification.

DEPARTMENT OF HISTORY

SEMESTER-III

TITLE OF PAPER: MODERN INDIAN HISTORY & CULTURE

1. Demonstrate advanced factual knowledge of world histories, politics, and cultures Assess and appraise the developments in art, literature, and society during the Renaissance and utilize content knowledge of the Reformation and Counter Reformation to make predictions about the evolution of Christianity in Europe and abroad.
2. Evaluate the causes for the Glorious Revolution and American Revolution and identify the background for the evolution of human rights movement.
3. Understand the main events of the French Revolution and its significance in the shift in European culture from Enlightenment to Romanticis.
4. Think how Russia's traditional monarchy was replaced with the world's first Communist state.
5. Know how the world wars affected people all over the world and the destruction they caused
6. Develop the intellectual curiosity and habits of thought that will lead to life-long learning and continued engagement with European history, literature, culture, languages, and current affairs and acquire advanced international and intercultural competency through coursework in international studies.
7. Visualize where places are in relation to one another through map pointing

SEMESTER-IV

TITLE OF PAPER: HISTORY & CULTURE OF ANDHRA

1. Interpret social and culture transformation from medieval to modern Andhra

Relate key historical development during medieval period occurring in costal Andhra and Telangana regions and analyze socio-political and economic changes under Qutbshahi rules

2. Understand gradual change, or change in certain aspects of society in Andhra, rather than rapid or fundamental changes.
3. Explain how the English East India company became the most dominant power and outline the impact of colonial on different aspects in Andhra
4. Outline the issues related to caste, women, widow remarriage , child marriage, social reforms and the laws and policies of colonial administration towards these issues.
5. Take pride in the non-violence struggle for Indian Independence and relate the important of peace in every life.
6. Apply the knowledge of the regional history to understand the regional, linguistic and other cultural aspirations of the present day society Visualize where places are in relation to one another through map pointing

SEMESTER-IV

TITLE OF PAPER: HISTORY OF MODERN WORLD

1. Unearth the true nature of the British rule and its disastrous impact on Indian economy and society Gauge the disillusionment of people against the Company's rule even during the early 19th century
2. Assess the causes and effects of Reformation movements and also inspire the public to overthrow inequalities of the present day society
3. Rise above petty parochial issues after understanding the sacrificial saga of freedom struggle
4. Evaluate the undercurrent of communal politics that led to India's partition and identify the enemies of India's integrity and sovereignty
5. Visualize where places are in relation to one another through map pointing

SEMESTER-V

TITLE OF PAPER: TOURISM AND HOSPITALITY SERVICES

1. Understand hospitality as a career
2. Inculcate interpersonal skills
3. Develop the ability for multi tasking and crisis management

4. Understands the spirit of teamwork
5. Acknowledge the importance of guest service and satisfaction

SEMESTER-V

TITLE OF PAPER: TOURISM GUIDANCE AND OPERATING SKILLS.

- CO 1: Acquire tour guiding, operating and soft skills
- CO 2: Understand different situations under which one has to work
- CO 3: Cultivate cultural awareness and flexibility
- CO4: Understand and apply team spirit
- CO 5: Plan and organize to our operations efficiently

DEPARTMENT OF POLITICAL SCIENCE

SEMESTER-II

TITLE OF PAPER: FUNDAMENTALS OF POLITICAL SCIENCE

- CO1: Correlate Political Science with allied disciplines like History, Economics, Philosophy and Sociology.
- CO2: Explain the elements of the state theories of origin of the state and demonstrate the concepts of ++ modern and welfare states.
- CO3: Differentiate Law, Liberty and Equality and also differentiate power authority and legitimacy.
- CO4: Explain the nature classification and theory of rights.
- CO5: Distinguish between Liberalism, Individualism, and Anarchism. Compare Socialism, Marxism and Multiculturalism.

SEMESTER-III

TITLE OF PAPER: INDIAN GOVERNMENT AND POLITICS

CO1: Demonstrate the constitutional development in India during British rule. Explain the salient features of the Indian constitution

CO2: Illustrate basic structure of the constitution.

CO3: Demonstrate mode of appointment powers and function of the President of India.

CO4: Explain the mode of appointment process and functions of the Government.

CO5: Analyze the Indian Judiciary powers and functions.

SEMESTER-IV

TITLE OF PAPER: INDIAN POLITICAL PROCESS

CO1: To have an idea on caste system in India.

CO2: To know the evolution of modernity in India.

CO3: To have overall idea on electoral trends of the lok sabha from 1952 to 2004

CO4: To understand the party system and ideology of various parties Ex: INC, BJP, CPM,
DMK, TDP etc

CO5: To understands the basics of personnel administration- both processes and institutions.

SEMESTER-IV

TITLE OF PAPER: WESTERN POLITICAL THOUGHT

CO1: Distinguish between Plato and Aristotle Theory with regard to Classical
Western Political Thought.

CO2: Discuss about early Medieval to the beginning of Modern thought.

CO3: Classify Thomas Hobbes, John Locke and Rousseau Theories on Liberal Thought.

CO4: Classify Jeremy Bentham and John Stuart Mill Philosophy with regard to Liberal
Democratic thoughts.

CO5: Compare Karl Marks and Antonio Gram sci Philosophies in connection with
Philosophical idealism.

SEMESTER-V**TITLE OF PAPER: OFFICE MANAGEMENT**

1. Understand fundamental knowledge of Office Management that can be applied to a career.
2. Have knowledge on office administration and identify job competencies.
3. Understand the importance of record management and allied sections.
4. Comprehend the administrative process in office
5. Identify the challenges in the background of ICT

SEMESTER-V**TITLE OF PAPER: PERSONNEL ADMINISTRATION**

1. Understand Personnel Administration that can be applied to a career.
2. Acquire knowledge on recruitment, selection and training and identify job competencies.
3. Understand the importance and role of civil services in Indian Governance.
4. Provide an overview on issues in administration.
5. Enhance skills, strategies and techniques for redressed of grievances in administration

DEPARTMENT OF ENGLISH**SEMESTER-I****TITLE OF PAPER: A Course in Communication & Soft Skills**

- Use grammar effectively in writing and speaking.
- Demonstrate the use of good vocabulary
- Demonstrate an understating of writing skills
- Acquire ability to use Soft Skills in professional and daily life.
- Confidently use the tools of communication skills

SEMESTER-II

TITLE OF PAPER: A Course in Reading& Writing skills

- CO1: Use reading skills effectively
- CO2: Comprehend different texts
- CO3: Interpret different types of texts
- CO4: Analyze what is being read
- CO5: Build up a repository of active vocabulary
- CO6: Use good writing strategies
- CO7: Write well for any purpose
- CO8: Improve writing skills independently for future needs

SEMESTER-III

TITLE OF PAPER: A Course in Conversational Skills

- CO1: Speak fluently in English
- CO2: Participate confidently in any social interaction
- CO3: Face any professional discourse
- CO4: Demonstrate critical thinking
- CO5: Enhance conversational skills by observing the professional interviews

DEPARTMENT OF TELUGU

SEMESTER-I

TITLE OF PAPER: SAHITHI SOURAVHAM

1. తెలుగు సాహిత్య అభ్యసన ద్వారా నేర్చుకున్న నైపుణ్యాలను, సృజనాత్మక నైపుణ్యాలుగా మార్చుకోగలరు.
2. విద్యార్థులు భాషాతత్వాన్ని, భాష యొక్క ఆవశ్యకతను, భాష యొక్క ప్రాధాన్యాన్ని గుర్తిస్తారు. మనిషి వ్యక్తిగత జీవనానికి, సామాజికవ్యవస్థ పటిష్ఠతకు భాష ప్రధానమని తెలుసుకుంటారు. తెలుగుభాషలోని కీలకాంశాలైన 'పర్ణం-పదం-వాక్యాల ప్రాధాన్యాన్ని గుర్తిస్తూ, వాగ్రూప- లిఖితరూప వ్యక్తీకరణ ద్వారా భాషానైపుణ్యాలను మెరుగుపరచుకోగలరు.
3. భాషానైపుణ్యాలను అలవరచుకోవడంతోపాటు వినియోగించడం నేర్చుకుంటారు. రచనా, భాషానైపుణ్యాలను సృజనాత్మక రూపంలో వ్యక్తీకరించగలరు.

4. ప్రాచీన పద్యరచనతో పాటు ఆధునిక కవిత, కథ, వ్యాసం, మొదలైన సాహిత్యప్రక్రియల నిర్మాణాలకు సంబంధించిన సిద్ధాంతవిషయాలను నేర్పడంతో పాటు వారిలో రచనా నైపుణ్యాలను పెంపొందించుకోగలరు.

5. సృజన రంగం, ప్రసారమాధ్యమ రంగాల్లో ఉపాధి అవకాశాలను అందిస్తున్నట్లుగా.

6. అనువాద రంగంలో నైపుణ్యం సంపాదించగలరు.

SEMESTER-II

TITLE OF PAPER: SRUJANATMAKA RACHANA

1. ప్రాచీన తెలుగుసాహిత్యం యొక్క ప్రాచీనతను, విశిష్టతను గుర్తిస్తారు. తెలుగుసాహిత్యంలో ఆదికవి నన్నయ కాలంనాటి భాషాసంస్కృతులను, ఇతిహాసకాలం నాటి రాజనీతి విషయాలపట్ల పరిజ్ఞానాన్ని సంపాదించగలరు.

2. శివకవుల కాలంనాటి మతపరిస్థితులను, భాషావిశేషాలను గ్రహిస్తారు. తెలుగు నుడికారం, సామెతలు, లోకోక్తులు మొదలైన భాషాంశాల పట్ల పరిజ్ఞానాన్ని పొందగలరు.

3. తిక్కన భారతంనాటి మత, ధార్మిక పరిస్థితులను, తిక్కన కవితాశిల్పాన్ని, నాటకీయతను అవగాహన చేసుకోగలరు.

4. ఎఱ్ఱన సూక్తివైచిత్ర్యాన్ని, ఇతిహాస కవిత్యంలోని విభిన్న రీతులపట్ల అభిరుచిని పొందగలరు. శ్రీనాథుని కాలం నాటి కవితావిశేషాలను, మొల్ల కవితా విశిష్టతను గుర్తించగలరు.

5. తెలుగు పద్యం స్వరూప స్వభావాలను, సాహిత్యాభిరుచిని పెంపొందించుకుంటారు. ప్రాచీన కావ్యభాషలోని వ్యాకరణాంశాలను అధ్యయనం చేయడం ద్వారా భాషాసామర్థ్యాన్ని, రచనల మెళకువలను గ్రహించగలరు.

SEMESTER-III

TITLE OF PAPER: Srujana Bharathi

1. ఆంగ్లభాష ప్రభావం కారణంగా తెలుగులో వచ్చిన ఆధునిక సాహిత్యాన్ని, దాని విశిష్టతను గుర్తిస్తారు.

2. సమకాలీన ఆధునిక సాహిత్య ప్రక్రియలైన “వచన కవిత్యం, కథ, నవల, నాటకం, విమర్శ”లపై అవగాహన పొందుతారు.

3. భావకవిత, అభ్యుదయ కవితాలక్ష్యాలను గూర్చిన జ్ఞానాన్ని పొందుతారు. అస్తిత్వవాద ఉద్యమాలపుట్టుకను, ఆవశ్యకతను గుర్తిస్తారు.

4. కథాసాహిత్యం ద్వారా సామాజిక చైతన్యాన్ని పొందుతారు. సిద్ధాంతాల ద్వారా కాకుండా, వాస్తవ పరిస్థితులను తెలుసుకోవడం ద్వారా సిద్ధాంతాన్ని సమీక్షించగలరు.

5. ఆధునిక తెలుగు కల్పనాసాహిత్యం ద్వారా సామాజిక, సాంస్కృతిక, రాజకీయ చైతన్యాన్ని పొందుతారు.

DEPARTMENT OF ZOOLOGY

SEMESTER-I

TITLE OF PAPER: INTRODUCTION TO CLASSICAL BIOLOGY

CO 1: Learn the principles of classification and preservation of biodiversity

CO 2: Understand the plant anatomical, physiological and reproductive processes.

CO 3: Knowledge on animal classification, physiology, embryonic development and their economic importance.

CO 4: Outline the cell components, cell processes like cell division, heredity and molecular processes.

CO 5: Comprehend the chemical principles in shaping and driving the macromolecules and life processes.

SEMESTER-I

TITLE OF PAPER: INTRODUCTION TO APPLIED BIOLOGY

1. Learn the history, ultra structure, diversity and importance of microorganisms.

2. Understand the structure and functions of macromolecules.

3. Knowledge on biotechnology principles and its applications in food and medicine.

4. Outline the techniques, tools and their uses in diagnosis and therapy.

5. Demonstrate the bioinformatics and statistical tools in comprehending the complex biological data

SEMESTER-II

TITLE OF PAPER: ANIMAL DIVERSITY-1 BIOLOGY OF NON-CHORDATES

- CO 1: Describe general taxonomic rules on animal classification
- CO 2: Classify Protozoa to Coelenterata with taxonomic keys
- CO 3: Classify Phylum Platyhelminthes to Annelida phylum using examples from parasitic adaptation and vermin composting
- CO 4: Describe Phylum Arthropoda to Mollusca using examples and importance of insects and Molluscs
- CO5: Describe Echinodermata to Hemichordate with suitable examples and larval stages in relation to the phylogeny
- CO6: To understand the importance of preservation of museum specimens to identify animals based on special identifying characters
- CO7: To understand different organ systems through demo or virtual dissections To maintain a neat, labeled record of identified museum specimens

SEMESTER-II

TITLE OF PAPER: CELL AND MOLECULAR BIOLOGY

- ☐ To understand the basic unit of the living organisms and to differentiate the organisms by their cell structure.
- ☐ Describe fine structure and function of plasma membrane and different cell organelles of eukaryotic cell.
- ☐ To understand the history of origin of branch of genetics, gain knowledge on heredity, interaction of genes, various types of inheritance patterns existing in animals
- ☐ Acquiring in-depth knowledge on various aspects of genetics involved in sex determination, human karyo typing and mutations of chromosomes resulting in various disorder.
- ☐ Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins.
- ☐ Understand the principles and forces of evolution of life on earth, the process of evolution of new species and apply the same to develop new and advanced varieties of animals for the benefit of the society.

SEMESTER-III

TITLE OF PAPER: CELL BIOLOGY, GENETICS, MOLECULAR BIOLOGY & EVOLUTION

- ☐ To understand the basic unit of the living organisms and to differentiate the organisms by their cell structure.
- ☐ Describe fine structure and function of plasma membrane and different cell organelles of eukaryotic cell.
- ☐ To understand the history of origin of branch of genetics, gain knowledge on heredity, interaction of genes, various types of inheritance patterns existing in animals
- ☐ Acquiring in-depth knowledge on various aspects of genetics involved in sex determination, human karyo typing and mutations of chromosomes resulting in various disorder.
- ☐ Understand the central dogma of molecular biology and flow of genetic information from DNA to proteins.
- ☐ Understand the principles and forces of evolution of life on earth, the process of evolution of new species and apply the same to develop new and advanced varieties of animals for the benefit of the society.

SEMESTER-IV

TITLE OF PAPER: Physiology, Cellular Metabolism & Embrology

CO1: Understand the functions of important animal physiological systems including digestion, cardio- respiratory and renal systems.

CO2: Understand the muscular system and the neuro-endocrine regulation of animal growth, development and metabolism with a special knowledge of hormonal control of human reproduction.

CO3: Describe the structure, classification and chemistry of Biomolecules and enzymes responsible for sustenance of life in living organisms

CO4: Develop broad understanding the basic metabolic activities pertaining to the catabolism and anabolism of various Biomolecules

CO5: Describe the key events in early embryonic development starting from the formation of gametes upto gastrula ion and formation of primary germ layers.

Identification of an organ system with histological structure

CO6: Deducing human health based on the information of composition of blood cells
Demonstration of enzyme activity *invitro*

CO7: Identification of various Biomolecules of tissues by simple colorimetric methods and also quantitative methods

CO8: Identification of different stages of earl embryonic development in animals .

SEMESTER-IV

TITLE OF PAPER: Immunology & Animal Biotechnology

- ☐ To get knowledge of the organs of Immune system, types of immunity, cells and organs of immunity.
 - ☐ To describe immunological response as to how it is triggered (antigens) and regulated(antibodies)
 - ☐ Understand the applications of Biotechnology in the fields of industry and agriculture including animal cell/tissue culture, stem cell technology and genetic engineering.
 - ☐ Get familiar with the tools and techniques of animal biotechnology.
- a. Acquainting student with immunological techniques vis-à-vis theory taught in the classroom
 - b. Interconnect the theoretical and practical knowledge of immunity with the outer world for the development of a healthier life.
 - c. Demonstrate basic laboratory skills necessary for Biotechnology research
 - d. Promoting application of the lab techniques for taking up research in higher studies

SEMESTER-V

TITLE OF PAPER: SUSTAINABLE AQUACULTURE AND MANAGEMENT

1. Evaluate the present status of aquaculture at the Global level and National level Classify different types of ponds used in aquaculture.
2. Demonstrate induced breeding of carps.
3. Acquire critical knowledge on commercial importance of shrimps Identify fin and shell fish diseases

SEMESTER-V

TITLE OF PAPER: POST HARVEST TECHNOLOGY OF FISH AND FISHERIES

1. Identify the types of preservation methods employed in aquaculture
2. Choose the suitable Processing methods in aquaculture.
3. Maintain the standard quality control protocols laid down in aqua indust
4. Identify the best Seafood quality assurance system On successful completion of this practical course, student shall be able to.
5. Identify the quality of aqua processed products.
6. Determine the quality of fishery by products by observation Analyze the protocols of aqua processing methods

DEPARTMENT OF PHYSICS

SEMESTER-I

TITLE OF PAPER: MECHANICS, WAVES AND OSCILLATIONS

- Understand Newton's laws of motion and motion of variable mass system and its application to rocket motion and the concepts of impact parameter, scattering cross section.
- Apply the rotational kinematic relations, the principle and working of gyroscope and its applications and the precessional motion of a freely rotating symmetric top.
- Comprehend the general characteristics of central forces and the application of Kepler's laws to describe the motion of planets and satellite in circular orbit through the study of law of Gravitation.
- Understand postulates of Special theory of relativity and its consequences such as length contraction, time dilation, relativistic mass and mass-energy equivalence.
- Examine phenomena of simple harmonic motion and the distinction between undamped, damped and forced oscillations and the concepts of resonance and quality factor with reference to damped harmonic oscillator.
- Appreciate the formulation of the problem of coupled oscillations and solve them to obtain normal modes of oscillation and their frequencies in simple mechanical systems.
- Figure out the formation of harmonics and overtones in a stretched string and acquire the knowledge on Ultrasonic waves, their production and detection and their applications in different fields.

SEMESTER-II

TITLE OF PAPER: MECHANICS AND PROPERTIES OF MATTER

Students will be able to understand and apply the concepts of scalar and vector fields, calculate the gradient of a scalar field, determine the divergence and curl of a vector field.

2. Students will be able to apply the laws of motion, solve equations of motion for variable mass systems
3. Students will be able to define a rigid body and comprehend rotational kinematic relations, derive equations of motion for rotating bodies, analyze the precession of a top and gyroscope, understand the precession of the equinoxes
4. Students will be able to define central forces and provide examples, understand the characteristics and conservative nature of central forces, derive equations of motion under central forces.

5. Students will be able to differentiate between Galilean relativity and the concept of absolute frames, comprehend the postulates of the special theory of relativity, apply Lorentz transformations, understand and solve problems

SEMESTER-III

TITLE OF PAPER: HEAT & THERMODYNAMICS

- Understand the basic aspects of kinetic theory of gases, Maxwell-Boltzmann distribution law, equipartition of energies, mean free path of molecular collisions and the transport phenomenon in ideal gases
- Gain knowledge on the basic concepts of thermodynamics, the first and the second law of thermodynamics, the basic principles of refrigeration, the concept of entropy, the thermodynamic potentials and their physical interpretations.
- Understand the working of Carnot's ideal heat engine, Carnot cycle and its efficiency
- Develop critical understanding of concept of Thermodynamic potentials, the formulation of Maxwell's equations and its applications.
- Differentiate between principles and methods to produce low temperature and liquefy air and also understand the practical applications of substances at low temperatures.
- Examine the nature of black body radiations and the basic theories.

SEMESTER-IV

TITLE OF PAPER: ELECTRICITY, MAGNETISM & ELECTRONICS

- Understand the Gauss law and its application to obtain electric field in different cases and formulate the relationship between electric displacement vector, electric polarization, Susceptibility, Permittivity and Dielectric constant.
- Distinguish between the magnetic effect of electric current and electromagnetic induction and apply the related laws in appropriate circumstances.
- Understand Biot and Savart's law and Ampere's circuital law to describe and explain the generation of magnetic fields by electrical currents.
- Develop an understanding on the unification of electric and magnetic fields and Maxwell's equations governing electromagnetic waves.
- Phenomenon of resonance in LCR AC-circuits, sharpness of resonance, Q-factor, Power factor and the comparative study of series and parallel resonant circuits.
- Describe the operation of p-n junction diodes, zener diodes, light emitting diodes and transistors
- Understand the operation of basic logic gates and universal gates and their truth tables.

SEMESTER-IV

TITLE OF PAPER: MODERN PHYSICS

- Develop an understanding on the concepts of Atomic and Modern Physics, basic elementary quantum mechanics and nuclear physics.
- Develop critical understanding of concept of Matter waves and Uncertainty principle.
- Get familiarized with the principles of quantum mechanics and the formulation of Schrodinger wave equation and its applications.
- Examine the basic properties of nuclei, characteristics of Nuclear forces, salient features of Nuclear models and different nuclear radiation detectors.
- Classify Elementary particles based on their mass, charge, spin, half life and interaction.
- Get familiarized with the nano materials, their unique properties and applications.
- Increase the awareness and appreciation of superconductors and their practical applications.

SEMESTER-V

TITLE OF PAPER: APPLICATIONS OF ELECTRICITY & ELECTRONICS

- Identify various components present in Electricity & Electronics Laboratory.
- Acquire a critical knowledge of each component and its utility (like resistors, capacitors, inductors, power sources etc.).
- Demonstrate skills of constructing simple electronic circuits consisting of basic circuit elements.
- Understand the need & Functionality of various DC & AC Power sources.
- Comprehend the design, applications and practices of various electrical & Electronic devices and also their trouble shooting.

SEMESTER-V

TITLE OF PAPER: ELECTRONIC INSTRUMENTATION

- Identify various facilities required to set up a basic Instrumentation Laboratory.
- Acquire a critical knowledge of various Electrical Instruments used in the Laboratory.
- Demonstrate skills of using instruments like CRO, Function Generator, Multimeter etc. through hands on experience.
- Understand the Principle and operation of different display devices used in the display systems and different transducers
- Comprehend the applications of various biomedical instruments in daily life like B.P. meter, ECG, Pulse oxymeter etc. and know the handling procedures with safety and security.

SEMESTER-I

TITLE OF PAPER: FUNDAMENTALS OF SOCIAL SCIENCES

1. Learn about the nature and importance of social science.
2. Understand the Emergence of Culture and History
3. Know the psychological aspects of social behaviour
4. Comprehend the nature of Polity and Economy
5. Knowledge on application of computer technology

SEMESTER-I

TITLE OF PAPER: PERSPECTIVES ON INDIAN SOCIETY

1. Learn about the significance of human behavior and social dynamics.
2. Remembers the Indian Heritage and freedom struggle
3. Comprehend the philosophical foundations of Indian Constitution
4. Knowledge on Indian Economy

SEMESTER-II

TITLE OF PAPER: MICRO ECONOMINCS

CO1: Explain what is an economy, economics and differentiate between micro and macro economics

CO2: Analyses the demand of a product and estimate elasticity

CO3: Estimate production function and understand its application

CO4: Analyze functioning of different markets and their differentiations

CO5: Examine the determination of rent, wage, interest and profit

SEMESTER-II

TITLE OF PAPER: MATHEMATICAL METHODS FOR ECONOMICS

CO1: Explain the basics of sets, functions and their graphical representation

CO2: Learn the rules of differentiation and apply the same to economic problems

CO3: Learn and use maxima and minima to Optimization problems in economics

CO4: Apply rules of integration to estimate the size of consumers' and producers' surplus

CO5: Solve the economic problems through the application of the Matrix Theory

SEMESTER-III

TITLE OF PAPER: DEVELOPMENT ECONOMICS

CO1: Explain concepts of economic growth and development, measure them, identify their factors.

CO2: Analyse the developmental issues of poverty, unemployment, inequality and sustainable development and suggest measures

CO3: Comprehend the various theories of growth and development

CO4: Examine and suggest various developmental strategies suitable to developing countries

CO5: Explain the role of institutions, planning in economic development

SEMESTER-IV

TITLE OF PAPER: ECONOMIC DEVELOPMENT IN INDIA AND ANDHRA PRADESH

CO1: Explain the basic characteristics, structural changes, planning and human development in Indian economy

CO2: Analyse the changes in incomes, demography and the developmental issues such

as poverty, inequality, unemployment and migration and suggest measures to address them

CO3: Examine the components of agricultural and industrial sectors and their performance

CO4: Examine the issues in public finance in terms of taxes, revenues, deficits and finance commission

CO5: Analyse the issues in Andhra Pradesh economy related to agriculture, industry and welfare programs

SEMESTER-IV

TITLE OF PAPER: STATISTICAL METHODS FOR ECONOMICS

CO1: Understand the nature of statistics and able to collect data using questionnaire

CO2: Draws critical diagrams and graphs for presentation of data

CO3: Calculates and Analyses Averages and Dispersions using given data and information

CO4: Explains the uses of correlation and regression analysis, time series and index numbers in economic analysis.

CO5: Calculate index numbers

SEMESTER-V

TITLE OF PAPER: INSURANCE SERVICES

CO1: Explain the concept and principles of insurance service and functioning of insurance service agencies.

CO2: Understand different life insurance products.

CO3: Identify the need for general Insurance and different general insurance products.

CO4: Demonstrate practical skills to enable them to start insurance service agency or earn wage employment in it.

CO5: Evaluate the performance of local case studies by understanding customer

mindset and the role of various supporting institutions under the existing regulations

SEMESTER-V

TITLE OF PAPER: BANKING AND FINANCIAL SERVICES

CO1: Explain the concepts and principals of banking and financial services

CO2: Know different types of deposits and digital banking services

CO3: Understand functions of Banking Correspondents and Common Service Centres

CO4: Examine the functions and challenges of Non-Banking Financial Institutions

CO5: Identify and evaluate the role and performance of FSCs.

DEPARTMENT OF CHEMISTRY

SEMESTER-III

TITLE OF PAPER: ORGANIC CHEMISTRY AND SPECTROSCOPY

- Understand preparation, properties and reactions of haloalkanes, haloarenes and oxygen containing functional groups.
- Use the synthetic chemistry learnt in this course to do functional group transformations.
- To propose plausible mechanisms for any relevant reaction.

SEMESTER-IV

TITLE OF PAPER: INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY

- To learn about the laws of absorption of light energy by molecules and subsequent photochemical reactions.
- To understand the concept of quantum efficiency and mechanisms of photochemical reactions.

SEMESTER-IV

TITLE OF PAPER: INORGANIC AND PHYSICAL CHEMISTRY

- Explain the difference between solid, liquid and gases in terms of intermolecular interactions.
- Apply the concepts of gas equations, pH and electrolytes while studying other chemistry

courses.

- Understand the basic concepts of p-block elements

SEMESTER-V

TITLE OF PAPER: ANALYTICAL METHODS IN CHEMISTRY-1

1. Identify the importance of solvent extraction and ion exchange method.
2. Acquire knowledge on the basic principles of volumetric analysis and gravimetric analysis.
3. Demonstrate the usage of common laboratory apparatus used in quantitative analysis.
4. Understand the theories of different types of titrations.
5. Gain knowledge on different types of errors and their minimization methods.

SEMESTER-V

TITLE OF PAPER: ANALYTICAL METHODS IN CHEMISTRY-2

1. Identify the importance of chromatography in the separation and identification of compounds in a mixture
2. Acquire a critical knowledge on various chromatographic techniques.
3. Demonstrate skills related to analysis of water using different techniques.
4. Understand the principles of spectro chemistry in the determination of metal ions.
5. Comprehend the applications of atomic spectroscopy.



SRI DASARI NARAYANA RAO

GOVERNMENT DEGREE COLLEGE FOR WOMEN

(Affiliated to Adikavi Nannaya University, Rajamahendravaram)
An ISO Certified Organisation

Beside Municipal Office, Main Road, PALAKOL-534260, W.G.Dt., A.P.
e-mail : dnrjkc@gmail.com website : www.sridnrgdcw.ac.in

Cell : 9346251441
☎ 08814-222128



Dr. P. Sobha Rani
M.A., M.Phil., Ph.D., PGDTE
Principal

Programme Outcomes (POs)

DEPARTMENT OF MATHEMATICS

Programme outcomes

- PO1: Investigate and solve unfamiliar math problems
- PO2: Formulate and develop mathematical arguments in logical manner
- PO3: Contribute as trained work force to provide teaching learning to schools.
- PO4: Equip the students with skills to analyze problems ,formulate hypothesis, evaluate and validate results, and draw reasonable conclusions writhing the proofs.
- PO5: Acquire good knowledge and understanding in advanced areas of mathematics chosen by the student form the given courses.
- PO6: Think in a critical manner.
- PO7: Communicate mathematical ideas both orally and in writing.
- PO8: Apply mathematical problems and solutions in a variety of contexts related to science ,technology ,business and industry

DEPARTMENT OF HINDI

Programme outcomes

- Developing the Consciousness of important of Hindi language.
- Developing the Knowledge of Literature.
- Analysing the relation between literature and the society.

- Developing the knowledge of our national and Official language.
- Consciousness about issues of our society.
- Developing the cultural and environmental consciousness.
- Developing writing skills through essay writing.
- Art of analysing the ‘Sanskritik and Lalit Nibandh Kala’.

DEPARTMENT OF POLITICAL SCIENCE

Programme outcomes

1. Understanding of government institutions, electoral processes, and policies in a variety of countries around the world and the ability to compare the effectiveness or impact of various political arrangements across countries.
2. Knowledge of some of the philosophical underpinnings of modern politics and government and the legal principles by which political disputes are often settled.
3. Understand the changes in patterns of political behavior, ideas and structures.
4. Assess how global, national and regional developments affect polity and society.
5. Develop the ability to make logical inferences about social and political issues on the Basis of comparative and historical knowledge.
6. Knowledge of key theories and concepts, historical developments, organizations, and modern issues in international relations

DEPARTMENT OF HISTORY

Programme outcomes

- The outcomes the programme provides in common with Master’s• Programs in the Faculty of Arts ,Commerce and Law are as follows:
 - 1. The learner develops the ability to use critical, analytical, and reflective thinking and reasoning
 - 2. The learner acquires the ability to reflect on social and ethical responsibilities in his/her professional life.

- 3. The learner gains experience and confidence in the dissemination of project/research outputs
- 4. The learner acquires the competence to work responsibly and creatively as an individual or as a member or leader of a team and in multidisciplinary environments.
- 5. He /She learns to communicate effectively by oral, written, graphical and technological means and have competency in English.
- 6. On completion the learner can independently research and acquire information, and develop appreciation of the need for continuously learning and updating..
- 7. The learner becomes able to assess the impact of the economic, social, and political environment from a global, national and regional level.
- 8. The learner gets to know how to access written and visual, primary and secondary sources of information, interpret concepts and data from a variety of sources in developing disciplinary and interdisciplinary analyses.

DEPARTMENT OF CHEMISTRY

Programme outcomes

1. B.Sc. Chemistry curriculum is so designed to provide the students a comprehensive
2. Understanding about the fundamentals of chemistry covering all the principles and perspectives. The branches of Chemistry such as Organic Chemistry, Inorganic Chemistry, Physical Chemistry and Analytical Chemistry expose the diversified aspects of chemistry where the Students experience a broader outlook of the subject.
3. The syllabi of the B.Sc. Chemistry course are discretely classified to give stepwise

Advancement of the subject knowledge right through the three years of the term.
4. The practical exercises done in the laboratories impart the students the knowledge about

Various chemical reagents and reactions. Thereby, hone their skills of handling the corrosive, Poisonous, explosive and carcinogenic chemicals making themselves employable in any kind of Chemical industries. They are also trained about the adverse effects of the obnoxious chemicals And the first aid treatment.

DEPARTMENT OF COMMERCE

Programme outcomes

1. After the completion of B.Com course the students will be able to acquire conceptual knowledge and application skills in the domain of Commerce studies.
2. It enables the students to make start ups independently.
3. Knowledge of different subjects in B.Com course such as Accounting, Costing and Banking etc. Helps the students to stand in different organizations.
4. It provides well trained professionals to industries, Banking Sector, Insurance Companies and Finance Companies.
5. The students will be able to become competent in the competitive world and they can be assured of job placements and good careers at the end of the course

DEPARTMENT OF ZOOLOGY

Programme outcomes

1. The program has been introduced to prepare the students for a bright career which finds application and provides solution to some of the major contemporary problems on the globe i.e.,
2. providing food for growing population, designing advanced medical treatment options for increasing evolving diseases, to find solutions for wild life conservation and to deteriorating environment caused due to over exploitation / misuse of natural resources etc.,
3. In this program the study of Biology offers around the world where there are Biologists making a difference to our lives – ensuring our food is safe, treating and preventing disease, developing green technologies or tracking the role of Organisms in climate change.
4. In this program the knowledge about the subject chemistry comes in to play when structures of macromolecules and their interactive relations to the environment are to be understood.
5. Finally the subject Biology amalgamates with various disciplines of sciences and offers ethically acceptable knowledge to bring about sustainable solutions for a variety of problems related to Ecology, Evolution, Agriculture, Environment and Quality of human life. These problems are solved with responsibility using appropriate tools while keeping in mind safety factor of Environment and Society.

DEPARTMENT OF ECONOMICS

Programme outcomes

1. The main objective of the B.A. Economics Degree is to train the students at graduate level for meeting the demands for the skilled man power in both organised and un-organised sectors and also provide an alternate channel for those who aimlessly pursue higher education and to prepare themselves for self reliance.
2. In this program the study of Economics opting a degree for many students to maintain Economy in their family. They planned the source of income and its proper utilization. Economics students are known to submerge into a Syllabus that contains practical approach to the subject. They will get to assess the Indian and Andhra Pradesh Economy and alsoworld Economy.
3. The Economics students have rich toolbox of simple models they can use to analyze various facets of the Economy and know to apply the right models.
4. The students are also understood the importance of a model based approach to Economics. Our goal is to produce students who have the capacity to analyze current Economic issues in the context of an Economic frame of Reference.
5. It is also important for students living in countries with highly open Economics to understand the important links connecting foreign Economics the anatomy of inflation and unemployment has been studied.
6. An overview course should contain what we feel is the core. The students to know national Income accounting, aggregate supply and demand, issues of inflation and unemployment, goods market, asset market and basics of monetary and fiscal policy. Supply details for consumption, investment, money markets and policy making. The students are also known the federal reserve and financial markets

DEPARTMENT OF HINDI

Programme outcomes

- Developing the Consciousness of important of Hindi language.
- Developing the Knowledge of Literature.
- Analysing the relation between literature and the society.
- Developing the knowledge of our national and Official language.
- Consciousness about issues of our society.

- Developing the cultural and environmental consciousness.
- Developing writing skills through essay writing.
- Art of analysing the ‘Sanskritik and Lalit Nibandh Kala’

DEPARTMENT OF ENGLISH

Programme outcomes:

1. On successful completion of the programme, the students will be able to communicate effectively in the second language i.e. English.
2. It will improve their LSRW English
3. Their intellectual, personal and professional abilities will be developed through effective communicative skills; ensuring high standard of behavioural attitude through literary subjects and shaping the students as socially responsible citizens.

DEPARTMENT OF BOTANY

Programme outcomes:

1. Critical Thinking:

Apply the knowledge of biology to make scientific queries and enhance the comprehension potential.

2. Effective Communication: Successful transfer of scientific knowledge both orally and in writing.
3. Social Interaction: Function as an individual, as a member or a leader to perform a task in class room situation or during field study.
4. Effective Citizenship: Responsible for learning, develop honesty in work and respect for self and others.
5. Ethics: Convey and practice social, environmental and biological ethics.
6. Environment and Sustainability: Insist the significance of conserving a clean environment for perpetuation and sustainable development.
7. Self-directed and Life-long Learning: study incessantly by self to cope with growing competition for higher studies and employment.

DEPARTMENT OF PHYSICS

Programme outcomes:

PO 1: This course forms the basis of science for coherent understanding of the academic field to pursue multi and inter-disciplinary science careers in future. (MPC)

PO 2: Able to plan and execute experiments or investigations, analyse and interpret data information collected using appropriate methods (Practical Paper)

PO 3: It helps to develop scientific temper and thus can prove to be more beneficial for the society as the scientific developments can make a nation or society to grow at a rapid pace through research. (Renewable Energy Project)

PO 4: Students can Apply discrete probability distributions. (Survey)

PO 5: Discuss debate and communicate in a clear and logical way, with graduates other fields. (Seminar)

PO 6: Demonstrate skills and competencies to conduct scientific experiments & data analysis.

PO 7: Bachelor of Science offers theoretical as well as practical knowledge about different subject areas

.

PO 8: Knowledge acquired through field trips/industrial tours is useful for their job work.

DEPARTMENT OF COMPUTER SCIENCE

Programme outcomes

PO1. Critical Thinking: Apply critical thinking and enhance learning in the three major subjects of their choice with scientific reasoning and analytical skills.

PO2. Problem solving: Think logically and organize task into a structured form for problem solving by applying the knowledge of basic science.

PO3. Effective communication: To develop the ability of effective communication of scientific information in written and oral format.

PO4. Individual and team work: Function effectively as an individual and as a member or leader in diverse teams and in multi-disciplinary settings.

PO5. Ethics: Apply ethical, moral and social values in personal and professional life leading to holistic development of the individual.

PO6. Environment and sustainability: Develop interdisciplinary approach to provide better solution and innovative ideas for sustainable development and conservation of natural resources.

PO7. Self-directed and lifelong learning: Recognize the need for and have the ability to engage in independent, lifelong learning and adapt to technological changes to be globally competent