

# **DON BOSCO COLLEGE**

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### **COURSE OUTCOME**

### **DEPARTMENT: BUSSINESS ADMINISTRATION**

### **Principles of Management:**

- **CO1** Examine and explain the management evolution and how it will affect future managers.
- **CO2** Estimate the conceptual framework of planning and decision-making in day to day life.
- **CO3** On the successful completion of the course, student will be able to:
- **CO4** Explain the various managerial functions to achieve the goals and objectives of the organization.
- CO5 Analyze the theories of motivation, leadership and communication in a variety of circumstances and management practices in organizations.
- **CO6** Identify and explain the importance of the management process and identify some of the key skills required for the contemporary management practice.

#### **BUSINESS ENVIRONMENT**

- **CO1** Develop an understanding on the gamut of business activities
- CO2 Explain the intricacies in starting a business and knowing the suited business form
- CO3 Design a business model in order to analyze its sustainability
- CO4 Comprehend the environmental factors that are conducive /detrimental to the respective businesses
- CO5 Have a simple and basic comprehension of the international scenario with regard to borderless business world

#### ORGANIZATIONAL BEHAVIOUR

- **CO1** Analyze the individual and group behavior; and understand the implications of organizational behavior on the process of management
- CO2 Identify various theories of motivation from the past and to evaluate motivational strategies used in a variety of organizational settings
- **CO3** Enhance productivity of the organization by ensuring required job satisfaction and employee attitude.

- CO4 Understand the supervisory effects on performance and to train supervisors by understanding different supervision styles.
- **CO5** Evaluate the appropriateness of various leadership styles and counseling methods

#### MANAGERIAL ECONOMICS

- **CO1** Apply the objectives of business firms, demand analysis and elasticity of demand in daily life and in their career.
- **CO2** Identify the effective applications of factors of production and BEP Analysis
- CO3 Understand the determination of the Price, Market structure and competition.
- **CO4** Analyze various theories of wages, Interest and profit in Business field.
- **CO5** Evaluate the performance of the Government sector in India.

#### FINANCIAL ACCOUNTING

- **CO1** Recall the accounting concepts and understand the rules of double entry system, journalizing and posting to ledger in the business transactions.
- CO2 Interpret the trial balance; identify the errors and to reconcile the bank statement by cash book.
- CO3 Summaries the manufacturing, trading, profit & loss account and balance sheet with the support of financial and accounting transactions.
- CO4 Illustrate the accounts for non-trading institutions through income & expenditure, receipts & payments along with the methods of depreciation.
- CO5 Classify the sections of accounting statements from incomplete data

#### PRODUCTION AND MATERIALS MANAGEMENT

- **CO1** Enumerate the production processes and production planning and control
- CO2 Describe the importance of materials management function in an organization, and how it can help in integrating various plans and reduce the material related costs
- CO3 Describe the material management, domestic and import purchase procedures and vendor rating and development.
- CO4 Outline management issues in receiving, stores, traffic and transportation, warehousing and physical distribution
- CO5 Discuss about the quality control, Total Quality Management, Bench marking and ISO

#### MARKETING MANAGEMENT

- **CO1** Recognize the significance of marketing and its role in economic development
- CO2 Recognize how market strategy works, market segmentation and product mix have impact on buying behaviour

- CO3 To apply marketing concepts, pricing for the development of marketing. Function.
- **CO4** Analyze and perform the functions of marketing in organisation.
- CO5 Demonstrate the critical thinking skills and analyze e-marketing in the Indian context.

#### **BUSINESS LAW**

- **CO1** Develop an understanding on business law in the global context.
- **CO2** Knowing the relevant legal terms in business
- CO3 Construct the relationship of ethics and law in business
- **CO4** Applying basic principles of law to business and business transactions
- CO5 Implementing current law, rules, and regulations related to settling business disputes

#### **HUMAN RESOURCE MANAGEMENT**

- **CO1** Analyze the process of Job analysis and its importance as a foundation of human resource management practice.
- CO2 Understand the Human resource planning
- CO3 Apply the policies and practice of the primary areas of human resource management, including staffing, training and compensation.
- CO4 Understand the importance of career planning and succession planning
- CO5 Apply the policies and practice of the primary areas of human resource management, including staffing, training and compensation

### FINANCIAL ACCOUNTING

- **CO1** Use business finance terms and concepts while communicating.
- CO2 Explain the financial concepts used in making financial management decision.
- **CO3** Use effective methods to promote respect and relationship for financial deals.
- **CO4** Utilize information to maximize and manage finance.
- **CO5** Demonstrate a basic understanding of Budgeting.

### MANAGEMENT INFORMATION SYSTEM

- **CO1** Apply modern tools, techniques and technology in a functional and productive manner in Professional Activities.
- CO2 Analyze, Design, Construct, Implement and Maintain, Usable, Reliable and
- CO3 Cost-Effective Information Systems (IS) that support Operational, Managerial and Strategic activities of Organizations.
- CO4 Study and evaluate existing manual and automated business processes and
- **CO5** Identify opportunities for re-engineering and/or automation.

- CO6 Coordinate confidently and competently with the user community in IS
- **CO7** Requirements analysis/design activities, provide guidance and technical support to end user computing activities.
- CO8 Analyze the impact of computing on individuals, organizations and society, Including ethical, religious, legal, security and global policy issues.

#### COST AND MANAGEMENT ACCOUNTING

- CO1 Understanding the concept of cost accounting, Recognize the merits and demerits of cost and management accounting along with the elements of cost concepts.
- CO2 Describe the cost sheets for the purpose of stores control through economic order quantity, pricing and material issues.
- CO3 Measure the financial statements through comparative and common size by using various financial ratios.
- CO4 Simplify the fund flow and cash flow statements by calculating funds and cash from operations.
- **CO5** Produce various budgets and apply standard costing for material variances; marginal costing for cost volume profit.

#### RESEARCH METHODOLOGY FOR MANAGEMENT

- CO1 Understand fundamental concepts of research, types and research process.
- **CO2** Summarize the sampling design and scaling techniques.
- CO3 Construct a method for data collection and able to edit, code, classify and tabulate the collected data.
- **CO4** Analyze the collected data to prove or disprove the hypothesis.
- **CO5** Interpret the data and prepare a research report.

# **BUSINESS COMMUNICATION**

- **CO1** Learn and apply effective written communication techniques.
- **CO2** Review and refine communications skills.
- **CO3** Developing and delivering effective presentations.
- **CO4** Determine and use proper psychological approach in writing situations.
- **CO5** Skills that maximize team effectiveness in the world of work.

### **SERVICES MARKETING**

- **CO1** Examine the nature of services, and distinguish between products and services
- CO2 Identify the major elements needed to improve the marketing of services
- CO3 Develop an understanding of the roles of relationship marketing and customer Service in adding value to the customer's perception of a service

- **CO4** Appraise the nature and development of a services marketing strategy
- CO5 Recognize how services marketing principles can be used as a conceptual

### FINANCIAL SERVICES

- **CO1** Identify and distinguish big data analytics applications
- **CO2** Describe big data analytics tools
- **CO3** Explain big data analytics techniques
- **CO4** Present cases involving big data analytics in solving practical problems
- CO5 Conduct big data analytics using system tools and Suggest appropriate solutions to big data analytics problems

#### **CAMPUS TO CORPORATE**

- **CO1** Remember the industry expectations
- CO2 Understand the importance of etiquette in organizational culture
- **CO3** Able to develop a confidence level and facing interviews
- **CO4** Demonstrate a good command in responding to any queries
- **CO5** Achieve the desired result thro proper evaluation of competencies and be creative

#### FINANCIAL ACCOUNTING

- **CO1** Understands the techniques of consignment, Branch and Accounting methods.
- CO2 Acquaints learners with knowledge regarding accounting procedures related fire Ins. claims and the process of claims.

#### **BUSINESS MANAGEMENT**

- CO1 Understand basic concepts and importance of management, including the principles, functions of management and contributions of management experts
- CO2 Gain knowledge on the conventional theoretical aspects and emerging trends and developments in management
- CO3 Familiarize themselves on internal and external environment and its impact on the growth and survival of organizations
- **CO4** Critically analyze role of planning, organizational structures, directing and controlling techniques in the achievement of organizational goals.

#### **BUSINESS LAW**

- **CO1** Provides a brief idea about the frame work of Indianbusiness law.
- **CO2** Familiarizes the students with case law studies related to business law.

#### CORPORATE ACCOUNTING - I

- CO1 Understand the concept of input, output and software of computer in detail
- CO2 Get the knowledge of tally

#### BUSINESS STATISTICAL METHODS.

- CO1 Introduces mathematics & statistics to undergraduate students of commerce so that they can use them in the field of commerce & industries to solve the real life problems.
- **CO2** Facilitates decision making with the help ofdecision making techniques

### **E-COMMERCE**

CO1 The students will be able to learn and understand the technology of E-Commerce and the emerging changes in marketing and advertisement in the E-Commerce and M-commerce era.

#### **CORPORATE ACCOUNTING - II**

- **CO1** Know about the companies all accounts.
- **CO2** Get the knowledge of banking / insurance company.
- **CO3** Get the knowledge of Holding Company.
- **CO4** Get the knowledge of Amalgamation, Absorption and Reconstruction.

#### PRINCIPLES OF MARKETING

CO1 The students will be able to understand the concepts of marketing and functional areas of business with recent trends in marketing.

### **BUSINESS STATISTICAL DECISION TECHNIQUES**

- **CO1** Prepares students to develop skills to solvefinancial problems.
- **CO2** Creates awareness of applications of Derivatives toconcepts in Economics.

#### **COMPUTER PRACTICAL – II– TALLY**

- CO1 After successfully qualifying practical examination, students will be able to well-known accounting software i.e., Tally ERP.9
- CO2 Students do possess required skill and can be employed as Tally data entry operator.

### **COST ACCOUNTING**

- **CO1** Explain Cost accounting systems
- **CO2** Explain main manufacturing cost elements
- **CO3** Makes Material Issue.
- **CO4** Makes Cost allocation.
- **CO5** Calculates production cost accounting to the process costing.

### PRINCIPLES AND PRACTICE OF AUDITING

- **CO1** Understand the basic principles and their application of auditing.
- CO2 Gain Practical knowledge on Internal Check as regards cash payments of various items.
- **CO3** Draft an Audit Report on behalf of a Public Limited Company

- **CO4** Draft an Audit Program
- **CO5** Record the verification procedure with respect to any one Fixed Asset.

### INCOME TAX LAW AND PRACTICE - I

- **CO1** On the successful completion of the course, students will be able to:
- CO2 Examine the basic concepts of schedules of rates of tax, tax liability, and penalties and prosecution.
- **CO3** Explain the total taxable income of an Assessee. Apply and practice the computation of total income.

### SOFTWARE DEVELOPMENT WITH VISUAL PROGRAMMING

- **CO1** Understand the basic principles and their application of Information Technology.
- **CO2** Gain Practical knowledge on Internet Access.
- **CO3** Familiarize themselves on e-commerce and mobile commerce.

#### MANAGEMENT ACCOUNTING

CO1 The Students will be able to understand the concept and use of Accounting and costing data for planning, control and decision making.

#### ENTREPRENEURIAL DEVELOPMENT

- **CO1** Understand the business opportunities and the methods of preparing project report to start new business.
- CO2 Familiarise students with Central and State Institutional Financial support to entrepreneurs.
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#### **COMMERCE PRACTICALS**

- **CO1** Enable the student to familiar with the forms and reports for business transactions through printed forms and electronic means. □
- CO2 Student becomes a practioner in modern offices like banks, insurance, manufacturing companies and professional practice of Income Tax and Goods & Service Tax.
- CO3 Understand the conceptual and practical knowledge about electronic filing of returns

#### SKILL BASED ELECTIVE PAPER – I

#### FINANCIAL MARKET

**CO1** The students will be able to acquire knowledge about mechanics and analysis of financial market.

### **MARKETING**

- CO1 Intercepts and familiarizes students with different and basic concepts of marketing mix, MIS and Marketing Research.
- CO2 Updates students about marketing challenges facedby marketing managers in 21st century.
- CO3 Makes students aware about competitive strategies for market leader, and various aspects of market.

### PROJECT METHODOLOGY

- CO1 After the successful completion of the course the students come to know to carry out the project work.
- CO2 Identify project goals, constraints, deliverables, performance criteria, control needs, and resource requirement in consultation with stake holders.

### TALLY - PRACTICAL II

- CO1 After successfully qualifying practical examination, students will be able to well- known accounting software i.e., Tally ERP.9
- **CO2** Students do possess required skill and can be employed as Tally data entry operator.

### **B.COM CA**

#### PRINCIPLES OF ACCOUNTANCY

- **CO1** Inculcates knowledge of various accounting concepts and policies.
- CO2 Introduces the students to working knowledge of Accounting Standards issued by the ICAI.

#### **BUSINESS COMMUNICATION**

- **CO1** Understand the essentials of effective business letters.
- **CO2** Draft an application for employment.
- **CO3** Gain Practical knowledge to face an Interview.
- **CO4** Developing writing skills towards secretarial correspondence.
- **CO5** Exploring a practical knowledge for bank & Insurance Correspondence.

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#### **DEPARTMENT: COMPUTER SCIENCE**

#### BACHELOR OF COMPUTER SCIENCE

- **CO1** Understand fundamental concepts of database.
- CO2 Understand user requirements and frame it in data model.
- **CO3** Ability in creations, manipulation and querying of data in databases.
- **CO4** Ability to solve real world problems using appropriate set, function, and relational models.
- **CO5** Ability to design E-R Model for given requirements and convert the same into database tables.

#### BACHELOR OF COMPUTER APPLICATIONS

- **CO1** Learn how to build by the algorithms for problems.
- **CO2** Learn how to create pictorial representations of the program.
- **CO3** Learn how to apply logic for problems.
- **CO4** Enhance their programming skills.
- CO5 Learn about Loops, Conditional statements, Array, Pointers, File Handling, Structure, Unions etc.
- **CO6** Understand the process of Software development.
- **CO7** Understand and plane the Software development.
- **CO8** Understand and implement the Coding.
- **CO9** Debug a software.
- CO10 Test a software.

#### MASTER OF SCIENCE

- **CO1** To design efficient algorithms using various algorithm designing strategies
- CO2 To analyze the problem and develop the algorithms related to these problems
- CO3 To classify the problem and apply the appropriate design strategy to develop algorithm
- **CO4** To design algorithm in context of space and time complexity and apply asymptotic notation
- CO5 To design and understand the following OS components: System calls, Schedulers, Memory management systems, Virtual Memory and Paging systems.
- **CO6** To evaluate, and compare OS components through instrumentation for performance analysis.
- CO7 To analyze the various device and resource management techniques for timesharing and distributed systems
- **CO8** To develop and analyze simple concurrent programs using transactional memory and message passing, and to understand the trade-offs and implementation decisions

# MASTER OF PHILOSOPHY

| CO1 | Identify the research problem by analyzing its characteristics   |
|-----|--|
| CO2 | Analyze the sampling and scaling techniques                      |
| CO3 | Demonstrate the data collection methods to analyze the same      |
| CO4 | Explore the tools of research for enhanced experimental analysis |
| CO5 | Check for the expertise over the domain which is opted           |

### **DEPARTMENT: DIGITAL PRINT MEDIA**

- **CO1** Provides job as a professional Graphics Designer.
- **CO2** Helps students to be self-employed in printing and media field.
- CO3 Create idea to the students regarding their higher studies in the field of Journalism and Mass communication.
- **CO4** Basic drawing and visual concepts are made known to the students.
- **CO5** Focus on obtaining management related jobs to our students.
- **CO6** Both software and hardware skills are made well-known to our students.
- **CO7** Different types of printing techniques from traditional to modern methods are thought to the students.
- **CO8** Knowledge regarding Quality maintenance, press management, machinery maintenance are made known to the students.
- **CO9** Post-Press techniques such as binding, packaging finishing operations are thought to the students.

### **DEPARTMENT: ENGLISH**

- **CO1** Students learn a little grammar and the usage of it.
- CO2 They become aware of the socio-political conditions of England and different political and social movement during various periods of time and also the evolution of English Literature.
- CO3 They learn how to read poetry and analyzing it critically.
- CO4 They also become aware of their maintenance of health and the benefits of Yoga and also learn moral values.
- CO5 They also know little about few Indian Authors, South Asian writers, American Writers and their works and its features.
- CO6 They are able to understand drama, its components, development, recent and famous dramatists and their works.
- **CO7** Students are also able to identify different figures of speech, literary devices and various forms of literature.
- **CO8** They also acquire skills on writing, preparing themselves to face interviews, communication skills and overall development of their personality.
- **CO9** They become aware of the English Phonetic sounds, the stricture types, Production of sounds.
- CO10 They also learn what is language, its characteristics, some basic concepts in linguistics.
- **CO11** They are also prepared for the Competitive exams by understanding and usage of English grammar and also facing objective types of questions.

### M.A. ENGLISH

- **CO1** Students learn about different ages and the authors of that Age like Chaucer and Elizabethan Age, Restoration Age, Romantic and Victorian Age.
- CO2 They also get aquatinted with different literatures like American literature, a few recent authors that is twentieth century writers, Comparative study of literatures and also the new literatures emerging worldwide from any part of the world.
- CO3 They are also acquiring knowledge about how to prepare Research Thesis, the fundamentals of research and so on
- **CO4** Students of Post Graduate are also prepared for facing NET and SET.
- CO5 They also learn about English language and different teaching methodologies of English.
- **CO6** They develop critical thinking, analyzing, appreciating, applying various literary theories to literary works.

# **DEPARTMENT: B.SC. (MATHEMATICS)**

#### CLASSICAL ALGEBRA

- **CO1** Learn to solve system of linear equation.
- **CO2** Learn to solve Diophantine equation.
- **CO3** Learn to find roots of polynomial over rational.
- **CO4** Learn to find graphs, roots and primes integer using maxima software.
- **CO5** Introduction to complex analysis.

### **DIFFERENTIAL CALCULUS**

- **CO1** Gain Knowledge of fundamental concepts of real numbers.
- CO2 Verify the value of the limit of a function at a point using the definition of the limit
- **CO3** Introduction to sequence and series.
- CO4 Learn to check function is continuous understand the consequences of the intermediate value theorem for continuous functions.

#### ALLIED STATISTICS I

- **CO1** Analyze statistical data using frequency distribution
- **CO2** Use of basic probability rules.
- **CO3** Translate real world problems into probability models.

#### INTEGRAL CALCULUS

- **CO1** Student will be to understand differentiation and fundamental theorem in differentiation and various rules.
- **CO2** Geometrical representation and problem solving on MVT and Rolls theorem.
- **CO3** Finding extreme values of function.
- **CO4** introduction to Ordinary Differential Equation.

### **VECTOR ANALYSIS**

- **CO1** Gain Knowledge of fundamental concepts of real numbers in n dimensions.
- CO2 verify the value of the limit of a function at a point using the definition of the limit in
- R\*R
- **CO3** Find the extreme value in 2 dimensions.
- **CO4** Study multiple integration.

### ALLIED STATISTICS II

- **CO1** Able to derive probability distribution function.
- **CO2** Able to calculate probabilities and marginal distributions.
- **CO3** Analyze statistical data using MS-Excel.
- **CO4** Students will learn the basic principles of statics covering resultants, equilibrium, trusses, frames, friction, centroids and moments of inertia with vector notation and calculus.
- **CO5** Defining vector quantities, distinguishing them from scalar quantities, and finding vector components.
- CO6 Applying laws of parallelogram and triangle for adding two vectors/forces.

- Using vector cross products for finding the moment of a force about a point and Finding the moment of a couple.
- **CO7** Using vector dot products for finding angles between two vectors.

### DIFFERENTIAL CALCULUS & LAPLACE TRANSFORMS

- CO1 Student will be able to solve first order differential equations utilizing the standard techniques for separable, exact, linear, homogeneous, or Bernoulli cases.
- CO2 Student will be able to find the complete solution of a non-homogeneous differential equation as a linear combination of the complementary function and a particular solution.
- CO3 Student will have a working knowledge of basic application problems described by second order linear differential equations with constant coefficients.

#### OFFICE AUTOMATION PRACTICAL

- **CO1** Learn Maxima software.
- CO2 Problem solve on analytic geometry and calculus by using maxima software.
- **CO3** Problem solving on geometry and calculus.

#### **DYNAMICS**

- **CO1** Distinguish kinematic and kinetic motion.
- CO2 Identify the basic relations between distance, time, velocity, and acceleration.
- **CO3** Apply vector mechanics as a tool for solving kinematic problems.
- **CO4** Create a schematic drawing of a real-world mechanism.

# TRIGNOMETRY & ANALYTICAL GEOMETRY OF 3D

- **CO1** Introduction to analytical geometry of 2 dimensional.
- **CO2** Study of lines in 2 and 3 dimension.
- CO3 Finding equation in various form of line, circle, ellipse, sphere, cones etc.
- **CO4** Give the knowledge of geometry using maxima software.

### **QUANTITATIVE APTITUDE**

- CO1 The main aim of introducing "Quantitative Aptitude" for mathematics students is to develop skill
- **CO2** To meet the competitive examinations for better job opportunity.
- **CO3** Effort has been made to accommodate fundamental, mathematical aspects to instill confidence among students.
- CO4 Enrich their knowledge and to develop their logical reasoning thinking ability.

#### **MODERN ALGEBRA-I**

- CO1 Understand the importance of algebraic properties with regard to working within various number systems.
- **CO2** Extend group structure to finite permutation groups (Caley Hamilton Theorem). Generate groups given specific conditions.
- **CO3** Symmetry using group theory.
- CO4 Understand the three major concrete models of Boolean algebra: the algebra of sets, the algebra of electrical circuits, and the algebra of logic.

#### **REAL ANALYSIS-I**

- **CO1** Describe fundamental properties of the real numbers that lead to the formal development of real analysis.
- CO2 Comprehend rigorous arguments developing the theory underpinning real analysis.
- CO3 Demonstrate an understanding of limits and how they are used in sequences, series, Construct rigorous mathematical proofs of basic results in real analysis

### **COMPLEX ANALYSIS-I**

- CO1 Compute sums, products, quotients, conjugate, modulus, and argument of complex numbers · Define and analyze limits and continuity for complex functions as well as consequences of continuity ·
- CO2 Conceive the concepts of analytic functions and will be familiar with the elementary complex functions and their properties · Determine whether a given function is differentiable, and if so find its derivative. Applies the theory into application of the power series expansion of analytic functions ·
- CO3 Understand the basic methods of complex integration and its application in contour integration. Analyze sequences and series of analytic functions and types of convergence
- **CO3** Evaluate complex contour integrals directly and by the fundamental theorem, apply the Cauchy integral theorem in its various versions, and the Cauchy integral formula.

### **OPERATIONS RESEARCH**

- **CO1** Develop linear programming (LP) models for shortest path, maximum flow, minimal spanning tree, critical path, minimum cost flow, and transshipment problems.
- CO2 Understand the mathematical tools that are needed to solve optimization problems.
- **CO3** Formulate pure, mixed, and binary integer programming models.
- **CO4** Formulate the nonlinear programming models.
- CO5 Use some solution methods for solving the nonlinear optimization problems.

#### **DISCRETE MATHEMATICS**

- **CO1** To understand logical concepts and to show logical equivalences by using truth tables and rules in logics.
- **CO2** Learn concept related to counting.
- **CO3** Introduction to advanced counting.

#### **C PROGRAMMING**

**CO1** Demonstrate an understanding of algorithms in the problem-solving process.

- **CO2** Identify the necessary properties of good problem-solving techniques.
- **CO3** Create and analyze algorithms for solving simple problems.
- **CO4** Use incremental program development to create, test, and debug algorithms for solving simple problems.

#### **MODERN ALGEBRA II**

- **CO1** Introduction to vector space and subspace.
- CO2 Use computational techniques and algebraic skills essential for the study of systems of Linear equations, matrix algebra, vector spaces, eigenvalues and eigenvectors
- CO3 Orthogonality and Diagonalization. (Computational and Algebraic Skills).

#### **REAL ANALYSIS II**

- CO1 Understand Integrality and theorems on integrality. Recognize the difference between point wise and uniform convergence of a sequence of functions.
- CO2 Illustrate the effect of uniform convergence on the limit function with respect to continuity, differentiability, and integrability.
- **CO3** Study improper integration using Riemann integration.

#### **COMPLEX ANALYSIS II**

- **CO1** To study the techniques of complex variables and functions together with their derivatives, Contour integration and transformations.
- CO2 To study complex power series, classification of singularities, calculus of residues and its applications in the evaluation of integrals, and other concepts and properties.

### **GRAPH THEORY**

- **CO1** To understand and apply the fundamental concepts in graph theory
- CO2 To apply graph theory based tools in solving practical problems
- CO3 Use definitions in graph theory to identify and construct examples and to distinguish examples from non-example.
- **CO3** Apply theories and concepts to test and validate intuition and independent mathematical thinking in problem solving.

#### **NUMERICAL ANALYSIS**

- **CO1** To apply appropriate numerical methods to solve the problem with most accuracy.
- CO2 Using appropriate numerical methods determine approximate solution of ODE and system of linear equation.
- CO3 Compare different methods in numerical analysis w.r.t accuracy and efficiency of solution.

### LATEX THEORY

- **CO1** Explain and use TeX and Latex.
- **CO2** Describes the development process of TeX and LaTeX.
- **CO3** Explains the difference between TeX and LaTeX.
- **CO4** Tells the advantages of LaTeX over other more traditional softwares.
- **CO5** install and use MikTeX.

### DISCRETE MATHEMATICS

- **CO1** To understand logical concepts and to show logical equivalences by using truth tables and rules in logics.
- CO2 Learn concept related to counting.
- **CO3** Introduction to advanced counting.
- **CO4** Problem solving on multivariable calculus and discrete mathematics.
- **CO5** Introduction to application of mathematics in real life.
- **CO6** Learn to build logical concept.

### LINEAR ALGEBRA

- **CO1** Introduction to vector space and subspace.
- CO2 Use computational techniques and algebraic skills essential for the study of systems
- CO3 Linear equations, matrix algebra, vector spaces, eigenvalues and eigenvectors
- **CO4** Orthogonality and Diagonalization. (Computational and Algebraic Skills).

### NUMERICAL ANALYSIS

- **CO1** To apply appropriate numerical methods to solve the problem with most accuracy.
- CO2 Using appropriate numerical methods determine approximate solution of ODE and system of linear equation.
- CO3 Compare different methods in numerical analysis w.r.t accuracy and efficiency of solution.
- **CO4** To demonstrate used of interpolation method in numerical analysis.
- CO5 Use computational techniques and algebraic skills essential for the study of systems
- **CO6** Linear equations, matrix algebra, vector spaces, eigenvalues and eigenvectors, Orthogonality and Diagonalization.

### **METRIC SPACES**

- **CO1** Able to understand the Euclidean distance function on R n and appreciate its properties, and state and use the Triangle and
- **CO2** Reverse Triangle Inequalities for the Euclidean distance function on R n
- **CO3** Explain the definition of continuity for functions from R n to R m and determine whether a given function from R n to R m is continuous
- **CO4** Explain the geometric meaning of each of the metric space
- CO5 Distinguish between open and closed balls in a metric space
- **CO6** Define convergence for sequences in a metric space and
- **CO7** Determine whether a given sequence in a metric space converges
- **CO8** Appreciate how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems.
- **CO9** Problem solving on metric space and connected and contactless.
- **CO10** Describe fundamental properties of the real numbers that lead to the formal development of real analysis.
- **CO11** Comprehend rigorous arguments developing the theory underpinning real analysis.
- CO12 Demonstrate an understanding of limits and how they are used in sequences, series, Construct rigorous mathematical proofs of basic results in real analysis

### **GROUP THEORY**

**CO1** Understand the importance of algebraic properties with regard to working within various number systems.

- **CO2** Extend group structure to finite permutation groups (Caley Hamilton Theorem).
- **CO3** Generate groups given specific conditions.
- **CO4** Symmetry using group theory.
- CO5 Understand the three major concrete models of Boolean algebra: the algebra of sets, the algebra of electrical circuits, and the algebra of logic.

# ORDINARY DIFFERENTIAL EQUATION

- CO1 Student will be able to solve first order differential equations utilizing the standard techniques for separable, exact, linear, homogeneous, or Bernoulli cases.
- CO2 Student will be able to find the complete solution of a nonhomogeneous differential equation as a linear combination of the complementary function and a particular solution.
- CO3 Student will have a working knowledge of basic application problems described by second order linear differential equations with constant coefficients.
- **CO4** Student will be able to find the complete solution of a differential equation with constant coefficients by variation of parameters.
- CO5 Demonstrate by solving various problem based on Symmetry using group theory Application of ODE.

### **NUMBER THEORY**

- **CO1** Find quotients and remainders from integer division
- **CO2** Apply Euclid's algorithm and backwards substitution
- CO3 Understand the definitions of congruence, residue classes and least residues add and subtract integers, modulo n, multiply integers and calculate powers, modulo n
- CO5 Determine multiplicative inverses, modulo n and use to solve linear congruence.

### **OPERATIONAL RESEARCH**

- CO1 Develop linear programming (LP) models for shortest path, maximum flow, minimal spanning tree, critical path, minimum cost flow, and transshipment problems.
- CO2 Understand the mathematical tools that are needed to solve optimization problems. Formulate pure, mixed, and binary integer programming models.
- **CO3** Formulate the nonlinear programming models.
- **CO4** Use some solution methods for solving the nonlinear optimization problems.

### NUMBER THEORY AND OPERATIONAL RESEARCH

- CO1 Develop a report that describes the model and the solving technique, analyze the results and propose recommendations in language understandable to the decision-making processes in Management Engineering
- CO2 Understand the definitions of congruence, residue classes and least residues add and subtract integers, modulo n, multiply integers and calculate powers, modulo n
- **CO3** Application based on Diophantine and Chinese remainder theorem and operational research.

### **COMPLEX ANALYSIS**

- CO1 Compute sums, products, quotients, conjugate, modulus, and argument of complex numbers · Define and analyze limits and continuity for complex functions as well as consequences of continuity ·
- CO2 Conceive the concepts of analytic functions and will be familiar with the elementary complex functions and their properties ·Determine whether a given function is differentiable, and if so find its derivative. Applies the theory into application of the

- power series expansion of analytic functions ·
- CO3 Understand the basic methods of complex integration and its application in contour integration. Analyze sequences and series of analytic functions and types of convergence, Evaluate complex contour integrals directly and by the fundamental theorem, apply the Cauchy integral theorem in its various versions, and the Cauchy integral formula.

### **REAL ANALYSIS II**

- CO1 Understand Integrability and theorems on integrability. Recognize the difference between point wise and uniform convergence of a sequence of functions.
- CO2 Illustrate the effect of uniform convergence on the limit function with respect to continuity, differentiability, and integrability.
- **CO3** Study improper integration using Riemann integration.
- CO4 Applies the theory into application of the power series expansion of analytic functions
- CO5 Understand the basic methods of complex integration and its application in contour
- CO6 To analyze sequences and series of analytic functions and types of convergence, · Evaluate complex contour integrals directly and by the fundamental theorem, apply the Cauchy integral theorem in its various versions, and the Cauchy integral formula
- **CO7** Solve improper integration using Riemann integration.
- **CO8** Solve problem on convergence of function.

### RING THEORY

- **CO1** Students will be able to define ring and subrings.
- **CO2** Study of ideals and concept related to ideal.
- CO3 Study of various integral domain in ring.
- **CO4** Introduction to field.

# PARTIAL DIFFERENTIAL EQUATION

- **CO1** Be familiar with the modeling assumptions and derivations that lead to PDEs.
- **CO2** Recognize the major classification of PDEs and the qualitative differences between the classes of equations.
- **CO3** Be competent in solving linear PDEs using classical solution methods.
- **CO4** Problem on ring and PDE.
- **CO5** Application of PDE in real life.
- **CO6** structural study of ring.

#### COMPUTATIONAL GEOMETRY

- **CO1** Students will able to understand two dimensional transformations.
- **CO2** Students will able to understand three dimensional transformations.
- CO3 To get acquainted with typical problem on CG and existence solution.
- **CO4** Introduction to projection and its types.
- CO5 bezier curves.

# **OPTIMIZATION TECHNIQUE**

- CO1 Understand and apply the concept of optimality criteria for various type of optimization problem.
- **CO2** Solve various constrained and unconstrained problems in single variable as well as multivariable.
- CO3 Solve simple games using various techniques · Analyze economic situations using game theoretic techniques · Recommend and prescribe which strategies to implement

- **CO4** Understand and apply the concept of optimality criteria for various type of optimization problems.
- **CO5** Solve various constrained and unconstrained problems in single variable as well as multivariable.
- **CO6** Solve simple games using various techniques · Analyze economic situations using game theoretic techniques · Recommend and prescribe which strategies to implement
- **CO7** Introduction to analytical geometry of 2 dimensional.
- **CO8** Study of lines in 2 and 3 dimension.
- **CO9** Finding equation in various form of line, circle, ellipse, sphere, cones etc.
- CO10 Give the knowledge of geometry using maxima software

# **DEPARTMENT: PHYSICS**

### **BCS. PHYSICS**

### **MECHANICS**

- **CO1** Understand the basics of Range, time of flight and angle of projection.
- CO2 Have grasped the idea of harmonic motion and dynamics of the rigid bodies.
- CO3 Acquire knowledge about Centre of gravity of a solid cone, Solid hemisphere and friction.
- **CO4** Become familiar on the pressure of a rectangular lamina and triangular lamina.
- **CO5** Have a deep knowledge about conservation theorem for linear momentum, angular momentum and energy.

#### THERMAL PHYSICS

- CO1 Know the different concepts of the specific heat capacities of a gas. be aware of the properties of Helium I and Helium II and liquefactions of the gas.
- CO2 Acquire knowledge about heat engines like carnot's petrol and diesel engines.
- CO3 Have a peripheral idea of blackbody radiation and the thermal conductivity of the bad conductor.
- **CO4** Be able to solve the claperyon's latent heat equation.

### PROPERTIES OF MATTER AND SOUND

- **CO1** Have gained the knowledge about the determination of young's modulus of uniform and non uniform bending using pin and microscope.
- **CO2** Be aware on determination of co-efficient of viscosity by capillary flow method.
- **CO3** Acquire knowledge about experimental determination of the surface tension.
- **CO4** Be able to derive the equation of motion for a body executing angular simple harmonic oscillations.
- **CO5** Get the knowledge about production of ultrasonic waves by piezo electrical method.

#### **OPTICS**

- **CO1** Have gained the knowledge of fabry- perot interferometer.
- **CO2** Famililarites with the fresnels and fraunhoffer diffractions.
- CO3 Study in depth of analysis of light by laurent's half shade polarimeter.
- **CO4** Acquired knowledge of monochromatic aberrations, spherical aberrations.
- CO5 Understand the single and multimode fiber optic systems.

#### ELECTRICITY AND MAGNETISM

- **CO1** Grasped the fundamental of force of attraction between plater of a charged capacitor.
- **CO2** Acquire knowledge of ammeter and high range voltmeter.

- **CO3** Have gained the experimental determination of mutual inductance.
- **CO4** Familiar with the LCR circuit.
- **CO5** Construct the current and voltage circuits.

### **BASIC ELECTRONICS**

- **CO1** Have gained the knowledge of light emitting diode, tunnel diode, varactor diode.
- CO2 Grasped the idea about CB, CE, CC transistor.
- **CO3** Acquired the knowledge of constructing the JFET, MOSFET, UJT.
- **CO4** Familiar with the positive and negative feedback amplifier.
- **CO5** Gained the concepts of astable, monostable and bistable multivibrator.

### **Atomic physics**

- **CO1** Have a deep understanding of photo electric effect.
- **CO2** Be able to slove the e/m value of positive ions.
- **CO3** Understand the foundations of Rutherford scattering formula.
- **CO4** Have a basic understanding about coupling schems.
- **CO5** Understand the fine structure of the Zeeman effect.

#### **NUCLEAR PHYSICS**

- **CO1** Grasped the fundamental concepts of properties of nucleus.
- CO2 Have peripheral ideas of the accelaerators like solid state detectors and betatrons.
- **CO3** Study in depth of rutherfords experiments.
- **CO4** Have gained the knowledge of the gawmows theory of alpha decay and elementary particles.

# QUANTUM MECHANICS AND RELATIVITY

- **CO1** Understand the basics of characteristics of waves.
- **CO2** Have grasped the idea of postulates of wave in one dimension schrodingers equations and three dimensions schrodingers equations.
- **CO3** Acquire knowledge about linear harmonic oscillator.
- **CO4** Become familiar on the special theory of relativity.

#### **SOLID STATE PHYSICS**

- **CO1** Have gained the knowledge about the determination of simple cubic, face centred cubic, body centered cubic crystal structure.
- **CO2** Be aware on determination of dia, para, ferro magnetic meterials.
- **CO3** Acquire knowledge about ceramics and glasses.
- **CO4** Get the knowledge about production of polarization.

### **ENERGY PHYSICS**

**CO1** Grasped the fundamental of solar records, pond and applications.

- **CO2** Acquire knowledge of basic principle of wind energy conversions.
- **CO3** Have gained the photo synthesis equations.
- **CO4** Familiar with the lead acid battery and nickel cadmium battery.
- **CO5** Construct the gas turbines and diesel engine and heat pipes.

#### LASER AND SPECTROSCOPY

- **CO1** Have gained the knowledge of high resolution constant deviation spectrometer.
- **CO2** Famililarites with the microwave oven spectroscopy.
- CO3 Study in depth of analysis of spontaneous and stimulated emissions.
- **CO4** Acquired knowledge of simple harmonic oscillators.
- CO5 Understand the raman effect and vibrational raman spectra.

### SPACE SCIENCE

- **CO1** Know the different concepts of the planets, earth, atmosphere, exterior planets and interior planets.
- **CO2** be aware of the properties of asteroids, comets etc.
- CO3 Acquire knowledge about photosphere, chromospheres, sunspots, satellites.
- CO4 Have a peripheral idea of types of galaxies, globular clusters and binary stars.
- **CO5** Have the idea of big bang theory, pulsating theory.

#### PROGRAMMING IN C LANGUAGE

- **CO1** Have gained the knowledge of computer generations and history and development of computer.
- CO2 Grasped the idea about central processing units and programming languages.
- **CO3** Acquired the knowledge of variables, datatype and constants.
- **CO4** Familiar with the simple if, if- else ladder statments.
- **CO5** Gained the concepts of writing the c programming.

### **BIO MEDICAL INSTRUMENTATION**

- **CO1** Have gained the knowledge of nature of cancer cells, difficult systems of human bodies.
- **CO2** Famililarites with the external and internal peacemakers and heart valves.
- **CO3** Study in depth of analysis of B.P measurements, blood cells counters.
- CO4 Acquired knowledge of RBC, WBC.
- CO5 Understand the effect of radiation exposure.

#### **DIGITAL ELECTRONICS**

- **CO1** Grasped the idea of binary, octal and hexadecimal code.
- CO2 Have peripheral ideas of the k- map, SOP, POS.
- **CO3** Study in depth of BCD to Seven segment display.
- CO4 Have gained the knowledge of the BCD, A/D, D/A conversions.

#### BASIC OF ELECTRICITY AND APPLIANCES

**CO1** Have gained the knowledge about the ohms, charge and units.

- **CO2** Be aware on principle of core type and shell type transformer.
- **CO3** Acquire knowledge about single phase, three phase connections.
- **CO4** Get the knowledge about electrical heating, welding, and induction heating.

### MICROPROCESSOR AND ITS APPLICATIONS

- **CO1** Know the different concepts of the machine and assembly languages of 8085.
- CO2 be aware of the ALU, accumulator etc.
- **CO3** Acquire knowledge about instruction set of 8085.
- **CO4** Have a peripheral idea of 8 bit addition and subtraction.
- **CO5** Be able to write the program for arranging the numbers in ascending and descending order.

# **VALUE EDUCATION (YOGA)**

- **CO1** Have experience the relationship between mind, body and spirit.
- **CO2** Grasped the idea about balance, flexibility, breath control.
- **CO3** Acquired the knowledge of select asanas appropriate for personal needs.
- **CO4** Familiar with the safety principles in a yoga practice.

### **ENVIRONMENTAL STUDIES**

- **CO1** Grasped the idea of appreciate key concepts from economics and social analysis as they pertain to the human natural systems.
- CO2 Have peripheral ideas of environments.
- CO3 Appreciate that one can apply systems concepts and methodologies to analyze and understand interactions between social and environmental processes.

### SALAI PATHUKAPPU VIDHIGAL

- **CO1** Have experience the relationship of road safety rules and signs.
- CO2 Grasped the idea about possibility use public transportation for accessing the city center.
- **CO3** Acquired the knowledge morden and efficient transportation systems in the world.

### **PEACHUKALAI**

- **CO1** Demonstrate an understanding of some fundamental aspects of rhetoric.
- **CO2** Famililarites with the skills of textual analysis.
- CO3 Study in depth of analysis of speeches.
- **CO4** Acquired knowledge of communications.
- **CO5** Demonstrate critical evaluation skills in assessing messages of effective speeches.

### MSC., PHYSICS

#### CLASSICAL AND STATISTICAL MECHANICS

- **CO1** Have a deep understanding of Newton's laws,
- **CO2** Be able to solve the Newton equations for simple configurations using various methods,
- **CO3** Understand the foundations of chaotic motion
- **CO4** Be able to solve statistical mechanics problems for simple non-interacting systems,

**CO5** Have a basic understanding of the phase transitions.

### MATHEMATICAL PHYSICS

- **CO1** Learn about Gradient, Divergence and Curl in orthogonal curvilinear and their typical applications in physics,
- CO2 Learn about special type of matrices that are relevant in physics and then learn about tensors,
- CO3 Get introduced to Special functions like Gamma function, Beta function, Delta function, Dirac delta function, Bessel functions and their recurrence relations,
- **CO4** Learn different ways of solving second order differential equations and familiarized with singular points and Frobenius method,
- CO5 Learn the fundamentals and applications of Fourier series, Fourier and Laplace transforms, their inverse transforms.

### **QUANTUM MECHANICS I**

- **CO1** Have a deep understanding of the mathematical foundations of quant mechanics,
- **CO2** Be able to solve the Schrodinger equation for simple configurations,
- CO3 Understand the effect of symmetries in quantum mechanics,
- CO4 Linear vector spaces, Hilbert space, concepts of basis and operators and bra and ket notation,
- CO5 Both Schrodinger and Heisenberg formulations of time development and their Applications.

### **ENERGY PHYSICS**

- **CO1** Understand the energy resources and renewable energies,
- CO2 Know about biomass conversion technologies,

- CO3 Deep understand about the Solar cells for direct conversion of solar energy to electric powers,
- CO4 Knowledge about Base components of wind energy conversion systems (WECS), Applications of Solar Energy.

### CONDENSED MATTER PHYSICS

- CO1 The subject treats functional materials from an experimental viewpoint, solid state theory and properties,
- CO2 The subject will be useful to gain an understanding of the interplay between classical and quantum mechanical phenomena,
- CO3 How microscopic/atomic processes acting between many atoms/molecules produces the typical properties of different solid state matter,
- **CO4** The electron theory of solids is developed and applied to explain the physical properties of metals, semiconductors, dielectrics and superconductors,
- CO5 The structure and properties of solids including thermal and electrical properties are described in lectures.

### **ELECTRONICS**

- **CO1** Field Effect Transistors, their principles and applications,
- CO2 Photonic devices like LED, Laser diode, photodetectors, solar cells etc and their working in detail,
- **CO3** Basic operational amplifier characteristics, OPAMP parameters, applications as inverter, integrator, differentiator etc.
- **CO4** Digital electronics baiscsusing logic gates and working of major digital devices like flip flops, CMOS, CCD etc.
- **CO5** Karunaghmaps, flipFlops, counters and working of Microprocessor in detail.

### MICROPROCESSORS AND MICROCONTROLLER

CO1 Study the Organization and internal architecture of the Intel 8085,

- CO2 Learn assembly language programming and arithmetic programmes,
- CO3 Learn common applications of microprocessors like E Analog to Digital convert,7 segment LED displays, Temperature measurement and control using a microprocessor etc,
- CO4 Compare accepted standards and guidelines to select appropriate Microprocessor (8085 & 8086) and Microcontroller to meet specified performance requirements,
- CO5 Analyze assembly language programs; select appropriate assemble into machine a cross assembler utility of a microprocessor and microcontroller.

### **OPTOELECTRONIC DEVICES**

- CO1 Know about manufacture of a hardware device that converts electrical energy into light and light into energy through semiconductors.
- CO2 Understand the optoelectronic device can be found in many optoelectronics applications like military services, telecommunications, automatic access control systems and medical equipments.
- CO3 A solar cell or photo-voltaic cell is an electronic device that directly converts sun's energy into electricity. When sunlight falls on a solar cell, it produces both a current and a voltage to produce electric power.
- CO4 Describe techniques to improve the operation of optoelectronic devices and device characteristics that have to be optimized for new applications by employing their understanding of optoelectronic device physics.

### **ELECTROMAGNETIC THEORY**

- CO1 Understand the basic mathematical concepts related to electromagnetic vector fields,
- CO2 Apply the principles of electrostatics to the solutions of problems relating to electric field and electric potential, boundary conditions and electric energy density,
- CO3 Apply the principles of magneto statics to the solutions of problems relating to magnetic field and magnetic potential, boundary conditions and magnetic energy density,
- CO4 Understand the concepts related to Faraday's law, induced emf and Maxwell's equations,
- CO5 Apply Maxwell's equations to solutions of problems relating to transmission lines and uniform plane wave propagation.

### COMPUTATIONAL METHODS AND PROGRAMMING

- CO1 Identify modern programming methods and describe the extent and limitations of computational methods in physics,
- **CO2** Identify and describe the characteristics of various numerical methods.
- CO3 Independently program computers using leading-edge tools,
- **CO4** Formulate and computationally solve a selection of problems in physics,
- CO5 Use the tools, methodologies, language and conventions of physics to test and communicate ideas and explanations.

# **QUANTUM MECHANICS II**

- CO1 Have a deep understanding of the mathematical foundations of quantum mechanics,
- **CO2** Be able to solve the Schrodinger equation using various approximation methods,

- **CO3** Have a basic understanding of relativistic effects in quantum mechanics.
- CO4 Space-time symmetries and conservation laws, theory of identical particles,
- CO5 Theory of scattering and calculation of scattering cross section, optical theorem, Born and Elkonal approximation, partial wave analysis etc.

### MOLECULAR SPECTROSCOPY

- **CO1** To acquire basic knowledge of the interaction of radiation with matter,
- **CO2** To identify the active molecular motion,
- CO3 Interaction of electromagnetic radiation with materials in order to produce an absorption pattern (i.e. a spectrum),
- CO4 To understand rotational, vibrational, Raman and electronic spectra,
- CO5 The principle and instrumentation of microwave, infra-red vibration-rotation Raman and infra-red spectroscopy and interpretation.

### NUCLEAR AND PARTICLE PHYSICS

- CO1 Have a basic knowledge of nuclear size ,shape, bindingenergy.etc and also the characteristics of nuclear force in detail,
- **CO2** Be able to gain knowledge about various nuclear models and potentials associated,
- CO3 Acquire knowledge about nuclear decay processes and their outcomes. Have a wide understanding regarding beta and gamma decay,

- CO4 Grasp knowledge about Nuclear reactions, Fission and Fusion and their characteristics,
- CO5 Understand the basic forces in nature and classification of particles and study in detail conservations laws and quark models in detail.

### **COMMUNICATION ELECTRONICS**

- CO1 To understand the functions of Antennas and Wave Propagation purpose of communications,
- CO2 To know about Pulse Code and Digital Modulation Techniques,
- CO3 Deep understand about the Microwave Electronics and its functions varies part.
- CO4 Knowledge about Radar and Television communication process
- **CO5** Aware of optical communication using optical fibers.

### **NANOSCIENCE**

- **CO1** Learn about the background on Nanoscience
- CO2 Understand the synthesis of nanomaterials and their application and the impact of nanomaterials on environment
- **CO3** Apply their learned knowledge to develop Nanomaterial's.
- **CO4** Understand the classification nanostructured materials.
- **CO5** Understood the principles and Characterization Techniques.

### P.G DEPARTMENT SOCIAL WORK

- **CO 1** Familiarize students to the core values and philosophy of social work profession and enable them to imbibe these values into their professional self.
- CO 2 To understand history and evolution of social Work profession, both in India and West.
- **CO 3** Enable students to understand and differentiate social work and other related terms.
- **CO 4** Understand the context of emergence of social work as a profession.
- **CO 5** Understand the nature of Social work practice in different settings.

### PSW 02: SOCIAL CASE WORK

- **CO 1** To understand the individual, family and their problems and the social contextual factors affecting them.
- **CO 2** Understand social casework as a method of social work practice.
- **CO 3** Develop capacity to understand and accept the uniqueness of individuals and work towards strengthening personality of clients by fostering skills of self-help.
- **CO 4** Understand the process involved in social work in individualized situations.
- **CO 5** Develop self-awareness and skills in working with individual clients as well as family systems.

### **PSW 03: SOCIAL GROUP WORK**

- **CO 1** To understand the nature and types of groups.
- **CO 2** To understand Social Group Work as a method of Social Work practice.
- **CO 3** To know the basic concepts, tools, techniques, processes and Skills of working with groups.
- **CO 4** To develop an understanding of process of group development and group dynamics.
- **CO 5** To develop an understanding of application of group works in diverse settings.

### PSW 04: INDIAN SOCIAL STRUCTURE AND SOCIAL PROBLEMS

- **CO 1** Acquaint themselves with the basic concepts of Sociology like society, community, association, culture, social change, social stratification etc.
- **CO 2** Know the basic social institutions like family, marriage, kinship in a scientific way.
- **CO 3** Explain social change and the factors affecting social change. Realize the importance of cultural lag to understand social change.
- **CO 4** Learn about the Constitutional Provision for the protection of minorities and other weaker section in India.

CO 5 To enable the students to understand the impact of social problems on social life and learn about the Reservation Policy in India.

#### PSW 05: PERSONALITY DEVELOPMENT AND HUMAN BEHAVIOUR

- **CO 1** Understand the nature and development of human behaviour in socio-cultural context.
- **CO 2** Develop a critical perspective of the theories of human behaviour and personality.
- **CO 3** Learn to apply concepts and theories of psychology in social work practice.
- CO 4 To understand psychological concepts and its relevance to Social Work
- CO 5 To understand the basic concepts and processes in social psychology and its relevance to Social Work

### PSW FP01: FIELD WORK PRACTICUM & RURAL CAMP - 1

- **CO 1** To visit various agencies working in different types of areas of Social Work practice.
- **CO 2** To have a rural exposure and understand the rural livelihood.
- **CO 3** To develop capacity for observation and analysis of social realities.
- **CO 4** To conduct Participatory Rural Appraisal in rural areas.
- **CO 5** To develop understanding of the needs, problems and Programmes for different target Groups.

### PSW 06: COMMUNITY ORGANIZATION AND SOCIAL ACTION

- **CO 1** To comprehend the concept, context and strategies of community work
- CO 2 To understand the fundamental concepts and components of community, community organization and social action
- **CO 3** To understand the models of community organization and social action.
- **CO 4** To understand the relationship of community organization and social action with other methods of social work.
- **CO 5** To understand various social movements in India.

#### PSW 07: SOCIAL WORK RESEARCH AND SOCIAL STATISTICS

- **CO 1** To gain understanding of nature and relevance of social science research and its application in the study of social phenomena.
- **CO 2** To learn steps and process of formulation of research design and carry out the same.
- **CO 3** To learn method of conducting a review of literature and how to prepare tools for collection of data.

- **CO 4** To develop familiarity with qualitative and quantitative research methods.
- **CO 5** To learn process of data collection, organization, presentation, analysis and report Writing.

#### PSW 08: SOCIAL WELFARE ADMINISTRATION AND SOCIAL LEGISLATIONS

- **CO 1** Develop understanding of social welfare administration as a method of social work profession.
- **CO 2** To understand concept of social welfare and social welfare administration.
- **CO 3** Understand various components of social welfare administration.
- **CO 4** Acquire competence in the administration of social welfare and development services.
- **CO 5** To develop understanding of the concept of social policy and social planning.

#### PSW 09A: HUMAN RESOURCE MANAGEMENT

- **CO 1** To understand the concept, principles and functions of management.
- **CO 2** To learn about Human resource management and its functions as well as challenges in current scenario.
- **CO 3** To acquire the knowledge on function of Human resource management and personnel research.
- **CO 4** To understand wage and salary administration and theories of wages.
- CO 5 To have a wider knowledge on industrial problems and to implement Industrial social work.

#### **PSW 09B: HEALTH AND HYGIENE**

- **CO 1** Understand the changing concept of health as an aspect of social development.
- **CO 2** Develop a critical perspective of healthcare services and programmes.
- **CO 3** Gain understanding of relevance, domains and nature of social work intervention in different health settings.
- **CO 4** Acquire knowledge on major communicable diseases and occupational health hazards.
- **CO 5** Understand the concept of Health Education with its importance and Principles.

### **PSW 09C: YOUTH IN COMMUNITY**

- **CO 1** Understand the concept of youth and their role with its method of youth mobilization.
- **CO 2** Have a critical view on needs and problems of youth in India.
- **CO 3** Study the methods and types of youth training.

- **CO 4** Understand the modern impact of rapid social changes on youth.
- **CO 5** Learn the role of government in development of youth and youth welfare.

#### PSW FP02: CONCURRENT FIELD WORK PRACTICUM – 2

- **CO 1** To work in agencies working in different types of areas of Social Work practice.
- CO 2 To develop work plan in consultation with agency supervisor.
- **CO 3** To develop capacity for observation and analysis of social realities.
- **CO 4** To practice the methods of working with individuals and groups.
- CO 5 To develop understanding of the needs, problems and Programmes for different target Groups.

### **PSW ED1: LIFE SKILL MANAGEMENT**

- **CO 1** Study the concept of motivation and stress management.
- **CO 2** Develop the methods of IQ and EQ test.
- **CO 3** Developing the personality through leadership, attitude, decision making skills.
- **CO 4** Face the society with job knowledge and interview process.
- **CO 5** Handle negative criticism and non-verbal communication.

### PHR 01: HUMAN RIGHTS

- **CO 1** Understand the context of Human Rights and fundamental rights.
- CO 2 Apply human rights framework for understanding issues and concerns affecting society
- **CO 3** Develop knowledge and skills required in working for a just society.
- **CO 4** Develop appropriate attitudes and commitment required to work for a just and equitable Society.
- CO 5 Understand various rights prevailing to women, children and aged.

#### Level: MSW Final Year

### **PSW 10A: LABOUR WELFARE**

- **CO 1** Understand the concept and characteristics of Indian labour.
- **CO 2** Develop labour welfare practices in industry in view of social work perspective.
- **CO 3** Learn about labour welfare administration and workers education.
- **CO 4** Apply labour welfare measures with reference to legal requirements.
- **CO 5** Develop the industry through industrial environment protection.

#### PSW 10B: HOSPITAL ADMINISTRATION

- **CO 1** To apply knowledge of management methods to their practice in managing people and resources.
- CO 2 To use critical analysis and available evidence to address problems and opportunities in health and aged care policy and practice.
- **CO 3** To negotiate ethical and practice dilemmas and apply their skills and knowledge to achieving better outcomes for communities client, and staff.
- **CO 4** To provide leadership at a more senior level and enhance their careers.
- **CO 5** To understand the laws pertaining to hospitals.

### PSW 10C: EVENT MANAGEMENT AND SOCIAL MARKETING

- **CO 1** Gain insight about Event management in the global and national context.
- **CO 2** Develop critical understanding of event planning and organizing.
- **CO 3** Understand the strategies and approaches of event management
- **CO 4** Develop skills of social work intervention in the promotion of an event.
- **CO 5** Have a knowledge on social marketing strategies and its applications.

#### **PSW 11A: INDUSTRIAL RELATIONS**

- **CO 1** Critically understand the concept, strategies and process of Industrial relations.
- **CO 2** Understand the ethical code of industrial relations and concept of discipline in industry.
- **CO 3** Learn the legal Acts maintains industrial relations.
- **CO 4** Develop skills necessary for development of trade union in industry.
- CO 5 Study the importance of collective bargaining and worker's participation in management

### PSW 11B: INTRODUCTION TO PSYCHIATRY

- **CO 1** Understand the historical development of psychiatric social work.
- **CO 2** Learn the classification of mental illness and formulation of psychosocial diagnosis.
- **CO 3** Understand psychiatric illness and neuro sciences.
- **CO 4** Critically understand about the people of mentally handicapped and their social, psychological problems.
- **CO 5** Acquire the skills on childhood and behaviour disorders.

#### PSW 11C: MANAGEMENT OF NON-PROFIT ORGANIZATION

- **CO 1** Understand concepts of Non-Governmental organization.
- **CO 2** Understand empowerment processes for the marginalized sections of the society.
- **CO 3** Critically examine legal mechanisms available for different vulnerable groups.
- **CO 4** Understand social situations, protective and promotive programmes for specific vulnerable groups.
- **CO 5** Learn the concept of budgeting, project evaluation and empowerment.

### PSW 12: COUNSELLING SKILLS FOR CONTEMPORARY SOCIAL WORK

- **CO 1** Understand the nature and goals of counselling as a helping process.
- CO 2 Understand the theoretical base underlying counselling practice.
- **CO 3** Learn to apply counselling skills while working with clients in various settings.
- **CO 4** Develop attitudes and inculcate values that enhance investment of self in the counselor's role.
- **CO 5** Develop an understanding of application of counselling in different settings.

### PSW FP03: CONCURRENT FIELD WORK PRACTICUM – 3

- **CO 1** To work in agencies working in different types of areas of Social Work practice.
- **CO 2** To develop work plan in consultation with agency supervisor.
- **CO 3** To develop capacity for observation and analysis of social realities.
- **CO 4** To practice the methods of working with individuals and groups.
- **CO 5** To develop understanding of the needs, problems and Programmes for different target Groups.

#### PSW BP01: SUMMER BLOCK PLACEMENT - 1

- **CO 1** To work in agencies working in different types of areas of Social Work practice.
- **CO 2** To develop work plan in consultation with agency supervisor.
- **CO 3** To develop capacity for observation and analysis of social realities.
- **CO 4** To practice the methods of working with individuals and groups.
- **CO 5** To develop understanding of the needs, problems and Programmes for different target Groups.

### PSW BP02: BLOCK PLACEMENT - 2

- **CO 1** To work in agencies working in different types of areas of Social Work practice.
- **CO 2** To develop work plan in consultation with agency supervisor.
- **CO 3** To develop capacity for observation and analysis of social realities.
- **CO 4** To practice the methods of working with individuals and groups.

**CO 5** To develop understanding of the needs, problems and Programmes for different target Groups.

#### PSW 13A: HUMAN RESOURCE DEVELOPMENT

- **CO 1** Understand the nature and context of human resource development in the organizations as civil society initiatives.
- CO 2 Develop skills in planning and management of industrial organizations.
- CO 3 Understand contemporary development discourses and suitable strategies.
- **CO 4** Gain the knowledge on career planning and performance counselling.
- **CO 5** Acquire skills on improving the quality of work life and total quality management.

### **PSW 13B: MEDICAL SOCIAL WORK**

- CO 1 Understand the changing concept of health as an aspect of social development.
- **CO 2** Develop a critical perspective of healthcare services and programmes in the context of health scenario in the country.
- **CO 3** Gain understanding of relevance, domains and nature of social work intervention in different health settings.
- **CO 4** Learn the organization and administration of medical social work in hospitals.
- **CO 5** Develop the skills of medical social worker in diverse hospital settings.

### **PSW 13C: RURAL COMMUNITY DEVELOPMENT**

- **CO 1** Understand social structure, social relations and institutions in rural communities.
- **CO 2** Develop sensitivity, commitment, and skills to influence critical issues in rural communities.
- **CO 3** Understand the policies, programmes and approaches of rural community development.
- **CO 4** Advance human rights and social and economic justice.
- **CO 5** Engage in policy practice to advance social and economic well-being and to deliver effective social work services.

### **PSW 14A: ORGANIZATIONAL BEHAVIOUR**

- **CO 1** Develop understanding of industrial organizations and organizational behaviour.
- **CO 2** Provide requisite legal base to deal with issues related to human resources.
- **CO 3** Learn the processes and concerns for employee development in the context of globalization.
- **CO 4** Develop appropriate skills and competencies in managing human resources.
- **CO 5** Understand the concept of organization system and organizational dynamics.

### PSW 14B: PSYCHIATRIC SOCIAL WORK

- **CO 1** Understand Psychiatric social work practice and magnitude of mental health problems.
- **CO 2** Learn social work practice in mental health field and Psychiatric settings.
- **CO 3** Develop Social work treatment methods skills
- **CO 4** Understand theories and models of Psychiatric social work in special settings.
- **CO 5** Developing Psychological rehabilitation through designing and implementing programmes in health care communities.

### **PSW 14C: URBAN COMMUNITY DEVELOPMENT**

- **CO 1** To train students with a bias on practical/experiential orientation based on scientific knowledge in advancement of sustainable urban development.
- **CO 2** To develop professional personnel in design, planning and management of urban areas.
- **CO 3** To establish a foundation for the graduate to practice, pursue and/or participate in professional activities/development in the urban milieu.
- **CO 4** To engage in research on various aspects related to the urban environment.
- **CO 5** To train students who will create, conserve, restore and offer leadership on useful and culturally valuable and historic urban environments.

### PSW BP03: BLOCK PLACEMENT - 3

- **CO 1** To work in agencies working in different types of areas of Social Work practice.
- **CO 2** To develop work plan in consultation with agency supervisor.
- **CO 3** To develop capacity for observation and analysis of social realities.
- **CO 4** To practice the methods of working with individuals and groups.
- **CO 5** To develop understanding of the needs, problems and Programmes for different target Groups.

#### PSW PR1: DISSERTATION/PROJECT

Dissertation would be carried out by the students during of MSW Final Year. The dissertation would be based on primary data, however, dissertation based on secondary data could also be undertaken by the student with due consultation of the field work supervisor. The dissertation work would enable the student to develop a clear understanding of the research and different steps associated with it. The topic for dissertation would be chosen based on a student's own area of interest in consultation with the field work/research supervisor. The student would work with a field work supervisor who would also provide guidance and support throughout the course of the research.

**CO 1** To develop ability to initiate and conduct research.

- **CO 2** To develop research Skills of identifying and selecting a research area and preparing research proposal.
- CO 3 To develop skills of doing literature review and steps of research methodology.
- **CO 4** To be familiarized with the process of data analysis and report writing.
- **CO 5** To understand ethical considerations of research.

### **DEPARTMENT: TAMIL**

### நன்னூல் எழுத்ததிகாரம்

### பாடநோக்கம்

தமிழ் மொழியை பிழையின்றி பேசவும் எழுதவும் மாணவர்களுக்கு தெளிவுபடுத்துதல். தமிழின் ஐந்திலக்கணங்களில் ஒன்றான எழுத்திலக்கணத்தை மாணவர்களுக்கு அறிவுறுத்துதல்.

கற்றல் விளைவுகள்.

- 1.மொழி ஆற்றலை மேம்படுத்துதல்
- 2. தமிழ் இலக்கணம் மரபினை உணர்தல்
- 3. எழுத்துக்களின் பிறப்பினை அறிந்து தமிழை பிழையின்றி பேசவும் எழுதவும் கற்றுக் கொள்ளுதல் 4. போட்டித் தேர்வுகளில் பங்குபெறும் திறனை பெறுதல்

### இக்கால இலக்கியம்.

## <u>பாடநோக்கம்</u>

இக்கால தமிழ் இலக்கிய வகைகளின் மாதிரிகளை கற்பித்து அவற்றின் ஈடுபாட்டையும் சுவைக்கும் திறனையும் ஏற்படுத்துதல்.

கற்றலின் விளைவுகள்

- 1.மொழி ஆளுமை திறன் பெறுதல்
- .2. சமூக சிந்தனையை வளர்த்துக் கொள்ளுதல்
- 3. படைப்பாளர்களாக உருவாகும் திறனை பெறுதல்

# தமிழ் இலக்கண வரலாறு.

# பாடநோக்கம்

தமிழில் தோன்றிய இலக்கண நூல்களில் வரலாற்றை மாணவர்களுக்கு கற்பித்தல் போட்டித் தேர்வுகளில் கலந்து கொள்ளும் விழிப்புணர்வை ஏற்படுத்துதல்

கற்றல் விளைவுகள்

- 1.தமிழ் இலக்கணங்களை அறிந்து கொள்ளுதல்
- 2. இலக்கண நூல்கள் மூலம் மொழியின் வளமையை உணர்தல்
- 3. போட்டித் தேர்வுகளில் கலந்து கொள்ளும் வாய்ப்பு பெறுதல்

### கொங்கு நாட்டு வரலாறு

### பாட நோக்கம்

கொங்கு நாட்டு வரலாறு அது பற்றி அறிதல் தமிழ்நாட்டு சரித்திரத்தில் கொங்கு நாடு முக்கிய இடம் வகித்ததை மாணவர்களுக்கு கற்பித்தல் கற்றலின் விளைவுகள்

- 1.கொங்கு நாடு பற்றி அறிந்து கொள்ளுதல்
- 2. மண்ணையும் மக்களையும் நேசிக்கக் கற்றல்
- 3.கொங்கு நாட்டின் முந்தைய நிலையையும் தற்போதைய நிலையும் அறிதல்
- 4.கொங்கு நாட்டோடு தொடர்புடைய மன்னர்களை அறிதல்

# <u>தமிழில் இலக்கிய வரலாறு</u>

# <u>பாடநோக்கம்:</u>

தொன்மைக்கால முதல் இக்காலம் வரை தமிழில் தோன்றிய இலக்கிய நூல்கள் அனைத்தையும் வரலாற்று நோக்கில் கற்பித்தல்

கற்றலின் விளைவுகள்

1.அரசு போட்டி தேர்வுகளில் பங்கு பெற விழிப்புணர்வு பெறுதல்

- 2.சங்க கால முதல் இக்காலம் வரையிலான இலக்கியங்களை அறிந்து கொள்ளுதல்
- 3. தமிழ் மொழியின் வளர்ச்சியை காலந்தோறும் அறிந்து கொள்ளுதல்

நூலகவியல்

பாடநோக்கம்

நூலக வரலாறு நூலகத்தில் அக ஒழுங்குமுறை, நூலை வகைப்படுத்துதல் பாதுகாத்தலின் அவசியத்தை மாணவர்களுக்கு கற்பித்தல்

கற்றலின் விளைவுகள்

நூலகத்தை வடிவமைக்கும் முறை குறித்து புரிதல் நூல்களை வகைப்படுத்தும் முறை அறிதல் நூலகராகும் வேலைவாய்ப்பு குறித்து விழிப்புணர்வு பெறுதல்

### புறப்பொருள் வெண்பாமாலை

பாடநோக்கம்

புறப்பொருள் பற்றிய இலக்கணங்களை மாணவர்களுக்கு கற்பித்தல் கற்றலின் விளைவுகள்

புறப்பொருள் இலக்கணங்களை அறிதல், புற பொருள் இலக்கணங்கள் வாயிலாக நூல்களை கற்றல் போட்டி தேர்வுகளில் பங்கேற்றல்

பாடநோக்கம்

தமிழில் உள்ள 96 வகை சிற்றிலக்கியங்களில் செல்வாக்கு பெற்ற வகைகளின் மாதிரிகளை கற்பித்தல், வாழ்க்கைக்கு உகந்த அறக்கருத்துக்களை மாணவர்களுக்கு கற்பித்தல்

சிற்றிலக்கியங்கள் குறித்து அறிதல், நீதி இலக்கியங்கள் குறித்து அறிதல் சிற்றிலக்கியங்கள் வழி இலக்கிய இன்பம் அனுபவித்தல், நீதி இலக்கியங்கள் வழி வாழ்வியல் உண்மைகளை அறிதல் தமிழக வரலாறு மக்களும் பண்பாடும்

பாடநோக்கம்

தமிழக வரலாற்றையும், மக்களின் பண்பாட்டையும் மாணவர்களுக்கு கற்பித்தல், அரசு போட்டி தேர்வுக்கான வேலை வாய்ப்பிற்கு தயார் செய்தல்

காப்பியங்கள்

பாடநோக்கம்

மதம் சார்ந்த காப்பியங்களின் வண்ணம் வடிவம் கற்பனை காலங்கள் ஆகிய கூறுகளை கற்பித்தல்

கற்றலின் விளைவுகள்

மொழியின் பெருமை அறிதல், வர்ணனை இலக்கிய நயம் உணர்தல், சொல்லாட்சி கற்பனை திறன் பெறுதல்

திராவிட மொழிகளின் ஒப்பாய்வியல்

பாடநோக்கம்

திராவிட மொழிக் குடும்பத்தில் தாய் தமிழில் என்பதனை நிறுவுவதற்கான மொழிகள் ஒப்பாய்வு முறையை கற்பித்தல்

கற்றலின் விளைவுகள்

திராவிட மொழிக் குடும்பங்களை அறிதல் ,உயிரொளி மெய்யொளி அறிதல் திராவிட மொழிக் குடும்பங்களின் தாய் தமிழே என்பதை அறிதல் போட்டித் தேர்வுகளுக்கான தகுதி பெறுதல்

படைப்பிலக்கியம்

பாடநோக்கம்

படைப்பிலக்கியத்திறனை வளர்த்தல் போட்டித் தேர்வுகளில் கலந்து கொள்ளும் திறனை ஏற்படுத்துதல்

கவிதை ஏற்றும் திறன் பெறுதல், சிறுகதை எழுதுதல் நாடகங்களை எழுதி நடிக்கும் திறன் பெறுதல் கட்டுரைகளை எழுதும் திறன் பெறுதல் போட்டித் தேர்வுகளில் பங்கேற்கும் திறன் பெறுதல்

தண்டியலங்காரம் பொருளினியல்

பாடநோக்கம்

தமிழின் ஐந்தாம் இலக்கணமாகிய அணி இலக்கண வகைகளை கற்பித்தல் கற்றலின் விளைவுகள்

அணி இலக்கணம் தெரிந்து கொள்ளுதல் அணிகளின் வகைகளை அறிந்து கொள்ளுதல் , போட்டித் தேர்வுகளில் கலந்து கொள்ளும் விழிப்புணர்வு பெறுதல் சங்க இலக்கியம்

பாடநோக்கம்

சங்க நூல்களில் உள்ள அகம் புறம் பற்றிய பாடல்கள் மூலம் மக்களின் பழக்கங்களையும் அறிந்து கொள்ளுதல், நல்வாழ்வுக்கு தேவையான அறங்களை சான்றோர்களின் வாக்குகளால் மாணவர்களுக்கு உணர்த்துதல்

கற்றலின் விளைவுகள்

சங்க இலக்கியங்கள் குறித்து அறிந்து கொள்ளுதல் , சங்க கால மக்களின் வாழ்வியல் முறை உணர்தல் அகம் புறம் பற்றி அறிதல் சங்ககால இலக்கிய சொல்லாட்சிகளை அறிதல்

இலக்கியத் திறனாய்வியல்

பாட நோக்கம்

இலக்கியம் திறனாய்வின் முக்கியத்துவத்தையும் அவற்றை மதிப்பிடுவதற்கான வழிமுறைகளையும் மாணவர்களுக்கு கற்பித்தல்

கற்றலின் விளைவுகள்

இலக்கியத் திறனாய்வு குறித்து அறிந்து கொள்ளுதல், திறனாய்வு வகைகள் அணுகு முறைகள் குறித்து அறிதல், திறனாய்வாளன் குறித்தறிதல், இலக்கிய கூறுகள் பற்றி ஒரு நூலை திறனாய்வு செய்யும் தகுதி அடைதல்

நாட்டுப்புறவியல்

பாட நோக்கம்

அழிந்து வரும் நாட்டுப்புற இலக்கிய வகைகளில் உள்ள இலக்கிய தரவுகளை மதிப்பிடுதலும் அவற்றை அழியாமல் பாதுகாத்தலும்

கற்றலின் விளைவுகள்

நாட்டுப்புறவியல் வரலாறு உணர்தல், நாட்டுப்புற கதைகளை தேர்ந்தெடுத்துக் கொள்ளுதல் , நாட்டுப்புற கலைகளை அறிந்து கொள்ளுதல் நாட்டுப்புற மக்களின் நம்பிக்கைகள்,சடங்குகள், பழக்கவழக்கங்கள் அறிதல் இலக்கியங்களில் காணலாகும் நாட்டுப்புறக் கூறுகளை இனம் காணல்

பாட நோக்கம்

தமிழ் இலக்கணம் வேறுபட்ட படைப்பாளர்கள் இலக்கியங்களில் தனிச்சிறப்புகளை ஒப்பிட்டு ஆராயும் போக்கை மாணவர்களிடம் வளர்த்தல் கற்றலின் விளைவுகள்

ஒப்பிலக்கியம் பற்றி அறிந்து கொள்ளுதல், இலக்கியத்தோடு பிற கலைகளை ஒப்பிட்டு அறிதல், இலக்கணத்தோடு பிற மொழி இலக்கியக் கொள்கைகளை ஒப்பிட்டு அறிதல், கவிஞர்களை ஒப்பிட்டு நோக்குதல் தொல்லியல்

பாட நோக்கம்

மறைந்து போன நாகரிகம் அகழ்வாராய்ச்சி மூலம் புதைபொருள் கண்டுபிடிப்புகளை மாணவர்களுக்கு கற்பித்தல்

கற்றலின் விளைவுகள்

அகழாய்வு குறித்து அறிந்து கொள்ளுதல் தொல்லியலின் பயன்களை தெரிந்து கொள்ளுதல் கீழடி அகழாய்வு குறித்து அறிதல் சங்ககால மக்களின் வாழ்வியலை அகழாய்வு வழி உணர்த்துதல் போட்டித் தேர்வுகளில் கலந்து கொள்ளும் திறன் பெறுதல்

# முதுகலைத் தமிழ்

# தொல்காப்பியம் எழுத்ததிகாரம்

பாட நோக்கம்

தமிழ் மொழியில் முதன் முதலில் முழுவதுமாக கிடைக்கப்பெற்ற இலக்கண நூலான தொல்காப்பியத்தை அறிமுகம் செய்தல்.

இக்கால இலக்கியம்

நோக்கம்

இலக்கிய வரலாற்று பின்னணியில் இக்கால தமிழ் இலக்கியங்களை அறிந்து கொள்ள வாய்ப்பு அளித்தல் கவிதை புதினம் சிறுகதை நாடகம் ஆகிய படைப்பியல் வகைகளை பற்றிய பரதப்பட்ட புலமையை பெருக்குதல். சிற்றிலக்கியங்கள்

நோக்கம்

பேரிலக்கியங்களில் இருந்து வேறுபட்டு மலர்ந்து தமிழின் இலக்கிய பரப்பை வளப்படுத்தியுள்ள சிற்றிலக்கியங்களை அறிமுகம் செய்து ஒவ்வொன்றின் தனித்தன்மைகளையும் சமுதாயம் இருப்பு நிலைகளையும் விளக்குதல்.

தமிழர் கலையும் பண்பாடும்

நோக்கம்

ஒரு நாட்டின் வரலாற்றில் கலையும் பண்பாடும் முக்கிய இடத்தை பெறுகின்றன

இலக்கிய படைப்புகளுக்கான சமுதாய துழல்களை எடுத்துரைப்பது.

இலக்கண வரலாறும் உரை வரலாறும்.

நோக்கம்

தமிழ் இலக்கணங்களின் வரலாற்றையும் தமிழ் இலக்கண இலக்கியங்களுக்கான ஒரே வரலாற்றையும் சுருக்கமாக அறிமுகம் செய்தல்.

இலக்கணங்களின் இணைத்து அறிவதற்கும் ஆராய்வதற்கும் ஏற்ற வழிவகை செய்யும்படி தமிழ் இலக்கண மரபு மாற்றங்களை அறிந்து கொள்வதற்கு ஏற்ற வகையிலும் ஒப்பீட்டு நோக்க வழி வகுத்தல்.

தொல்காப்பியம் சொல்லதிகாரம்

நோக்கம்

எழுத்துக்களால் ஆகிய சொற்கள் தொடராகும்.

வேற்றுமைகளின் வகைப்பாடுகள் அவற்றின் உறுப்புகள் பற்றியும் விளக்குதல்.

இலக்கணங்களை பேசுவது சொல்லிதிகாரம் இவற்றைப் பற்றி கற்பித்தல்.

காப்பியங்கள்

நோக்கம்

காலந்தோறும் தமிழ் காப்பியங்களின் வளர்ச்சியையும் கொள்கை பின்னணிகளையும் அறுவதுடன் அவை காட்டும் சமுதாய மாறுதல்களையும் இலக்கிய கோட்பாடுகளை சுருக்கமாக அறிமுகப்படுத்தி வைத்தல்.

சமய இலக்கியங்கள்

நோக்கம்

திருமூலர் நிலையாமையை எடுத்துரைத்தல் சைவ குரவர்கள் திருஞானசம்பந்தர் திருநாவுக்கரசர் சுந்தரர் ஆகிய மூவர்களின் பாடகர் வழி பக்தி மார்க்கத்தை கற்பித்தல்.

பட்டினத்தார் வள்ளலார் வேதநாயகம் பிள்ளை குணங்குடி மஸ்தான் சாகிப் பாடல்களின் வழி சமய இலக்கியங்கள் எவ்வாறு மறுமலர்ச்சி உற்றது என்பதை அறியச் செய்தல்.

பண்பாட்டு மானுடவியல்

நோக்கம்

பண்பாட்டு நிலை அறிதல் பண்பாட்டு நிலையில் உயர்ந்து நின்றோர் நிலை அறிதல் மானிடர் வாழ்ந்த நிலையினையும் வாழ வேண்டிய நிலையும் அறிதல்.

நாட்டுப்புறவியல் கோட்பாடுகள்

நோக்கம்

நாட்டுப்புறவியலின் தேவையை உணர்த்தல் நாட்டுப்புற இலக்கியங்கள் கலைகள் ஆகியவற்றை அறிந்து பாதுகாத்தல் நாட்டுப்புறவியல் சார்ந்த கோட்பாடுகளை விளக்குகள் பாமர மக்களின் இலக்கிய இலக்கண உத்திகள் அறிதல் என்பனவாகும்.

கணினி ஓர் அறிமுகம்.

நோக்கம்

மாணவர்களுக்கு கணினி பயன்பாடுகள் அறிந்து கொள்ளுதல் மிகவும் அவசியம் இணையத்தில் சேவைகள் உலகளாவிய வாய்ப்புகள் தேடுதல் ஈமானிய பம் செய்தல் அனிமேஷன் உருவாக்குதல் வேலைவாய்ப்புகள் உருவாக்குதல் ஆகிய கற்று மாணவர்கள் தெளிவடையும் பொருட்டு கணினி வழிகாட்டல் முறை கல்வி முறையில் கொண்டு வருதல் நடைமுறைப்படுத்தல் ஆகையின இதன் முக்கிய நோக்கமாகும்.

பயன்பாட்டுத் தமிழ்

நோக்கம்

மாணவர்கள் பேசும் போது எழுதும் போதும் இலக்கணம் பிழை என்று வேண்டும் எழுதுதல் வேண்டும் ஊடக தமிழ் செய்திகள் அறிதல் நிறுத்தக்குறிகளின் பயன்பாட்டை அறிதல் கதை கட்டுரை கவிதை ஆராய்ச்சி கட்டுரை எழுதும் போதும் நேர்காணல் போதும் கடைப்பிடிக்க வேண்டிய அறிதல் பொருட்டும். இப்ப பாடத்திட்டத்தின் இலக்கணங்களை (மக்கிய நோக்கமாகும்.

தொல்காப்பியம் பொருளதிகாரம்

நோக்கம்

அதிகாரத்தில் நுவரப்படும் பொருள்கள் அறிய பெரிய நுண்கருத்துக்கள் கொண்டமைந்தனம் ஆகும் வாழ்க்கை துவங்கும் நிலை நில பகுப்பாடு முதல் பொருள் கருப்பொருள் உரிப்பொருள்களின் இயல்புகளை விளக்குதல்.

பொருள் அதிகாரத்தில் நுவளப்படும் பொருள்கள் அரிய பெரிய நுண்கருத்துக்கள்கொண்டது.

புறத்திணையில் வீரர் மேம்பாடு அரசனாவான் படைகளை இயக்கும்.

அகத்திணையில் வாழ்க்கை துவங்கும் நிலப் பாகுபாடு முதல் பொருள் கருப்பொருள் உரிப்பொருள்களின் இயல்புகளை விளக்குதல்.

[ தமிழக வரலாறும் பண்பாடும்.

### நோக்கம்

மனித குலத்தின் முன் தோன்றிய மூத்த குழுவினர் தமிழர் அவர்தான் வரலாறு தொல்காப்பியர் காலத்திற்கு உட்பட்டது பண்பாடும் மிகத் தொன்மை வாய்ந்தது இலக்கியம் கல்வெட்டு பட்டியல்கள் அயல்நாட்டார் கடிதங்கள் ஆகியவற்றின் மூலம் பண்டை தமிழரின் வரலாறும் பண்பாடும் தெரிகின்றது.

### பெரியாரியல்

# நோக்கம்

தமிழரின் தன்மான உணர்வின் நிகழ்ச்சிக்கு ஊற்றுக்கண்ணாக அமைந்த சமுதாய சீர்திருத்த நடைமுறைகளை செயல்படுத்திய தந்தை பெரியாரின் வாழ்வையும் பணியையும் அவரின் சிந்தனை போக்குகளையும் உணர்த்துதல்.

:திறனாய்வுக் கோட்பாடுகள்

### நோக்கம்

திறனாய்வின் அவசியத்தை உணர்த்துவது திறனாய்வு கோட்பாடுகளை அறிமுகப்படுத்துதல் தமிழ் இலக்கியங்களை கோட்பாடுடன் அணுகுதல் தமிழில் புதிய தடத்தை உருவாக்கித் தருதல் படைப்புகளை திறனாய்வு வழியாக ஆராய்வது.

கல்வெட்டியல்

### நோக்கம்

கல்வெட்டுகளின் நோக்கம் பயன் அமைப்பு முதலாம் நூற்றை உணர்த்துதல் கல்வெட்டுகளில் காணப்படும் மொழி அமைப்பினை எடுத்துரைத்தல் கல்வெட்டு குழல் வரலாறு தெளிவாக விளக்குதல்

சங்க இலக்கியம்

### நோக்கம்

எட்டுத்தொகை நூல்களையும் அதன் உள்ளடக்கிய அடக்கங்களையும் மாணவர்களுக்கு கற்பித்தல்.

அகமும் புறமும் இணைந்து அமைந்துள்ள எட்டுத்தொகை நூல்களை அறிமுகப்படுத்தி அதன் அமைப்பின் சிறப்பையும் கற்பித்தல்.

பல்நோக்கு பார்வையில் திருக்குறள்

### நோக்கம்

திருக்குறளின் சிறப்புகளை மாணவர்களுக்கு உணர்த்துவது அறம் பொருள் இன்பம் மேலாண்மை போன்ற பல நிலைகளில் ஆராய்தல்

பல்நோக்கு முறையில் திருக்குறள் அமைந்திருப்பதை மாணவர்களுக்கு உணர்த்துவது.

ஆராய்ச்சி அறிமுகம்

### நோக்கம்

ஆய்வும் ஆய்வோடும் வகைகள் முதன்மை கூறுகள் நேர்காணல் ஆய்வேட்டின் உருவாக்கம் மேற்கோள்கள் பற்றி உணர்த்துதல்.