SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome-Tamil

Teaching – Learning and Evaluation

6 Student Performance and Learning Outcome

முதல் பருவம்

தலைப்பு: இக்கால இலக்கியம் (கவிதை,சிறுகதை,நாடகம், இலக்கியவரலாறு)

இக்காலஇலக்கியவகைமைகளானகவிதை,சிறுகதை,நாடகஇலக்கியங்க ளைக் கற்றதன் மூலம்மாணவர்கள் சிந்திக்கும் திறனைப் பெறுகின்றனர். கவிதை,சிறுகதை,நாடகம் எழுதும் திறனைவளர்த்துக் கொள்கின்றனர். மொழிஆற்றல் மேம்படுத்தப்பட்டுபடைப்பாக்கத்தில் ஈடுபடுகின்றனர். கவிஞர்களின் படைப்பின் வழியாகவும்,வரலாற்றின் வழியாகவும் தமிழ்ப் பண்பாட்டினைஉள்வாங்கிக் கொள்கின்றனர். இலக்கியவரலாற்றைக் கற்றதன் மூலம் கவிதை,சிறுகதை,நாடகம் போன்ற இலக்கியவகைமைகளின் தோற்றம்,வளர்ச்சி,வரலாற்றினைத் தெரிந்துகொள்கின்றனர்.

இரண்டாம் பருவம்:

தலைப்பு:அறஇலக்கியங்கள்;,காப்பியங்கள்,உரைநடை, இலக்கியவரலாறு

அற இலக்கியங்களைக் கற்றதன் மூலம் மாணவர்கள் தனிமனித,சமூகவிழுமியங்களைஅறிந்துகொண்டு,அவ்வழியேநல்லொழுக்கம் மிக்கவர்களாகவாழப் பழகுகின்றனர். காப்பியங்களைக் கற்றதன் மூலம் காப்பியகாலமக்களின் பண்பாடு,பழக்கவழக்கம்,சமயம்,வழிபாட்டுமுறை,வாழ்க்கைமுறை,காப்பிய ங்கள் உணர்த்தும் அறம்ஆகியவற்றைப் பற்றித் தெரிந்துகொள்கின்றனர். சைவ,வைணவ,சமண, இசுலாமியக்,கிருத்துவக் காப்பியங்களைக் கற்றதன் மூலம் மாணவர்களிடையேசமய,சமூகநல்லிணக்கம் ஏற்படவாய்ப்பாகஅமைகின்றது. பிறசமயத்தைமதிக்கும் பண்பினைப் பெறுகின்றனர். தமிழறிஞர்களின் உரைநடைவடிவிலானகட்டுரைகளைக் கற்றதன் மூலம்சிந்தனைத் திறனுக்கும்,படைப்பாற்றலுக்கும் தேவையானஊக்கத்தைப் பெறுகின்றனர். அற இலக்கியங்கள்,காப்பியங்கள்,உரைநடை இலக்கியவரலாற்றைக் கற்றதன் மூலம் அவற்றின் தோற்றம்,வளர்ச்சி,வரலாற்றினைத் தெரிந்துகொள்கின்றனர்.

மூன்றாம் பருவம்

தலைப்பு: பக்தி இலக்கியங்களும் சிற்றிலக்கியங்களும்; பக்தி இலக்கியங்களைக் கற்றதன் மூலம் மாணவர்கள் சமயக் கருத்துகளைஅறிந்து,அதன் நெறிகளைஉணர்ந்துகொள்கின்றனர். இறைவழிபாட்டின் மூலம் மனிதமனம் பக்குவமாவதைஉணர்ந்து,மனம் அமைதிபெறுகின்றனர். சிற்றிலக்கியங்களைக் கற்றதன்

மூலம்,தனிமனிதனின் எண்ணங்களையும் உணர்வுகளையும் பிரதிபலிக்கும் வகையில் தொடர்ந்துபாடல்கள் இயற்றபபட்டிருப்பதால்,எளியமக்களையும் முதன்மைப் படுத்தி இலக்கியம் படைக்கப்பட்டிருப்பதைஉணர்ந்துகொள்கின்றனர். இலக்கியவரலாற்றின் வழி பக்தி இலக்கியங்கள்,சிற்றிலக்கியங்கள் தோற்றம்,வளர்ச்சி,வரலாற்றினைத் தெரிந்துகொள்கின்றனர்.

நான்காம் பருவம்

தலைப்பு: சங்க இலக்கியம் மற்றும் படைப்பிலக்கியப் பயிற்சி சங்க இலக்கியச் செய்யுள்களைக் கற்றதன் மூலம் சங்ககாலமக்களின் காதல்,வீரம்,பண்பாடு,சமயம்,வழிபாட்டுமுறை,வாழ்வியல் முறை,பழக்கவழக்கம்,நாட்டு வளம்,மன்னனின் ஆட்சிமுறை,ஈகைக் குணம் போன்றவற்றைத்தெரிந்துகொள்கின்றனர்.சங்க இலக்கியவரலாற்றைக் கற்றதன் வழி; சங்ககால இலக்கியங்களின் தோற்றம்,வளர்ச்சி,வரலாற்றினைத் தெரிந்துகொள்கின்றனர்.படைப்பிலக்கியப் பயிற்சிபெற்றதன் வழிவெண்பா,ஆசிரியப்பா,கலிப்பா,வஞ்சிப்பாபோன்றபாவகைகளில் மரபுக்கவிதை இயற்றும் ஆற்றலைப் பெற்று,மாணவர்கள் தங்கள் கற்பனைத் திறனைக் கையாண்டுமரபுக்கவிதைகளைப் படைக்கின்றனர். இதன்மூலம் மாணவர்களின் படைப்பாக்கத் திறன் சமூகத்தில் வெளிப்படுத்தப்படுகிறது.

SGC

SARADHA GANGADHARAN COLLEGE

Course Outcome M.Sc(Maths)

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

SARADHA GANGADHARAN COLLEGE

(Affiliated to Pondicherry University)

(Recognized by UGC under Section 2(f) of the UGC Act 1956 as PG Institution)

COURSE OUTCOMES

DEPARTMENT OF M.SC MATHEMATICS

SEMESTER: I

Subject Name: ADVANCED ALGEBRA

In this course the students will

CO1:	Understand basic definitions of Groups axioms, Subgroup generated by subsets of a group
CO2:	Understand basic definitions of Quotient groups and Group Actions
CO3:	Understand Compact space and its characteristics.
CO4:	Characterize direct, semi-direct products and abelian groups.
CO5:	Define Euclidean domains and prove related theorems

Subject Name: REAL ANALYSIS – I

In this course the students will

CO1:	Understand the basic definition of compact sets, connected sets, sequences.
CO2:	Solve problems on root and ratio tests and define addition and multiplication of series.
CO3:	Understand limits of function, continuous function, Monotonic function.
CO4:	Find derivatives of higher order and vector-valued function.
CO5:	Understand the definition and existence of integral, properties and related theorems.

Course Outcome M.Sc(Maths)

Subject Name: GRAPH THEORY

In this course the students will

CO1:	Understand the operations on Graphs.
CO2:	Get an idea of Cut sets and Connectivity.
CO3:	Understand Coverings, Matchings in Bipartite Graphs and prove related theorems.
CO4:	Define Coloring, Girth and prove related theorems.
CO5:	Understand Planarity and prove related theorems.

Subject Name: DIFFERENCE EQUATIONS

In this course the students will

CO1:	Understand the Derivation, Operators and Factorial polynomials.
CO2:	Understand general first-order equation.
CO3:	Understand Fundamental theorem for homogeneous equations.
CO4:	Understand Sturm Liouville difference equation.
CO5:	Construct a difference equation.

SEMESTER: II

Subject Name: GALOIS THEORY

In this course the students will

CO1:	Understand basic definitions of Polynomial rings, Irreducible criteria
CO2:	Study basic definitions of Algebraic Extensions
CO3:	Analyze Separable and inseparable extensions.
CO4:	Prove the fundamental theorem of Galois Theory .
CO5:	Formulate cyclotomic extensions and abelian extensions over Q.

Subject Name: REAL ANALYSIS-II

In this course the students will
Course Outcome M.Sc(Maths)

CO1:	Understand the basics of Bounded variation, Metric Spaces, Nowhere dense sets.
CO2:	Find uniform convergence Iterated limits, Equi-continuous Families of Functions
CO3:	Solve Exponential, Trigonometric and Logarithmic Functions
CO4:	Define Linear Transformation, the Contraction Principle and prove related theorems.
CO5:	Analyze implicit Function, and theorems on Ranks and Determinants.

Subject Name: COMPLEX ANALYSIS

In this course the students will

CO1:	Understand basic definitions of Analytic functions and Luca's Theorem.
CO2:	Define Linear transformations, Cross ratio and construct elementary conformal mappings.
CO3:	Perceive Cauchy's theorem for rectangle and disc.
CO4:	Understand basic definitions of Zeros and poles.
CO5:	Understand Definite integrals, Taylor's and Laurent's series.

Subject Name: FLUID MECHANICS

In this course the students will

CO1:	Understand the basic laws of mass and energy.
CO2:	Define the Concepts of circulation of fluid in incompressible flows.
CO3:	Interpret Navier- Stokes equations and Decomposition concepts.
CO4:	Understand the flows in Potential and its paradox.
CO5:	View on Boundary layers and prove related theorems.

Subject Name: DISCRETE MATHEMATICS

In this course the students will

CO1:	Understand the basic definition of Posets and lattices with examples.

Course Outcome M.Sc(Maths)

CO2:	Study special lattices and their properties.
CO3:	Understand Atoms, Boolean functions, canonical forms of Boolean expressions.
CO4:	Form Logic gates and solve K-Maps.
CO5:	Understand Directed graphs and related theorems.

SEMESTER: III

Subject Name: TOPOLOGY

In this course the students will

CO1:	Understand definitions of sets, Lattices, Metric Spaces.
CO2:	Understand basic definitions of Topology, Separability, Countability.
CO3:	Elaborate Compact space and its characteristics.
CO4:	Define Sequential compactness, Hausdroff space.
CO5:	Understand connected space and prove related theorems.

Subject Name: LEBESGUE MEASURE THEORY

In this course the students will

CO1:	Understand the basic definition of σ - algebras and examples.
CO2:	Interpret Measurable functions with examples and related theorems.
CO3:	Understand Lebesgue integral of non- negative measurable functions, Lebesgue integral of integrable functions and related theorems.
CO4:	Compare Riemann and Lebesgue integration and prove theorem on almost everywhere differentiable monotonically increasing functions.
CO5:	Understand Absolutely continuous functions, their examples and properties and Characterize absolutely continuous functions as indefinite integrals.

Subject Name: ORDINARY DIFFERENTIAL EQUATIONS

In this course the students will

Course Outcome M.Sc(Maths)

CO1:	Understand Qualitative properties of solutions, Eigen values and Eigen functions and vibrating string.
CO2:	Solve Series solutions of first and second order equations.
CO3:	Construct Legendre polynomials, Bessel functions and their properties.
CO4:	Solve Homogeneous linear system with constant coefficients.
CO5:	Find the method of successive approximations and prove Picards's theorem.

Subject Name: INTEGRAL EQUATIONS

In this course the students will

CO1:	Classify integral equation, IVP for ODE
CO2:	Define the Concepts of BVP for elliptic PDE and Abel's problem.
CO3:	Solve Singular boundary value problems.
CO4:	Understand Degenerate kernels and a different approach .
CO5:	Prove theorems on Newmann series.

Subject Name: ALGORITHMIC GRAPH THEORY

In this course the students will

CO1:	Understand the basics of Graphs and notations, Operations on graphs.
CO2:	Define Search methods ,groups, fields and vector spaces
CO3:	Understand Fundamental cut set, Connectivity and separability.
CO4:	Define Incidence matrix, Cycle matrix, cut set matrices and Path matrix
CO5:	Analyze the shortest path problem using algorithm

SEMESTER: IV

Subject Name: FUNCTIONAL ANALYSIS

In this course the students will

Course Outcome M.Sc(Maths)

CO1:	Understand the basics of normed Linear Spaces, Dual Spaces.
CO2:	Characterize finite dimensional normed linear spaces and prove related theorems.
CO3:	Prove Hahn-Banach theorem and related theorems
CO4:	Understand Orthonormal sets, Orthonormal basis and prove related theorems.
CO5:	Prove theorems on Separable Hilbert spaces, Orthogonal projections.

Subject Name: LINEAR ALGEBRA

In this course the students will

CO1:	Understand the basic of Linear Transformation, Invariant subspace and matrices.
CO2:	Able to find the Nilpotent transformation, index and invariance.
CO3:	Formulate Jordan forms, Modules and related theorems
CO4:	Understand rational canonical form, trace, transpose and determinants.
CO5:	Analyze Normal transformations and Real Quadratic forms.

Subject Name: PARTIAL DIFFERENTIAL EQUATIONS

In this course the students will

CO1:	Understand the basic of first order PDE, Non-linear first order PDEs.
CO2:	Classify Second order PDE, and can solve Linear PDE with constant solutions.
CO3:	Prove one dimensional wave equation, find adjoint operators.
CO4:	Derive Laplace equation, Poisson equation, Neumann problems for a rectangle and circle.
CO5:	Define Heat Conduction Problem and classify n-variables.

Subject Name: NUMERICAL ANALYSIS FOR ORDINARY DIFFERENTIAL EQUATIONS

In this course the students will

Course Outcome M.Sc(Maths)

CO1:	Interpret the concepts of Euler,Trapezoidal and Theta method.
CO2:	Understand order and convergence of Adams - Bashforth method
CO3:	View on Explicit and Implicit Runge Kutta scheme.
CO4:	Understand A-stability of RK and multistep methods.
CO5:	Solve the errors in Runge Kutta method.

Course Outcome M.Sc(Maths)

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome-MCOM

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

SARADHA GANGADHARAN COLLEGE

(Affiliated to Pondicherry University)

(Recognized by UGC under Section 2(f) of the UGC Act 1956 as PG Institution)

NAAC Accredited Institution, ISO-9001:2015 Certified Institution

PG-Department of Commerce

Program Outcomes

➢ To acquaint a student with conventional as well as contemporary areas in the discipline of Commerce.
➢ To enable a student well versed in national as well as international trends.
➢ To enable the students for conducting business, accounting and auditing practices, role of regulatory bodies in corporate and financial sectors nature of various financial instruments.
➢ To provide in-depth understanding of all core areas specifically Advanced Accounting, International Accounting, Management, Security Market Operations and Business Environment, Research Methodology and Tax planning.

Program Specific Outcomes

After the completion of the M.Com Course, a student is able

➢ For pursuing research in their chosen areas.
➢ For teaching in Schools and Colleges after qualifying requisite tests.
➢ For working as data analyst.
➢ To work as investment consultants after a brief internship in suitable organizations absorbed in Banking and Insurance sector as executives

Course Outcome – MCOM

Course Objectives and Outcomes

M.Com Semester – I

Subject: Management Concepts and Organization Behavior
Subject Code: Major I
Periods per week: 6

Duration of Period: 45 Minutes

Course Objectives

➢ To enable the students analyze the implementation of different functions of management.
➢ To develop an understanding regarding the role of leaders in decision making process in an organization.
➢ To help students get an insight into the behavior of individuals and groups in an organization.
➢ To apprise the students regarding the impact of important developments on organization behavior.
➢ To assess the role of emotional intelligence in an organization.

Course Outcome – MCOM

Course Outcomes
- ➢ Ability to execute managerial tasks of planning, organizing and controlling.
- ➢ Understanding of different styles of leadership and its impact on decision making process.
- ➢ In-depth understanding of emotional labour and different types of emotions.
- ➢ Ability to analyze challenges and opportunities in the field of organization behavior.

Subject: Business Environment
SubjectCode: Major
Periods per week: 6

Duration of period: 45 minutes

Course Objectives

- ➢ To give an insight into meaning of business environment and its components.
- ➢ To familiarize with Economic System & its types.
- ➢ To enable the students to analyze Positive and Negative impact of Liberalization, Privatization and Globalization in Indian economy.
- ➢ To make the students aware about provisions of FEMA, The Consumer Protection Act 1986, The Environment Protection Act 1986 and various regulatory policies of Indian Government.
- ➢ To describe implication of Deficit Financing, Disinvestment of Public enterprises and Demonetization etc. in Indian Economy.

Course Outcomes
- ➢ Skill to identify and differentiate various Micro and Macro factors affecting functioning of Business.
- ➢ Ability to analyze Indian Economy in light of changing government regulatory policies.
- ➢ Understanding of the targets and priorities of five years plans.
- ➢ Ability to file complaint against unfair trade practices under Consumer Protection Act.
- ➢ Familiarization with the objectives and strategies in Economic planning with special reference to Planning Commission and NITI Aayog.

Course Outcome – MCOM

Subject: Accounting for Managerial Decision

Subject Code: Major III

Periods per week: 6

Duration of Period: 45 Minutes

Course Objectives

- ➢ To introduce a separate branch of accounting i.e. Management Accounting and its relevance in a business organization.
- ➢ To enable the students to understand Managerial behavior, Control structure and Control Process under different circumstances.
- ➢ To understand the applicability of certain contemporary techniques of management
- ➢ **i.e. Target Costing, Value Chain Analysis, Activity Based Costing etc.**
- ➢ To familiarize the students about the various measures of segment performance evaluation like Balance Scorecard, Economic Value Added.
- ➢ To enable the students to understand objectives of managerial reporting and reporting requirements at different levels of management.

Course Outcomes

- ➢ Familiarization with the Management Control Systems.
- ➢ Ability to understand Managerial Behaviour and Control Structure prevalent under varied business environment.
- ➢ Skill to evaluate the Segment Business Units.
- ➢ Familiarization with Contemporary issues in management.
- ➢ Clarity about the reporting requirements of management.

Subject: Statistical Methods

Subject Code: Major IV

Periods per week: 6

Duration of period: 45 minutes

Course Objectives

- ➢ To bring out clearly the importance of statistics in solving different research problems.
- ➢ To enable the students in-depth understanding of the concepts of probability, sampling, correlation and their applicability.
- ➢ To help the students gain a comprehensive view of the usage and importance of SPSS in solving different statistical problems.

Course Outcome – MCOM

Course Outcomes
- ➢ Development of logical reasoning ability in students.
- ➢ Knowledge about the applicability of various parametric and non-parametric tests.
- ➢ Ability to use SPSS to solve statistical problems.
- ➢ Ability to make decisions under uncertain business situations.

Subject: Human Resource Management
Subject Code: Major V
Periods per week: 6

Duration of period: 45 minutes

Course Objectives

- ➢ To enable the students to evaluate the process of recruitment and selection.
- ➢ To impart knowledge for developing an organization's remuneration plans.
- ➢ To analyze the changes in human resource practices.
- ➢ To design and implement different methods for training of human resources.
- ➢ To apprise the students regarding various methods of collecting job analysis information.

Course Outcomes
- ➢ Capability to understand employee recruitment and selection process.
- ➢ Understanding of different types of remuneration plans and their significance.
- ➢ Capability to evaluate different training programs and understanding of their limitations.
- ➢ Knowledge regarding the developing role of human resource management in the globalized world.

M.Com Semester – II

Subject: Managerial Economics
Subject Code: Major VI
Periods per week: 6

Duration of Period: 45 Minutes

Course Objectives

Course Outcome – MCOM

➢ To help the students form a clear idea of Managerial Economics.
➢ To enable the students understand determination of price under different market forms.
➢ To enable the students understand the situation of consumer and producer equilibrium.
➢ To describe the concept of Inflation and its consequences in an economy.
➢ To illustrate the calculation of national income.

Course Outcomes

➢ Ability to forecast demand in light of changing circumstances and to formulate business plans.
➢ Ability to chalk out Business Policies.
➢ Knowledge about Profit Planning and control.
➢ Skill to analyze effects of Government Policies.

Subject: Advanced Financial Accounting
Subject Code:
Periods per week: 6

Duration of Period: 45 Minutes

Course Objectives

➢ To give a broad view of the provisions to be followed for the preparation of final accounts of companies as per Companies Act 2013.
➢ To give a detailed view of legal provisions regarding calculation of managerial remuneration.
➢ To explain the concept of divisible profits and its implications in various accounting procedures leading to preparation of Final Accounts if a Company as per Company Act.
➢ To give a comprehensive view of legal provisions governing audit of Companies and its various kinds.

Course Outcomes

➢ Ability to calculate Goodwill, evaluate shares adopting different methods and preparation of final accounts of Holding Companies.
➢ Understanding of the provisions regarding amalgamation, observation and internal reconstruction of companies.

Course Outcome – MCOM

Subject: Marketing Management

Subject Code: VIII

Periods per week: 6

Duration of period: 45 minutes

Course Objectives

➢ To develop understanding about holistic nature of Marketing.
➢ To enable the students understand the techniques to scan Marketing Environment.
➢ To make students understand the different buying behavior of consumers.
➢ To familiarize the students about the techniques of Market segmentation, Product Pricing, Promotion, Packaging and distribution.
➢ To familiarize with the importance of social responsiveness in marketing decisions.

Course Outcomes

➢ Familiarization with Marketing Concepts and Philosophies.
➢ Ability to understand the changing Marketing Environment.
➢ Knowledge of different consumer and business buying behaviors.
➢ Familiarization with product related decisions.

Subject: Financial Management

Subject Code: Major IX

Periods per week: 6

Duration of period: 45 minutes

Course Objectives

➢ To introduce the students about the importance of Finance Management for a business.
➢ To enable them to understand the various modes and techniques of managing the financial resources of an organization.
➢ To know about the various factors to be considered while planning for financial policies.
➢ To acquaint the students regarding the various types of decisions taken by financial managers in current competitive environment.
➢ To enable students to select an investment project out of alternative investment proposals.

Course Outcomes

➢ Skill to manage financial resources of a company.
➢ Knowledge about the various sources of finance available to businessmen these days.

Course Outcome – MCOM

> ➢ Ability to select an investment proposal by analyzing the compounded and discounted value of money invested.

Subject: Entrepreneurial Development and Small Business Management
Subject Code: Major X
Periods per week: 6

Duration of period: 45 minutes

Course Objectives

> ➢ To realize the importance of entrepreneurship   qualities required for small business management
> ➢ To introduce the students about the importance of Entrepreneurship
> ➢ To enable them to understand the various concepts of MSME

Course Outcomes
> ➢ Skill to manage and run an enterprise on its own
> ➢ Knowledge about the various sources of finance available to businessmen these days.
> ➢ Ability to select an investment proposal by analyzing the compounded and discounted value of money invested.

M.Com Semester – III

Subject: Financial Markets and Services
Subject Code: Major XI
Periods per week: 6

Duration of period: 45 minutes

Course Objectives

> ➢ To introduce the students about Financial System prevalent in India.
> ➢ To impart knowledge about the structure of development banks in India.
> ➢ To understand the central banking operations, functions of NBFCs, Factoring and Venture capital companies in India.
> ➢ To learn about the clearing procedure of stock exchanges in India.
> ➢ To enable the students to understand the progress of Government securities markets, Treasury Bill market, Commercial Paper Market and Certificate of Deposits Market in India.

Course Outcome – MCOM

Course Outcomes
- ➢ Knowledge of the progress of various components of Indian financial system.
- ➢ Clarity of stock market operations and the clearing and settlement procedures of stock exchanges.
- ➢ Detailed understanding about the Banking Structure of the country and its recent developments.

Subject: Economic Legislation

Subject Code: Major XII

Periods per week: 6

Duration of period: 45 minutes

Course Objectives

- ➢ To provide students knowledge on various economic legislations required for   running a business organization
- ➢ To introduce the students about various legislation prevalent in India.
- ➢ To impart knowledge about the structure of development banks in India.
- ➢ To understand the Foreign Exchange Management Transactions
- ➢ To learn about the Intellectual Property Act in India.

Course Outcomes

- ➢ Knowledge on various economic legislation prevalent
- ➢ Clarity of foreign Exchange transactions and the clearing and settlement procedures.
- ➢ Detailed understanding about the Intellectual Propertyand its recent developments

Subject: Corporate Tax Planning

Subject Code:

Periods per week: 6

Duration of period: 45 minutes

Course Objectives

- ➢ To make the students aware of the Income Tax laws prevalent in the

Course Outcome – MCOM

country related to Corporate Sector.
➢ To gain knowledge about the role of tax planning in managerial decision making.
➢ To familiarize with the relevant provisions and procedure to compute total income of a company.
➢ To understand how the Corporate Tax Laws can be used for tax planning.

Course Outcomes
➢ Ability to identify the difference between Tax Evasion, Tax Planning and Tax Avoidance.
➢ Understanding of various deductions, rebates and reliefs to reduce the taxable income and tax liability.

Subject: Advertising and Sales Promotion
Subject Code:
Periods per week: 6

Duration of each period: 45 minutes

Course Objectives

➢ To introduce the various principles adopted for advertising and marketing different products.
➢ To enable students to create and manage media campaigns.
➢ To learn ways to engage and communicate with clients and target audience.
➢ To create awareness with the legal, ethical and social responsibility of advertisers.
➢ To guide the students to specialize in different areas of advertising.

Course Outcomes
➢ Ability to study market trends and consumer behavior.
➢ Understanding of sales milestones, sales situations, selling styles and sales strategies followed by different business houses.
➢ Ability to connecting advertising strategies and organizational goals with the moral code of conduct in advertising.
➢ Skill to targeting new business and exploit new areas of opportunity.

Subject: Research Methodology
Subject Code:
Periods per week: 6

Duration of period: 45 minutes

Course Objectives

Course Outcome – MCOM

➢ To introduce the concept of Research and Research Methodology.
➢ To enable the students to understand the Quantitative and Qualitative Methods for conducting research.
➢ To make students understand about Tabular and Graphical Description of Data.
➢ To enable the students to use SPSS for solving the research data.
➢ To enable the students to understand the Structure and Components of Research Report.
➢ To enable the students to write the research report using hypothetical data.

Course Outcomes

➢ Familiarization with Research and research problems.
➢ Understanding of the Quantitative and Qualitative Methods of research.
➢ Ability to represent data in tabular as well as graphical manner.
➢ Skill to write Research paper.

M.Com Semester - IV

Subject: Strategic Management
Subject Code:
Periods per week: 6

Duration of Period: 45 Minutes

Course Objectives

➢ To describe the role of strategic management in the success of successful companies.
➢ To enable the students understand the components which formulate a strategic intent.
➢ To make students understand and formulate different strategies at business level and corporate level.
➢ To discuss the role of corporate governance and social responsibility in the strategic management of an organization.

Course Outcomes

➢ Familiarization with the strategic management process.
➢ Understanding about the techniques to scan an environment and the role of environment scanning in hurdle less strategic management of an organization.
➢ Understanding about the equal importance of strategy formulation and strategy implementation.
➢ Clarity about the strategies followed by different companies in the corporate world.

Course Outcome – MCOM

Subject: E Commerce

Subject Code:

Periods per week: 6

Duration of Period: **45 Minutes**

Course Objectives

> ➢ To impart knowledge about the relevance of E-Commerce in current competitive environment.
> ➢ To make the students aware about the common legal, ethical and tax issues involved in e-commerce.
> ➢ To develop understanding of the working of online shopping and e-payment.
> ➢ To enable the students how to use various tools to build a dynamic website.
> ➢ To help them learn how to evaluate e-commerce websites using major e-commerce revenue models.

Course Outcomes

> ➢ Ability to start up and operate e-commerce website.
> ➢ Familiarization with online payment services and different cyber laws.
> ➢ Ability to understand customer relationship life.
> ➢ Knowledge of cyber world and scope of cyber laws in E-commerce.
> ➢ Skill to take managerial decisions keeping in view the Income Tax Rules.
> ➢ Knowledge of Double Taxation Avoidance Agreement.

Subject: Corporate Reporting Practices

Subject Code: MAJOR XVI

Periods per week: 6

Duration of Period: 45 Minutes

Course Objectives

> ➢ To provide students knowledge on various accounting standards applicable in Corporate business
> ➢ To make the students aware about concepts relating to accounting and reporting.
> ➢ To develop understanding of the working of GAAP and IFRS.
> ➢ To enable the students how to use various tools used in corporate reporting.
> ➢ To help them learn how to do corporate disclosure.

Course Outcomes

> ➢ Ability to account and report the accounts to corporate world.
> ➢ Familiarization with various accounting standards.
> ➢ Knowledge of corporate reporting procedures.

Course Outcome – MCOM

➢ Skill to take managerial decisions keeping in view of the various corporate laws.
➢ Knowledge of corporate disclosure practices.

Subject: Brand Management
Subject Code: Optional
Periods per week: 6

Duration of Period: **45 Minutes**

Course Objectives

➢ To introduce the students about various brand related issues viz. Brand Management, Brand Equity and Brand Loyalty.
➢ To enable the students to formulate various branding strategies.
➢ To familiarize the students about Qualitative and Quantitative Research techniques for measuring Brand Performance.
➢ To understand different Retail formats and retail locations.
➢ To make the students understand intricacies of Retail store design and Visual Merchandising and Retail Supply Chain Integration.

Course Outcomes

➢ Familiarization with Brand Management, Brand Equity and product branding strategies.
➢ Ability to measure Brand Performance using Research techniques.
➢ Understanding of various Retail formats and Retail locations.
➢ Ability to integrate Retail Supply Chain.

Subject: Services Marketing
Subject Code: Optional
Periods per week: 6
Course Objectives

➢ To impart knowledge regarding customer expectations from services and their perceptions about it.
➢ To apprise the students regarding the concept of service recovery paradox.
➢ To provide knowledge regarding an effective services marketing research program.
➢ To make the students understand different methods for pricing of services.
➢ To enable the students understand different models to evaluate service quality.

Course Outcomes

➢ Capability to evaluate the suitability of different pricing methods for

Course Outcome – MCOM

services.
➢ Understanding of the roles of employees and customers in service delivery.
➢ Capability to analyze different service quality models.
➢ In-depth understanding of impact of service failure and recovery.
➢ Ability to analyze and interpret marketing research findings.

Course Outcome – MCOM

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome
M.Sc(Computer Science)

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

COURSES OUTCOME

M.Sc. COMPUTER SCIENCE

BRIDGE COURSE

Semester I

DATA STRUCTURES AND ALGORITHMS   **SUBJECT CODE: MSCB001**

In this course, the students will

CO1:	To understand Data Structures used for Programming and Manipulation of Data.
CO2:	To understand the basics of Design and Analysis of Algorithms.

OPERATING SYSTEMS   **SUBJECT CODE: MSCB002**

In this course, the students will

CO1:	To learn basic Functionality of OS..
CO2:	To understand the various management activities of OS.

PROGRAMMINGIN C   **SUBJECT CODE :MSCB003**

In this course, the students will

CO1:	To develop C Programs using basic programming constructs.
CO2:	To develop C programs using arrays and strings
CO3:	To develop applications in C using functions, pointers and structures
CO4:	To do input/output and file handling in C

OBJECT ORIENTED PROGRAMMING USING JAVA   **SUBJECT CODE: MSCB004**

In this course, the students will

CO1:	To learn the basic concepts of OOP.
CO2:	To develop Java and Applets Programs.

Course Outcome – M.Sc(CS)

Semester I

DESIGN AND ANALYSIS OF ALGORITHMS   SUBJECT CODE: MSCS 411

In this course, the students will

CO1:	Ability to design efficient algorithms using various algorithm designing strategies.
CO2:	Ability to classify the problem and apply the appropriate design strategy to develop algorithm.

ADVANCED COMPUTER ARCHITECTURE   SUBJECT CODE: MSCS 412

In this course, the students will

CO1:	Ability to address the design challenges in the evolution of computer architectures.
CO2:	Ability to address the parameters in the designing of pipeline and parallel computer architectures.

AUTOMATA THEORY AND FORMAL LANGUAGES   SUBJECT CODE: MSCS 413

In this course, the students will

CO1:	To understand various Computing models like Finite State Machine, Pushdown Automata, and Turing Machine.
CO2:	To understand Decidability and Undecidability of various problems

PROBABILITY AND STATISTICS   SUBJECT CODE: MSCS 431

In this course, the students will

CO1:	To Understand concepts of discrete probability, conditional probability, independence, and can apply these concepts to engineering applications
CO2:	To understand mathematical descriptions of random variables including probability mass functions (PMFs), cumulative distribution functions (CDFs), probability distribution functions (PDFs), conditional mass, conditional distribution and conditional density functions

COMMUNICATION SKILLS   SUBJECT CODE: MSCS 414

In this course, the students will

CO1:	To Understand concepts of basic communication skills such as listening and speaking.

Course Outcome – M.Sc(CS)

CO2:	To understand Interview techniques, Body language, Management Communication Relationships and Presentation.

LAB:I ALGORITHMS LAB   **SUBJECT CODE: MSCS 415**

In this course, the students will

CO1:	Able to analyze performance of algorithms and the ability to get them implemented.
CO2:	Ability to implement various algorithms and compute their time complexity

LAB: II COMPUTER ARCHITECTURE LAB   **SUBJECT CODE: MSCS 416**

In this course, the students will

CO1:	Able to Understand Computer Architecture components and the ability to implement.
CO2:	To implement designing of parallel computer architectures using a simulation software

Semester II

MODERN OPERATING SYSTEMS   **SUBJECT CODE: MSCS 421**

In this course, the students will

CO1:	Ability to analyze the various device and resource management techniques for timesharing and distributed systems.
CO2:	Ability to know the components and management aspects of Real time, Mobile operating systems

ADVANCED DATABASE SYSTEMS   **SUBJECT CODE: MSCS 422**

In this course, the students will

CO1:	To acquaint the students with the use of current relational database systems.
CO2:	Ability to build a solid foundation for advanced studies in database area.

Course Outcome – M.Sc(CS)

OPTIMIZATION TECHNIQUES **SUBJECT CODE: MSCS 432**

In this course, the students will

CO1:	To Understand the fundamental concepts of Optimization Techniques.
CO2:	Ability to apply the concepts of various classical and modern methods for constrained and unconstrained problems in both single and multivariable problems.

SKILL ENHANCEMENT- I   DATA MINING TOOLS **SUBJECT CODE: MSCS 534**

In this course, the students will

CO1:	To understand the basic concepts and techniques of Data Mining and to develop skills of using recent data mining software for solving practical problems
CO2:	Ability to use the tools for data analysis.

LAB III: OPERATING SYSTEM LAB **SUBJECT CODE: MSCS 423**

In this course, the students will

CO1:	Able to understand the design issues associated with Operating Systems.
CO2:	Ability to apply the concepts of various scheduling algorithms in Operating System.

LAB IV: DATABASE SYSTEMS LAB **SUBJECT CODE: MSCS 424**

In this course, the students will

CO1:	Able to understand the Relational data base concepts using Mysql & Sql sever
CO2:	Ability to implement WEKA Data mining tool.

Course Outcome – M.Sc(CS)

Elective –I: CLOUD SECURITY   **SUBJECT CODE: MSCS 447**

In this course, the students will

CO1:	Ability to understand the processes involved in cloud security.
CO2:	Acquiring skills to implement virtualization systems and enhancing virtualization-based security.

Elective –II: INTRODUCTION TO MACHINE LEARNING   **SUBJECT CODE: MSCS 585**

In this course, the students will

CO1:	Ability to explore logic for solving various AI problems.
CO2:	Ability to Understand various probabilistic and graphical models in Machine leaning and experiment them.

Semester III

ADVANCED COMPUTER NETWORKS   **SUBJECT CODE: MSCS 511**

In this course, the students will

CO1:	Ability to design the new protocols for modern networks.
CO2:	Ability to get familiarized with next generation networks.

Course Outcome – M.Sc(CS)

WEB TECHNOLOGY   **SUBJECT CODE: MSCS 512**

In this course, the students will

CO1:	To understand and program features of web programming languages
CO2:	Ability to design an innovative application for web.

LINEAR PROGRAMMING   **SUBJECT CODE: MSCS 433**

In this course, the students will

CO1:	Be to able to apply the concepts in the many real time applications and understand linear programming problem ,differentiate between LPP & Non-LPP problems.
CO2:	Apply the concepts in the many real time applications.

Elective –III: PYTHON PROGRAMMING FOR DATA ANALYTICS

SUBJECT CODE: MSCS 562

In this course, the students will

CO1:	Understand the data aggregation and grouping concepts, Leveraging web scraping in Python.
CO2:	Have the Ability to do data analytics using python programs.

Course Outcome – M.Sc(CS)

Elective –IV: Internet of Things   **SUBJECT CODE: MSCS 577**

In this course, the students will

CO1:	Understand Real World IoT Design Constraints, Industrial Automation and Commercial Building Automation in IoT.
CO2:	Ability to develop small applications using IoT.

Elective –V: INTRODUCTION TO ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEMS

SUBJECT CODE: MSCS 581

In this course, the students will

CO1:	To Understand the basic concepts of AI and expert systems.
CO2:	Ability to explore logic for solving various AI problems.

Outreach Programme (Conferences/Symposiums/Technical Meets / Workshops/Etc..)

SUBJECT CODE: MSCS 513

In this course, the students will

CO1:	To provide an opportunity for students to present papers in conferences.
CO2:	To enable students to get acquaintance with latest software tools

LAB V: WEB TECHNOLOGY AND COMPUTER NETWORKS LAB

SUBJECT CODE: MSCS 514

In this course, the students will

CO1:	will be able to design and develop a Web Applications
CO2:	To establish and Configure Computer Networks.

Course Outcome – M.Sc(CS)

Semester IV

Project Seminar, Project Work, Project Report & Viva-Voce   SUBJECT CODE: MSCS 523

In this course, the students will

CO1:	Be able to implement an IEEE paper for project work.
CO2:	Will be able to present their project paper, report its outcome and get exposed to a Viva-Voce Examination.

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome-Hindi

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

SARADHA GANGADHARAN COLLEGE

COURSE OUTCOMES

FOR ALL UG COURSES

SUBJECT NAME: FOUNDATION HINDI – 1 (MIL-HINDI)   SUBJECT CODE: LH1(1)

In this course the students will

CO1	Understand the importance of Hindi language for official communication
CO2	Understand the importance of the Technical words and its application in various fields.
CO3	Understand the social consciousness of famous story writers like Premchand, Jayashankar Prasad, Usha Priyamvada and many , by learning their short stories
CO4	Learn the importance of Hindi Grammar and its usage for effective communication
CO5	Understand the different types of stories in Hindi literature.

SUBJECT NAME: FOUNDATION HINDI- 2(MIL- HINDI)   SUBJECT CODE:LH2(1)

CO1	Understand the Importance of Drama in Hindi during Pre- Independence period.
CO2	Understand the origin of Hindi script Devanagari lipi and its uses
CO3	Demonstrate their understanding of synonyms,antonyms, a word for many words in active learning
CO4	Learn to identify and rectify the grammatical errors in a sentence for effective communication

SUBJECT NAME : FOUNDATION HINDI-3 (MIL – HINDI)

SUBJECT CODE:LH3(1)

FOR II YEAR B.A(ENG),B.SC(MATHS) & B.SC(PHY)

In this course the students will

CO1	Learn the different types of Prose in Hindi literature
CO2	Understand the importance of Prose learning for the social-cultural development of every individual
CO3	Learn the importance of Hindi learning as a citizen of India
CO4	Understand the different usage and forms of Hindi as National language, Official language and also its various forms in different Media for its effective application accordingly.
CO5	Understand the social consciousness of Hindi writers by learning their works

SUBJECT NAME : FOUNDATION HINDI-4(MIL-HINDI)
SUBJECT CODE:LH4(1)

CO1	Learn the importance of poetry learning
C02	Understand the types of poetry in Hindi literature
CO3	Learn the social consciousness of Hindi poets in various periods (Ancient – Modern)
CO4	Understand the importance of translation from English and Hindi and vice - versa
CO5	Learn to translate from Hindi to English and vice- versa

Course Outcome - Hindi

Course Outcome - Hindi

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome-French

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

COURSES OUTCOMES

UG Degree

Semester I

FRENCH – IB.A. , B,Sc   **PAPERCODE: LFR111**

In this course, the students will follow the main recommendations of the common European frame of reference radically appropriate to the basic structure and the essential lexicon of French and therefore be able to quickly deal with the routines of everyday life

Unit 1	The first contacts, Introducing oneself and others
Unit 2	Education system practice in France, means of transport and shops
Unit 3	French life style , telephone services and Invitation

FRENCH – I (C) B.Com, B.Com (CS), BBA, BCA   PAPER CODE: LFR111 (C)

In this course the students are trained to communicate with real situations in day to day life.

Unit 1	Communication for buy materials
Unit 2	To take and give information

Semester II

FRENCH – II   B.A. , B,Sc   **PAPER CODE: LFR 121**

In this course, the students will follow the main recommendations of the common European frame of reference radically appropriate to the basic structure and the essential lexicon of French and therefore be able to quickly deal with the routines of everyday life

Unit 4	Festivals, Travel, Media
Unit 5	Climate, Routine, Paris, Francophone
Unit 6	Pet animals, First Works and Newspapers

FRENCH – II (C) B.Com, B.Com (CS), BBA, BCA   PAPER CODE: LFR121 (C)

In this course the students are trained to communicate with real situations in day to day life.

Unit 3	Speak about the place and object
Unit 4	Speak about others

Semester III

Course Outcome - French

FRENCH - III   B.A. , B,Sc   PAPER CODE: LFR 131

In this course the student will continue the book festival 1, in which it takes up some of the characteristics, mainly simple readable model, which allows the learner to immediately identify the different topics of the lesson which will help them to communicate as native speakers.

Unit 1	Rappels et Revisions
Unit 2	La vie au quotidien
Unit 3	Apparences et identite

Semester IV

FRENCH - IV   B.A. , B,Sc   PAPER CODE: LFR 141

In this course the student will continue the book festival 1, in which it takes up some of the characteristics, mainly simple readable model, which allows the learner to immediately identify the different topics of the lesson which will help them to communicate as native speakers.

Unit 4	Papotages et Reportages
Unit 5	Travail et projets
Unit 6	Reves et Regrets

Course Outcome - French

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome
B.Sc(Maths)

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

COURSE OUTCOMES

DEPARTMENT OF MATHEMATICS

B.SC MATHEMATICS

SEMESTER: I

Subject Name: Theory of Equations & Trigonometry   **Subject Code: MATH111**

In this course the students will

Unit 1	Determine the relations between the roots and coefficients and get skills in transforming equations in one form into another.
Unit 2	Find the solution of Cubic equations using Cardon's method, Trigonometrical method and Horner's Method. Also find the solution of Bi-quadratic equation using Ferrari method
Unit 3	Know De Moivre's theorem and its application, understand direct, inverse circular and hyperbolic functions
Unit 4	Understand Logarithm of a complex quantity and perform expansion of Sinθ, Cosθ Tanθ and power of Sinθ and Cosθ, in terms of functions of multiples of θ.
Unit 5	Know Gregory's series and express the summation of series.

Subject Name: Differential Calculus   **Subject Code: MATH 112**

In this course the students will

Unit 1	Acquire knowledge about Differential Calculus, nth derivative, trigonometrical transformations and formation of equations.
Unit 2	Find total differential coefficients, Euler's theorem, partial derivatives of a function of two functions. And get knowledge about the equations of tangent and normal, Taylor expansions of single and double variables.
Unit 3	Understand Maxima and Minima of two variables, Lagrange's method of undetermined multipliers, Angle of intersection of curves, sub tangent and sub normal.
Unit 4	Get knowledge about angle between the radius vector and tangent , angle between the intersection of two curves , Polar sub tangent

Course Outcome B.Sc(Maths)

	and sub normal.
Unit 5	Learn about Circle, radius and centre of curvature, Cartesian formula for radius of curvature and envelope.

SEMESTER: II

Subject Name: Analytical Geometry-3D   **Subject Code: MATH 121**

In this course the students will

Unit 1	Acquire knowledge about angle between 2 lines-projections, direction cosines, relation between the direction cosines of a straight line, the projection of line joining two points and the angle between the lines whose direction cosines are given.
Unit 2	Understand general equation, angle between two planes, length of perpendicular from a given point to a plane, equations of the plane bisecting the angle between two planes.
Unit 3	Know various forms of lines in three dimensional space and to find the shortest distance between two skew lines.
Unit 4	Get knowledge about Sphere with centre and radius, various types of equations of sphere.
Unit 5	Learn about a Cone with its vertex at the origin and know the various forms of equations of quadratic cone and circular cone.

Subject Name: Integral Calculus   **Subject Code: MATH 122**

In this course the students will

Unit 1	Get the skills of evaluating integrals by the method of substitution, integration of irrational algebraic functions and evaluation of definite integrals.
Unit 2	Find Integration by parts, Bernoulli's formula and reduction formula.
Unit 3	Evaluate double integral, changing the order of integration, double integral in polar coordinates and triple integral.
Unit 4	Learn about Jacobian, change of variables, transformation form Cartesian to Polar and Spherical coordinates.
Unit 5	Understand the properties, relation between Beta and Gamma functions and Recurrence formula.

Course Outcome B.Sc(Maths)

SEMESTER: III

Subject Name: Abstract Algebra   **Subject Code: MATH 231**

In this course the students will

Unit 1	Get knowledge about Group and subgroups and examples.
Unit 2	Understand a counting principle, Normal subgroups and Quotient Groups and know about Homomorphisms.
Unit 3	Know about Automorphisms, Cayley's theorem and Permutation groups.
Unit 4	Get knowledge about Ring, Ideal and quotients rings with examples.
Unit 5	Construct quotient groups using an integral domain.

Subject Name: Real Analysis-I   **Subject Code: MATH 232**

In this course the students will

Unit 1	Get knowledge about sets and elements, functions, Countability, and bounds.
Unit 2	Understand sequence ,Convergent ,Bounded , Operation on convergent sequence and Cauchy sequence
Unit 3	Know about Convergence and divergence, Series, convergence Tests and Summation By parts.
Unit 4	Get knowledge about Limit , Metric spaces and Limits in metric spaces.
Unit 5	Analyze the functions continuous at a point and metric space - Open sets and closed sets

Subject Name: Logic and Lattices   **Subject Code: MATH 233**

In this course the students will

Unit 1	Get knowledge about Connectives, truth table, tautologies and duality law
Unit 2	Understand a Normal forms, principal disjunctive normal forms and principal

Course Outcome B.Sc(Maths)

	conjunctive normal forms
Unit 3	Know Partially ordered set , minimal and maximal member and bounds
Unit 4	Get knowledge about Lattice , direct product and Special lattices
Unit 5	Construct Boolean algebra, Boolean functions ,karnaugh maps

SEMESTER: IV

Subject Name: Linear Algebra   **Subject Code: MATH 241**

       In this course the students will

Unit 1	Get knowledge about Vector spaces ,Elementary Concepts and subspaces
Unit 2	Understand Linear independence and Dual spaces
Unit 3	Know about Inner product spaces
Unit 4	Get knowledge about Algebra of Linear transformations and Characteristic roots.
Unit 5	Construct Matrices : Canonical forms and triangular forms

Subject Name: Real Analysis II   **Subject Code: MATH 242**

       In this course the students will

Unit 1	Get knowledge about More about open sets ,Connected , Bounded sets and totally bounded sets
Unit 2	Understand Compact metric spaces ,Continuous functions on compact metric Spaces , Continuity and Uniform continuity.
Unit 3	Know about Sets of measure zero, Definition, Properties and Existence of the Riemann integral
Unit 5	Study about Hyperbolic function ,The exponential function ,The logarithmic function, Taylor Theorem and L'Hopital's rule.

Subject Name: Vector Calculus   **Subject Code: MATH 243**

       In this course the students will

Unit 1	Get knowledge about Gradient of a scalar function, Divergence and Curl of a vector

Course Outcome B.Sc(Maths)

	function
Unit 2	Understand Vector identities ,Line integrals and related problems
Unit 3	Know about Surface integrals and Volume integrals
Unit 4	Get knowledge about Green's theorem and Stokes's theorem
Unit 5	Solve Gauss divergence theorem

SEMESTER: V

Subject Name: Complex Analysis – I   **Subject Code: MATH 352**

In this course the students will

Unit 1	Get knowledge about basic definitions of Complex numbers, Triangular inequality and roots Region in the complex plane
Unit 2	Understand Analytic functions, Limit , Derivatives and Cauchy Riemann equations
Unit 3	Know about Cauchy Riemann equations in polar form , Analytic functions and Harmonic functions.
Unit 4	Get knowledge about Elementary functions, Exponential function, Trigonometric functions and Hyperbolic functions
Unit 5	Solve Mapping by elementary functions

Subject Name: Operations Research-I   **Subject Code: MATH 353**

In this course the students will

Unit 1	Get knowledge about Mathematical formulation of LPP,Graphical,Simplex Method, Artificial variables Method and Two Phase Method
Unit 2	Understand Duality in LPP
Unit 3	Know about Transportation Problems
Unit 4	Get knowledge about Assignment Problems and Travelling Salesman Problems
Unit 5	Understand Game theory and various solving techniques

Subject Name: Ordinary Differntial Equations   **Subject Code: MATH 354**

In this course the students will

Course Outcome B.Sc(Maths)

Unit 1	Get knowledge about exact differential equations and Clairaut's form
Unit 2	Understand Linear Differential equations with constant and variable co-efficients.
Unit 3	Know about Method of Variation of parameters and Simultaneous Linear differential equations with constant coefficients
Unit 4	Get knowledge about Laplace transform, derivatives and integrals of transforms.
Unit 5	Solve Inverse Laplace transforms and solution of linear ODE of second order with constant coefficients.

Subject Name: Programming using scilab-theory   Subject Code: MATH 357

In this course the students will

Unit 1	Get knowledge about Scilab, Creating Real Variables and Elementary mathematical functions
Unit 2	Understand Matrices ,Operations and more on elementary functions
Unit 3	Know about Looping and branching , Managing output arguments and Debugging functions.
Unit 4	Get knowledge about Plotting , 2D plot and Contour plots
Unit 5	Solving Ordinary Differential Equations using Scilab

SEMESTER: VI

Subject Name: Complex Analysis II   Subject Code: MATH 362

In this course the students will

Unit 1	Get knowledge about Contour integrals and Cauchy Goursat's theorem
Unit 2	Understand Cauchy integral formula, Liouville's theorem and The fundamental theorem of algebra.
Unit 3	Know about Convergence of sequences and series, Taylor series and Laurent Series .
Unit 4	Get knowledge about Singularities, Residues and poles
Unit 5	Solve different types of integration

Course Outcome B.Sc(Maths)

Subject Name: Operations Research II   **Subject Code: MATH 363**

In this course the students will

Unit 1	Get knowledge about Network and Basic Components
Unit 2	Understand Deterministic inventory Models
Unit 3	Know about Queueing Systems
Unit 4	Get knowledge about Multi server queueing Model
Unit 5	Solve Methodology of Simulation

Subject Name: Partial Differential Equations   **Subject Code: MATH 364**

In this course the students will

Unit 1	Get knowledge about Formation of Partial differential equations by various methods
Unit 2	Understand Standard types of first order equations
Unit 3	Know about Lagrange's equations and Charpit's Method.
Unit 4	Get knowledge about Linear Partial Differential equation of Second and higher order with constant coefficients.
Unit 5	Solve One dimensional wave equations, heat equation, Laplace equation

Subject Name: Numerical Methods   **Subject Code: MATH 367**

In this course the students will

Unit 1	Get knowledge about Numerical solution of algebraic and transcendental equations
Unit 2	Understand Numerical solution of simultaneous linear algebraic equations
Unit 3	Know about Finite difference operator , Interpolation, divided difference formula
Unit 4	Get knowledge about Numerical solutions of Ordinary differential equations
Unit 5	Solve Euler's method, Runge-Kutta method of second and fourth order and Milne's predictor corrector method.

Course Outcome B.Sc(Maths)

Course Outcome B.Sc(Maths)

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome
B.Sc(Maths)

Teaching – Learning and Evaluation

6 Student Performance and Learning Outcome

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES
SEMESTER: I

Subject Name: Introduction to Problem Solving Using C.   Subject Code: CSIT113

In this course the students will

CO1:	Understand the fundamentals of C, data types, operators used in C, basic input and Output Operations.
CO2:	Develop conditional and iterative statements to write C programs.
CO3:	Inscribe the important topics such as arrays and character arrays.
CO4:	Learn about the functions and structures used in C.
CO5:	Inscribe C programs using pointers and to allocate memory using dynamic memory Management functions.

Lab: Programming in C   Subject Code: CSIT116

In this course, the students will

CO1:	Illustrate flowchart and algorithm to the given problem.
CO2:	Understand basic Structure of the C-PROGRAMMING, declaration and usage of Variables.
CO3:	Write C programs using operators with basic expressions.
CO4:	Exercise conditional and iterative statements to Write C programs.
CO5:	Write C programs using arrays, strings, functions, structures and union.
CO6:	Write C programs using Pointers to access arrays and functions. Exercise files concept to show input and output of files in C.

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

Subject Name: Digital Electronics   **Subject Code: CSIT114**

In this course the students will

CO1:	Learn the basic concepts of Number Systems, Binary Codes and knowledge about basic logic gates, Timing diagram of logic gates
CO2:	Understand Boolean Algebra and apply various techniques to simplify the Boolean functions
CO3:	Understand the concepts of Combinational Logic Circuits like Multiplexer, DEMUX, Encoder, Decoder and Adder
CO4:	Understand the Sequential Logic Circuits and Flip flops, learn about types of shift registers
CO5:	Understand the Register Transfer Logic, Micro operations types and components which help to design simple computer

LAB: DIGITAL LAB   **SUBJECT CODE: CSIT117**

In this course, the students will

CO1:	To study and understand various Basic Logic Gates- AND, OR, NOT
CO2:	To study and understand various Basic Logic Gates- NAND, NOR, XOR
CO3:	To simplify a given Boolean function and to implement using basic gates.
CO4:	To understand and design a Half Adder
CO5:	To understand and design a Half Subtractor
CO6:	To understand and design a Full Adder
CO7:	To understand and design a Full Subtractor
CO8:	To understand and design an Encoder
CO9:	To understand and design a Decoder

CO10:	To understand and design a Multiplexer

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: II

Subject Name: Data Structures and Algorithms. **Subject Code: CSIT124**

In this course the students will

CO1:	Be able to choose appropriate data structure as applied to specified problem definition.
CO2:	Gain knowledge on basic building blocks for creating efficient programs and learn how to store and manipulate data in linear data structure and non-linear data structures.
CO3:	Handle operations like searching, insertion, deletion, traversing mechanism etc., on Various data structures.
CO4:	Learn the concept of last-in first-out (LIFO) and first-out (FIFO) data structure to Implement operations on stacks and queue its applications.
CO5:	Develop non-linear data structure and implement the memory representation, traversal Schemes and applications of graphs.

LAB: Data Structures and Algorithms   **Subject Code: CSIT129**

In this course, the students will

CO1:	Learn to implement simple array concept and implement stack using arrays. Implement linear and binary search using arrays.
CO2:	Implement the Queue ADT using arrays. Implement singly linked list.
CO3:	Implement doubly linked list and tree traversal (Inorder, pre-order and post-order.
CO4:	Implement expression evaluation using stack
CO5:	Implement sorting methods, including bubble, selection, merge sort insertion and Quick sort.

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: II

Subject Name: Python Programming   **Subject Code: CSIT123**

CO1:	Learn to work with the Variable, Expression, statement, conditions, functions and Recursion.
CO2:	Learn Fruitful function, Debugging, Iteration and strings.
CO3:	Understand the List sequence, list operation, method, map, filter Dictionaries, looping And reverse lookup.

CO4:	Understand the basics of file reading, file writing, and format operator.
CO5:	Understand the pure functions, modifiers, prototyping, debugging, printing objects, Overloading and inheritances.

LAB: Python   **Subject Code: CSIT128**

In this course, the students will

CO1:	Write a simple Python programs using arithmetic Boolean and logical operators
CO2:	To develop Python program using control flow tools like IF.
CO3:	To develop Python program using LOOP control structures
CO4:	To implement Data structures stack using List in Python.
CO5:	To implement Data structures Queue using List in Python.
CO6:	To develop Python program using tuple, sequence,
CO7:	To develop Python program using to read and write files, create and delete directories
CO8:	To develop Python program with exception handling
CO9:	To develop Python program using string handling and regular expressions.

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES
SEMESTER: III

Subject Name: Object Oriented Programming Using JAVA   Subject Code: CSIT231In this course the students will

CO1:	Gain knowledge about object oriented programming, java technology and its features and get exposure on java literals, data types, variables and operators.
CO2:	Implement programs using control flow statements, loop statements and arrays.

CO3:	Learn the basic building block of object oriented programming and object creation. Understand the principles of reuse the existing code and to arrange and manage classesusing packages.
CO4:	Learn how to create objects for basic types and how to handle abnormal condition occurring in a program. Implement String classes and its methods.
CO5:	Implement input output data processing and learn how to execute more than one process at a time.

LAB: JAVA LAB   **Subject Code: CSIT237**

In this course, the students will

CO1:	Write, compile, and execute Java programs that may include basic data types, arrays and control flow constructs.
CO2:	Write, compile and execute Java programs using object oriented concept like classes, constructors, and calculations methods, including inheritance, packages, interfaces, overriding and overloading and exception handling.
CO3:	Write, compile, and execute Java programs using GUIs and event driven Programming
CO4:	Write, compile, and execute Java programs manipulating Strings and processing of file input and output.
CO5:	Write, compile, and execute Java programs on applets and multithreading.

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES
SEMESTER: III

Subject Name: Operating Systems   **Subject Code: CSIT232**

CO1:	Learn CPU scheduling algorithms used in operating system.
CO2:	Acquire the knowledge of methods prevention and recover from a system deadlock handling I/O devices.
CO3:	Learn the mechanisms involved in memory management in contemporary OS

CO4:	Learn about the process management and process scheduling while executing processes.
CO5:	Understand the File System, allocation of file system and strategy module communication, process Synchronization,

Subject Name: Software Engineering   Subject Code: CSIT234

CO1:	Gain knowledge about the concept of software engineering and understand the nature of the software development, planning processes of software phased life cycle models, cost models, and planning on organization structure.
CO2:	Understand the techniques of software cost estimations and software cost factors.
CO3:	Learn the fundamentals of software design concepts, notations, techniques, modules and modularization criteria.
CO4:	Know the techniques, Implementation issues of software requirements and specifications.
CO5:	Be acquainted with the basics of testing and the concepts of software quality assurance and software configuration management process.

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: III

Subject Name: Computer Networks   **Subject Code:**

CSIT233In this course the students will

CO1:	Be familiar with various components of a communication system used in various Organizations, and Networks Reference models.
CO2:	Learn the transmission media types like guided media, unguided media, communication satellites, switching and idea of multiplexing.
CO3:	Understand the data link layer design issues, Handle the transmission errors and flow control protocols.
CO4:	Learn the network layer design issues, routing algorithms and how to handle the congestion using congestion control algorithms.
CO5:	Understand the transport layer protocols TCP and UDP and Application layer protocols Domain Name System and Electronic Mail.

LAB: Computer Networks   **Subject Code: CSIT238**

In this course, the students will

CO1:	To have an idea of Sending and Receiving text message by using python or java languages.
CO2:	To gain knowledge of File Transmission between client and server.
CO3:	To impart the basic concepts of Chat Applications.
CO4:	Understand the use of Simple Mailing Application.
CO5:	Acquire knowledge of Client Server Applications.

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: IV

Subject Name: Database Management Systems   **Subject Code:**

CSIT241 In this course the students will

CO1:	Understand the Fundamentals of database systems and Data Models.
CO2:	Learn the concepts of database management systems, Tree and Plex structures. Understand the concepts of normalization.
CO3:	Learn the basics of SQL commands, DDL, DML, DLL, string and date functions, reports, Union and joins.
CO4:	Understand the Fundamentals of PL/SQL, Triggers, procedures, functions, packages and Exception handling.
CO5:	Learn locking techniques, time stamp ordering, validation techniques, recovery concepts and database security issues.

LAB: DBMS   **Subject Code:**

CSIT248 In this course the students will

CO1:	To have an idea of creating database and establish relationships between tables.
CO2:	To gain knowledge of ER model and creating views from two or more tables.
CO3:	To impart the basic concepts of stored procedures and functions.
CO4:	Understand the use of Cursors and database triggers.
CO5:	Acquire knowledge of PL/SQLs.

COURSE OUTCOME-B.Sc(IT)

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES
SEMESTER: IV

Subject Name: Information Theory and Coding   **Subject Code: CSIT242**

CO1:	Learn the theorems of Probability, Discrete probability distribution and discrete functions for discrete random and continuous random variables
CO2:	Know about Uncertainty, Entropy, Types of Entropy, Codes, Construction of optimal codes – Huffman's & Shannon-Fano Methods.
CO3:	Learn about Discrete Memory Less Channel, Channel Capacity
CO4:	Learn Types of Codes, Linear block codes syndrome and error detection, Syndrome decoding and Hamming codes.
CO5:	Understand Cyclic codes, Generator and Parity check matrices, syndrome computation, error detection and decoding.

COURSE OUTCOMES
SEMESTER: III

Subject Name: Soft Skills   **Subject Code:**

CSIT801

In this course the students will

CO1:	Learn about the Communication skills, the Channels and Nature. The Listening Process, Speech Process, Conversion and Oral skills.
CO2:	Understand the Interview Process and Techniques to face the Interview. Characteristics of Group Discussion and Group Interaction Strategies
CO3:	Know the Presentation Skills, Preparing, Organizing the Presentation and improving the Delivery.

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: V

Subject Name: Web Technology   **Subject Code: CSIT351**

CO1:	Learn the features of web browsers, web servers. HTTP request and response message
CO2:	Understand the elementary tags, ordered and unordered list, tables and frames, forms in HTML
CO3:	Learn the concept of DHTML , style sheets, inline, external and cascading style sheets
CO4:	Introduction to java script, DOM, Add a text input, button element and properties, event handlers. Learn the scripts
CO5:	Learn the concept of ASP, data access with ADO :Connection object, working with ADO record set object

Subject Name: Lab: Web Technology   **Subject Code: CSIT357**

In this course the students will

CO1:	Understand the basic concepts of how to use the HTML commands, graphics, image formats and hyperlinks.
CO2:	Understand the concepts of creating tables, frames, forms, background graphics and color
CO3:	Learn to create the applications using DHTML and Cascading style sheets.
CO4:	Learn to create the applications using java script
CO5:	Learn to create the applications using ASP

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER VI

Subject Name: Visual Programming Using C#   **Subject Code: CSIT361**

CO1:	Understand the concept of .net framework components, Common Language Runtime, CTS, CLS and .Net base class library
CO2:	Learn the concept of C# Program Structure, Data types, Operators, branching & looping statements, Arrays and String Manipulation
CO3:	Introduction to OOP in C#, Class , objects, encapsulation, constructors, inheritance types and operator overloading, delegates
CO4:	Learn the concept of Errors and Exception handling, Multithreading, and learn about windows forms, SDI and MDI applications
CO5:	Understand the ADO.NET, ADO.NET Architecture, learn how to use Data Objects in a program, accessing records in a database

Visual Programming Lab   **Subject Code: CSIT368**

In this course, the students will

CO1:	Implement Classes and Objects, Inheritance &Polymorphism
CO2:	Implement Interfaces, Operator Overloading, Delegates and Events
CO3:	Implement Exception Handling &Multi-Threading
CO4:	Create Console application & Window Applications.
CO5:	Create programs using SDI & MDI
CO6:	Create program using Database Controls. Use ADO.NET to create application to read, insert, and update data in a database.

'	Develop any TWO case studies listed below: I. Inventory Control II. Retail Shop Management III. Employee Information System IV. Personal Assistant Program V. Students' Information System

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: IV

Subject Name: Client / Server Computing   **Subject Code: CSIT244**

CO1:	Learn the basic of client server advantages and disadvantages of client server
CO2:	Understand the concept of architecture and components of client server
CO3:	Learn the concept of database and Middleware components of client server
CO4:	Learn the technologies and client server application and services
CO5:	Learn the features of hardware and software requirements and web applications

Subject Name: Computer Graphics   **Subject Code: CSIT246**

CO1:	Learn the basic features of graphics hardware components and graphics software Packages.
CO2:	Understand the two dimensional graphics and their transformations
CO3:	Understand the Matrix Representations by examining Co-Ordinate Transformations for displaying 2D primitives
CO4:	Learn the output function in graphics packages.
CO5:	Understand the concepts of 3D display properties of primitives.

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: V

Subject Name: Distributed Computing   **Subject Code:**

CSIT353 In this course the students will

CO1:	Understand the collaborative operations of collections of computer systems and World Wide Web.
CO2:	Learn Inter process communication, Network virtualization and MPI.
CO3:	Understand the principles of remote invocation, remote procedure calls and the technique of group communication.
CO4:	Get an idea about message queues, shared memory approach and distributed objects.
CO5:	Knowledge of distributed file systems, file service architecture, mutual exclusion and elections.

Subject Name: IT Project Management   **Subject Code: CSIT356**

CO1:	Understand the concept of nature of IT projects, project charter and baseline project plan
CO2:	Learn the concept of human side of project management and project scope
CO3:	Learn the concept of work break down structure and budget managing project risk
CO4:	Understand the concept of project communication, tracking and reporting
CO5:	Learn the concept of managing organizational change, closure and evaluation

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: VI

Subject Name: Cloud computing   **Subject Code:**

CSIT364In this course the students will

CO1:	Learn about cloud computing, the various architecture layers that make up the cloud Computing stack and cloud computing services.
CO2:	Learn the important characteristics of cloud computing networks and applications, Including abstraction and virtualization.
CO3:	Learn to explore cloud infrastructures cloud management and security.
CO4:	Learn Service Oriented Architecture, the factors involved in deciding to move an Application to the cloud and the role of cloud storage in storing and processing data.
CO5:	Learn to use the mobile cloud, working with mobile devices and mobile web services.

SEMESTER VI

Subject Name: Internet of Things   **Subject Code: CSIT365**

CO1:	Learn building blocks of IoT and their characteristics and their real-world applications.
CO2:	Understand programming aspects of IoT with a view to developing rapid prototypes of complex IoT applications.
CO3:	Understand Python programming, Packages, frameworks and cloud services and Amazon Web Services that can be used to develop IoT systems.
CO4:	Learn Raspberry Pi device is chosen for various IoT domains viz., home automation, Smart environment smart cities, logistics, Retail, smart agriculture, industrial controland smart health.
CO5:	Learn the advanced topics on data analytics and tools for IoT.

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: IV

Subject Name: Introduction to E-Business   **Subject Code:**

CSIT705

CO1:	Learn the concept of E-Commerce framework, digital revolution, benefits and limitations of EC
CO2:	Understand the components, types, mechanisms.EC application: Internet marketing and E-Retailing
CO3:	Learn the concept of employment, publishing e-Books, banking and personal finance Online. B2B Ecommerce concept and characteristics
CO4:	Understand the concept of E –Government to E- Learning, Definition and scope-G2C,G2B.G2B
CO5:	Learn the concept of E- Commerce security, fraud issue and protection. Technical and Non-Technical attack methods

SEMESTER V

Subject Name: Artificial Intelligence   **Subject Code:**
CSIT704

CO1:	Understand concepts of artificial intelligence and underlying characteristics.
CO2:	Learn various heuristic search techniques and knowledge representation.
CO3:	Acquire knowledge about predicate logic, resolution, frames, slot and filler structure and conceptual dependency.
CO4:	Ability to understand game playing, minimax search procedure and alpha beta cuts offs.
CO5:	Understand the components of planning system and expert systems.

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: IV

Subject Name: Multimedia Tools   **Subject Code: CSIT803**

In this course the students will

CO1:	Learn the concepts of multimedia technology, Learn the working environment of Flash, Create animation using flash
CO2:	Understand the advanced animation methods and controlling movies through Action Scripts
CO3:	Know how digital audio files are processed, stored and published on the Web, and also learn to use digital audio in multimedia products, how to import and publish digital video on the web.

SEMESTER V

Subject Name: Programming with PHP   **Subject Code: CSIT804**

CO1:	Understand the fundamentals of PHP, creating conditional structures and looping Statements for repetitive tasks.
CO2:	Learn how to store data in array, using array functions, associative array and the Concepts of creating functions.
CO3:	Know about the cookies, sessions and how to retrieve and process form submission Data.
CO4:	Perform date and Time functions in PHP, creation, reading, appending and deletion of Files and difference between include and require function.
CO5:	Learn to create database tables and query processing, read and process the data in a MYSQL database.

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DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: V

Subject Name: Internship/Mini Project/Online Course/In-Plant Training   Subject Code: CSIT806/7/8/9 In this course the students will

CO1:	Attend an Internship Programme in a neighbouring IT Industry for 2 weeks
CO2:	Develop an IT oriented Mini Project under the guidance of a faculty
CO3:	Enroll for an online course in SWAYAM or CEC Portal and obtain Certification after completion of the course and taking the assessment test.
CO4:	Undergo In-Plant Training in Software/Hardware related industry for a duration of one month during vacation.

SEMESTER VI

Subject Name: Project Viva-voce   **Subject Code: CSIT362**

CO1:	An ability to apply knowledge of computing and mathematics appropriate to the Project.
CO2:	An ability to analyze a problem, and identify and define the computing requirements.
CO3:	An ability to design, implement, and evaluate a computer-based system, process, Component, or program to meet desired needs.
CO4:	An ability to use current techniques, skills, and tools necessary for computing practice.
CO5:	An ability to use and apply current technical concepts and practices in the core Information technologies.

DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE OUTCOMES

SEMESTER: II

Subject Name: Discrete Mathematics   **Subject Code: CSIT125**

In this course the students will

CO1:	Study the types of Matrices, to find the rank of a Matrix, calculate the Eigen Values and vectors.
CO2:	Learn the mathematical Logic, Connectives, Truth Table, Tautology, Equivalences and Normal Forms
CO3:	Understand Sets, Lattice and its properties & know about Boolean Algebra
CO4:	Study the Graph Theory, Different types of Graphs and their properties
CO5:	Learn about different types of Trees and their Properties, Spanning Trees and Fundamental Circuits.

SEMESTER: III

Subject Name: Numerical Methods   **Subject Code: CSIT236**

CO1:	Learn about the Roots of Non-Linear Equations, Iterative, Bisection and Newton Raphson Method.
CO2:	Understand the Direct Solution of Linear Equations. Gauss elimination and Gauss Jordan, Gauss Jacobi and Gauss Seidel Methods.
CO3:	Know about Interpolation – Newton's forward and Backward difference formulae
CO4:	Learn about Numerical Differentiation and Numerical Integration
CO5:	Study Ordinary Differential Equation , Taylor Series, Euler and Runge-Kutta Methods

Course Outcome B.Sc(Information Technology)

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome
B.Com.

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

SARADHA GANGADHARAN COLLEGE

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COURSE OUTCOME

BACHELOR OF COMMERCE

I YEAR

I SEMESTER

Subject Name: Financial Accounting

Subject Code: BCGN 111

In this course the student will learn

CO1. Understand and acquaint with the basic principles of Accounting.

CO2. Know ability to prepare cash book and Bank Reconciliation statement.

CO3. Have skill of preparing Average due date and Account current.

CO4. Understand and make adjustments during the preparation of final accounts.

CO5. Provide Knowledge on accounting for hire purchase transactions including repossession and installment purchase accounting.

CO6. understand the basics of partnership accounting and maintenance of partner capital account

CO7. Understand the various accounting treatments at the time of admission of a partner

CO8. Know the various accounting treatment at the time of retirement and death of a partner

CO9. Understand accounting procedure for dissolution and amalgamation of partnership firms

CO10. Know accounting treatment at the time of Insolvency of partners.

Subject Name: Business Law

Subject Code: BCGN 112

In this course the student will learn

CO1.   Understand the nature, essentials and classification of contract

CO2.   Knowledge on various modes of performance of

contracts

CO3.   Explain the rights and duties of bailor and bailee.

CO4.   Knowledge on the requisites of negotiable instruments and its discharge.

CO5.   Understand the Consumer Protection Council and its structure

CO6.   Explain the rights and powers of Competition Commission of India.

Subject Name: Introduction to Public Administration

Subject Code: PADM 113

In this course the student will learn

CO1 To gain knowledge about introduction of Administration, history of Public
Administration,

CO2 To gain overall knowledge of Public Administration

CO3 Understanding the Concept of Public Administration

CO4 Ability to analyze existing government structure and Power and Duties of
Government.

II SEMESTER

Subject Name: Business Management

Subject Code: BCGN 121

In this course the student will learn

CO1. Understanding the importance and steps in planning and strategic planning

CO2. Know the principles of the organization, types and delegation.

CO3. Know the organizations structure of business and the ways to achieve business goals.

CO4. Understand the essentials of motivation and the need of it for having healthy human resources.

CO5. Have knowledge on the leadership qualities, styles and approaches

CO6. Understand the process and methods of control of the business including new techniques.

Subject Name: Company Law

Subject Code: BCGN 122

In this course the student will learn

CO1. Understand the nature, essentials and classification of Company

CO2. Knowledge on various modes of performance of Contracts

CO3. Explain about memorandum and Articles of Association.

CO4. Knowledge on the requisites of appointment of Director Qualification and others

CO5. Understand the Agenda, Minutes and Meeting.

CO6. Explain the features and effect of winding up.

Subject Name: Environmental Studies

Subject Code: ENVS 123

In this course the student will learn

CO1 Creating the awareness about environmental problems among people.

CO2 Imparting basic knowledge about the environment and its allied problems.

CO3 Developing an attitude of concern for the environment.

CO4 Motivating public to participate in environment protection and environment improvement.

CO5 Acquiring skills to help the concerned individuals in identifying and solving environmental problems.

CO6 Striving to attain harmony with Nature.

II YEAR

III SEMESTER

Subject Name: Goods and Services Tax

Subject Code: BCGN 231

In this course the student will learn

CO1 To know the reformative process of indirect taxes.

CO2 To Understand the salient features of GST

CO3 To get a idea about SGST, CGST, IGST & UTGST

CO4 To Study the process of Levy and Collection of GST

CO5 Get the Knowledge of Administration, Accounts & Audit of GST

CO6 To understand Regulatory Mechanism of GST

Subject Name: Business Statistics

Subject Code: BCGN 232

In this course the student will learn

CO1. Understand statistical concepts to include sampling, estimation

CO2. Understand regression, and correlation analysis, multiple regression.

CO3. Compute and interpret the results of Bivariate and Multivariate Regression and Correlation Analysis

CO4. Understand forecasting and also perform ANOVA and F-test.

CO5. Perform Testing of Hypothesis for single sample and two samples and understand the p- values.

CO6. Know non-parametric test such as the Chi-Square test for Independence as well as

Goodness of Fit.

Subject Name: Management Accounting-I

Subject Code: BCGN 233

In this course the student will learn

CO1. Provide a basic knowledge about management accounting concepts

CO2. Provide a basic knowledge about comparative Analysis

CO3. Understand use the different types of ratios

CO4. Describe the method of preparing the Funds flow statement as per AS-

CO5. Describe the method of preparing the Cash flow statement as per AS-

Subject Name: Communicative Skills

Subject Code: BCGN 234

In this course the student will learn

CO1.   Have complete understanding of qualities of business correspondence, structure and layout.

CO2.   Practice of drafting career objectives, and various letter relating to application, resume, appointment order.

CO3.   Familiar with drafting various business letters including quotations, purchase order, business complaint, adjustment and collection letter

CO4.   Understand and make correspondence with Bank, Insurance and Agency.

CO5.   Have knowledge on use of electronic media like E-mail, SMS etc. in performing business activities.

IV SEMESTER

Subject Name: Management Accounting-II

Subject Code: BCGN 241

In this course the student will learn

CO1. Understand and analyze the CVP analysis for managerial decision making

CO2. Understand and analyze the Budget and its types
CO3. Provide the knowledge the Marginal costing

CO4. Understand the concepts of variance analyses.
CO5. Provide the overall concepts of decision making.

Subject Name: Cost Accounting

Subject Code: BCGN 242

In this course the student will learn

CO1.   Indentify various cost classifications based on how the cost will be used.

 CO2.   Know the accounting methods for inventory maintenance and issues.

CO3. Understand the maintenance of inventory levels for material control including EOQ

CO4. Know the cost ascertainment of for labour cost including various incentive plans

CO5. Appropriate and apportionment of overheads for a department or activity.

 CO6. Know the preparation of process cost accounting and report.

CO7. Understand the preparation of reconciliation of cost and financial accounting.

Subject Name: Income Tax

Subject Code: BCGN 243

In this course the student will learn

CO1 – introduce the basic concept of Income Tax

CO2 – familiarize the different know-how and heads of income with its components

CO3 – build an idea about income from house property as a concept

CO4 – discuss the various provisions relating to income from business or profession

CO5 – make the students familiarizes with the concept of depreciation and its provisions

CO6 – familiarize the concept of capital gain

CO7 – enlighten the concept of income from other source

CO8 – enabling the students to have a fair idea on set-off and carry forward of losses

CO9 – comprehend the knowledge about the concept of deductions under the section 80C to 80U

Subject Name: Arithmetic Skills

Subject Code: BCGN 244

In this course the student will learn

CO1. To explain the meaning and techniques calculation of Interest..

CO2. To formulate and solve real life problems in compound interest

CO.3 To solve the problems under matrix and Determinates

CO4. To find relationship of variables of a business.

CO5.To knows and understands the types of functions-Algebraic, Polynomial function.

III YEAR

V SEMESTER

Subject Name: Computer Application Skills

Subject Code: BCGN 351

In this course the student will learn

CO1.   Know the basic components of the computer and working of each device.

CO2.   Understand the representation of data in computer.

CO3.   Comparative knowledge on the of Assembly and High level

programming Languages.

CO4.   Understand different types of software used in computer and operating systems.

CO5.   Understand use of word for text editing, text formatting, picture insertion,

alignment, mail merging.

CO6.   Provide working knowledge on excel which includes cell editing, usage of

formulae and button function and drawing graphs etc.

CO7.   Enable students for understanding the internet concepts,

Subject Name: Financial Management

Subject Code: BCGN 352

In this course the student will learn

CO1.   Understand the concept of financial management, functions and role of financial manager.

 CO2.   Know nature, principles and techniques of preparing capital budget.

CO3.   Understand the concept of working capital and computation of working capital.

CO4.   find the overall cost of capital and cost of capital for each sources of capital.

CO5.   Have knowledge on dividend policies, Classification, theories of dividend decisions.

Subject Name: Principles of Marketing

Subject Code: BCGN 354

In this course the student will learn

CO1.   4P's of marketing- product, price, Physical distribution and promotion.

CO2.   Explain the steps in new product development

CO3.   Express the various determinants of price.

CO4.   Classify the different channels of distribution

CO5.   Have knowledge on advertising, types and personal selling and qualities of salesman.

Subject Name: Corporate Accounting

Subject Code: BCGN 356

In this course the student will learn

CO1. Understand the preparation of final accounts of companies

CO2. Know the calculation of profits prior to incorporation and valuation of goodwill and shares.

 CO3. Prepare accounts for amalgamation, absorption and reconstruction

CO4. Prepare accounts of banking and insurance companies as per new norms

CO5. Prepare consolidated profit and loss account and balance sheet

CO6. Know the accounting for price level changes and human resource accounting.

Subject Name: Principles of Micro Economics

Subject Code: BCGN 357

In this course the student will learn

CO1:   Differentiate economics and managerial economics.

CO2:   Basic idea of demand and the concept 'elasticity of demand' and its role price fixing.

CO3:   Understand about various methods of demand forecasting.

CO4:   Get the knowledge over various types of market structure and their features.

CO5:   Get the idea on Break Even Point in profit planning of a firm.

VI SEMESTER

Subject Name: Entrepreneurial Skills

Subject Code: BCGN 361

In this course the student will learn

CO 1 Purpose to know the importance of Entrepreneurship

CO2 To Acquire the knowle4dge about Business Plan

CO3 To Analyze the location, layout and Operations.

CO4 Get the practical exposure of mobilizing the Resources

CO5 To understand the expectations of New Customers

CO6 To Review the Basic start-up Problems/

Subject Name: Bank Management

Subject Code: BCGN 362

In this course the student will learn

CO1.   Have better understanding about banks and its relationship with customers.

CO2.   Know complete knowledge on cheques, material alteration, crossing and endorsements

CO3.   Have understanding of rights, duties of payment and collecting Bankers

CO4.   Understand general principles of lending, Types of advances in business.
CO5.   Provide basic knowledge about Internet Banking, Mobile banking, NEFT, RTGS its users and advantages

Subject Name: Auditing

Subject Code: BCGN 364

In this course the student will learn

CO1.   Explain the objectives, types and procedure for auditing.

CO2.   Understand the qualification, appointment and removal of auditor.

CO3.   provide knowledge on internal control, internal check and internal audit and their relations.

CO4.   Know the auditor's duty as regards verification and valuation of assets and liabilities

CO5.   Understand the concept of vouching and duties of auditor as regards vouching.

 CO6.   Have knowledge on the liabilities of auditor to different persons.

Subject Name: Human Resource Management

Subject Code: BCGN 366

In this course the student will learn

CO1.   Understand the magnitude of Human Resource and their successful management in the organization.

CO2.   Understand the key aspects of forecasting the Human Resource requirements of an organization.

CO3.   Know in detail about the recruitment and selection process and illustrate the

impacts.

COURSE OUTCOME-B.COM

CO4.   Describe, analyze and apply advance training strategies.

CO5.   Know implementation, monitoring and assessment procedure of training

methods.

 CO6.   Design performance appraisal mechanism for the employees.

CO7.   Outline the Human Resource Information System, record the Human Resource
in

        Changing Environment and managing Human Resource in Virtual organization.

Subject Name: Indian Economy

Subject Code: BCGN 367

In this course the student will learn

CO1   Develop ideas of the basic characteristics of Indian economy,

CO2   It's potential on natural resources.

CO3   To understand the basic concepts of Monetary and Fiscal policy

CO4   To know the Sectoral distribution in the economy

CO5 Understand the importance, causes and impact of population growth and its
distribution,

CO6 Translate and relate them with economic development.

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Students Outcome
B.Com.(CS)

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

SARADHA GANGADHARAN COLLEGE
(Accredited by NAAC)
(Affiliated to Pondicherry University)
ISO 9001:2015 Certified Institution
(Recognized by UGC under Section 2(f) of the UGC Act 1956 as a PG Institution)

B.Com (CORPORATE SECRETARYSHIP)

PROGRAMME OBECTIVIES:

➢ To impart knowledge and skills needed to contribute to the corporate world.

➢ It is a 100% placement – oriented, professional course eligible to pursue ACS to become a company secretary.

➢ The students will get ready to get Employment opportunities in management relatedjobs, Auditors, Bank, Accountants.

PROGRAM SPECIFIC OUTCOMES:

➢ The course enabled the students to acquire the knowledge about Accounting, Lawpapers and computer skills.

➢ They specialize in areas like Company law, Secretarial practice, Business Law, Corporate Control System and Corporate governance

YEAR: 1
SEMESTER: I

SUBJECT: FINANCIAL ACCOUNTING **SUB CODE:**

BCCS 111

COURSE OBJECTIVE:

- The main objective of financial accounting is to accurately prepare an organization's final accounts for a specific period.

COURSE OUTCOMES:

CO-1: Prepare financial statements in accordance with Generally Accepted Accounting Principles (GAAP).

CO-2: To understand adjustment entries to be passed in the preparation of finalaccounts and to know the procedure for preparing Self balancing System

CO-3: An understanding of Classification of income and Expenditure and To gain knowledge on Depreciation of assets and its methods.

CO-4: To understand the difference between Hire purchase system and Instalment Purchase System and Accounting procedure followed under each system.

CO-5: To gain knowledge on the preparation of Partnership accounts during Admission, Retirement, Death, Insolvency of Partner or partners and dissolution of firm.

YEAR: 1
SEMESTER: I

SUBJECT: BUSINESS LAW   **SUB CODE:**

BCCS 112

COURSE OBJECTIVE:

This course made to impart the knowledge of fundamental principles of Business laws

COURSE OUTCOMES:

CO-1: Understand the nature, essentials and classification of contract and knowledge on various modes of performance of contracts

CO-2: Understand the knowledge of contract of agency

CO-3: Explaining sale of goods act 1930.

CO-4: Knowledge on the requisites of negotiable instruments and its discharge.

CO-5: To Understand the Consumer Protection Council and its structure

YEAR: 1
SEMESTER: II

SUBJECT: BUSINESS MANAGEMENT   **SUB CODE:**

BCCS 121

COURSE OBJECTIVE:

This course made to impart the knowledge of Business management, levels and concepts.

COURSE OUTCOMES:

CO-1: Understanding the basic concepts of management and school of management thoughts

CO-2: Knowledge on the importance and steps in planning and strategic planning

CO-3: To know the organizations structure of business and the ways to achieve business goals have knowledge on the leadership qualities, styles and approaches

CO-4: To understand the essentials of motivation and the need of it for having healthy human resources.

CO-5: To understand the process and methods of control of the business including new techniques.

YEAR: 1
SEMESTER: II

SUBJECT: COMPANY LAW   **SUB CODE:**

BCCS 122

COURSE OBJECTIVE:

The course is designed to understand the Formation, Management and other activities of the companies.

COURSE OUTCOMES:

CO-1: To learn about the characteristics and the various types of company form oforganization**.**

CO-2: To know about the various types of shares and the rules regarding alteration ofshare capital.

CO-3: To understand the concept of membership of the company

CO-4: To learn the procedures involved in conducting various types companies meeting.

CO-5: To understand the process of winding up.

YEAR: II
SEMESTER: III

SUBJECT: GOODS AND SERVICES TAX   **SUB CODE:**

BCCS 231

COURSE OBJECTIVE:

This course enable the students to get familiarize with the Provisions of GST.

COURSE OUTCOMES:

CO-1: Understanding the Key Concepts of GST and its Scope

CO-2: Imparting Knowledge of CGST, SGST, IGST and UTGST Act

CO-3: To know the GST Levy and Collection of Tax

CO-4: To Know GST Administration – Accounts and Records.

CO-5: To understand the Demand and Recovery and Advance Ruling Process of GST

COURSE OUTC
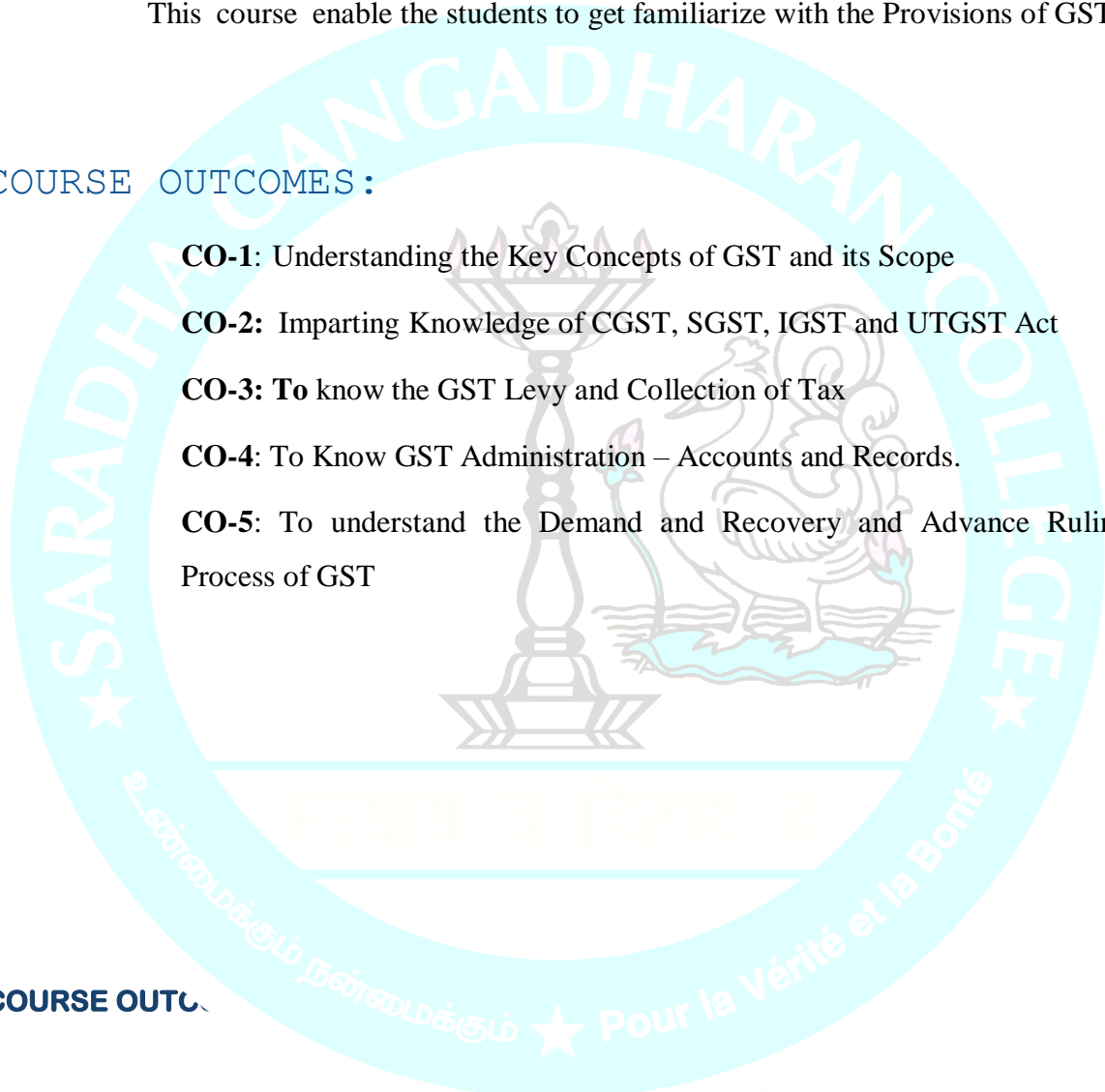
YEAR: II
SEMESTER: III

SUBJECT: BUSINESS STATISTICS　　　　　　　　**SUB CODE:**

BCCS 232

COURSE OBJECTIVE:

The course is designed to provide a theoretical appreciation and use of the science of statistics to make better business decisions.

COURSE OUTCOMES:

CO-1: To understand statistical concepts to include sampling and estimation

CO-2: T o understand regression, and correlation analysis and multiple regression and compute and interpret the results of Bivariate and Multivariate Regression and Correlation Analysis

CO-3: To learn the Time series – Moving Averages Method & Least Squares

CO-4: To know the Computation of Index Number – price and quantity

CO-5: To Learn the Theory of Probability – Theoretical Distribution, Binomial, Poisson and Normal.

YEAR: II
SEMESTER: III

SUBJECT: MANAGEMENT ACCOUNTING - I   **SUB CODE:**

BCCS 233

COURSE OBJECTIVE:

To analyze and interpret financial statements from the point of view of managers and outsiders

COURSE OUTCOMES:

CO-1: To provide a basic knowledge about management accounting concepts

CO-2: Understanding the preparation of financial statement analysis

CO-3: To understand use the different types of ratios

CO-4: Describe the method of preparing funds flow statement

CO-5: Preparation of cash flow statement

CO

YEAR: II
SEMESTER: III

SUBJECT: COMMUNICATIVE SKILLS   **SUB CODE:**

BCCS 234

COURSE OBJECTIVE:

To develop effective business communication skills

COURSE OUTCOMES:

CO-1: To understand and develop Communication Skills

CO-2: Learn to Draft Business Letters -

CO-3: To Learn Intra-organizational Communication and understanding the modern forms of Communication

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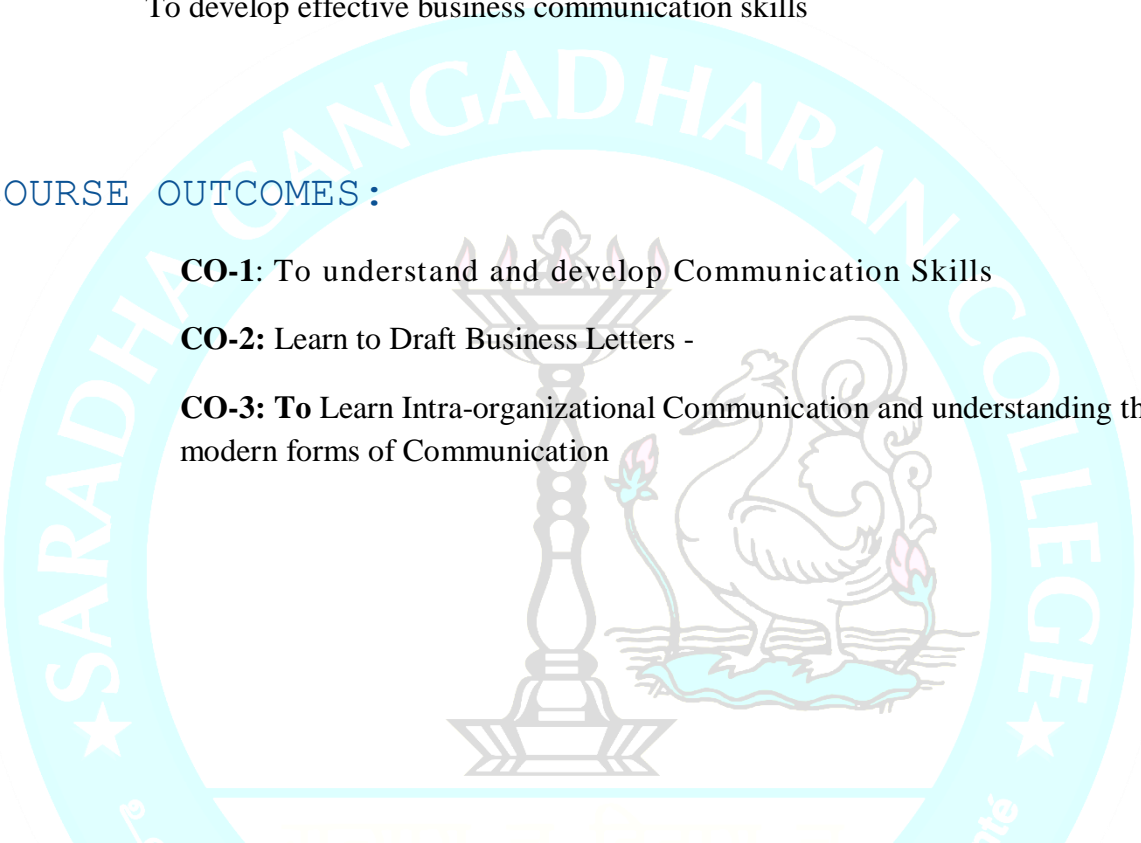
YEAR: II
SEMESTER: IV

SUBJECT: MANAGEMENT ACCOUNTING - II   SUB CODE:

BCCS 241

COURSE OBJECTIVE:

To analyze and interpret financial statements from the point of view of managers and outsiders.

COURSE OUTCOMES:

CO-1: Provide a basic knowledge marginal and differential costing

CO-2: Understand the pricing-break-even-analysis and shutdown decisions

CO-3: Describe the method of preparing budget

CO-4: Understand and analyze the standard costing and variance analysis

CO-5: Understand the basic concept of zero base budgeting and responsibility accounting

C

YEAR: II
SEMESTER: IV

SUBJECT: COST ACCOUNTING   **SUB CODE:**

BCCS 242

COURSE OBJECTIVE:

The aim of this course is to equip students with skill and knowledge to identify and calculate different types of costs. Determine the product cost by means of historical and standard cost systems

COURSE OUTCOMES:

CO-1: Indentify various cost classifications based on how the cost will be used and understand the preparation of reconciliation of cost and financial accounting

CO-2: To know the accounting methods for inventory maintenance and issues and understand the maintenance of inventory levels for material control including EOQ
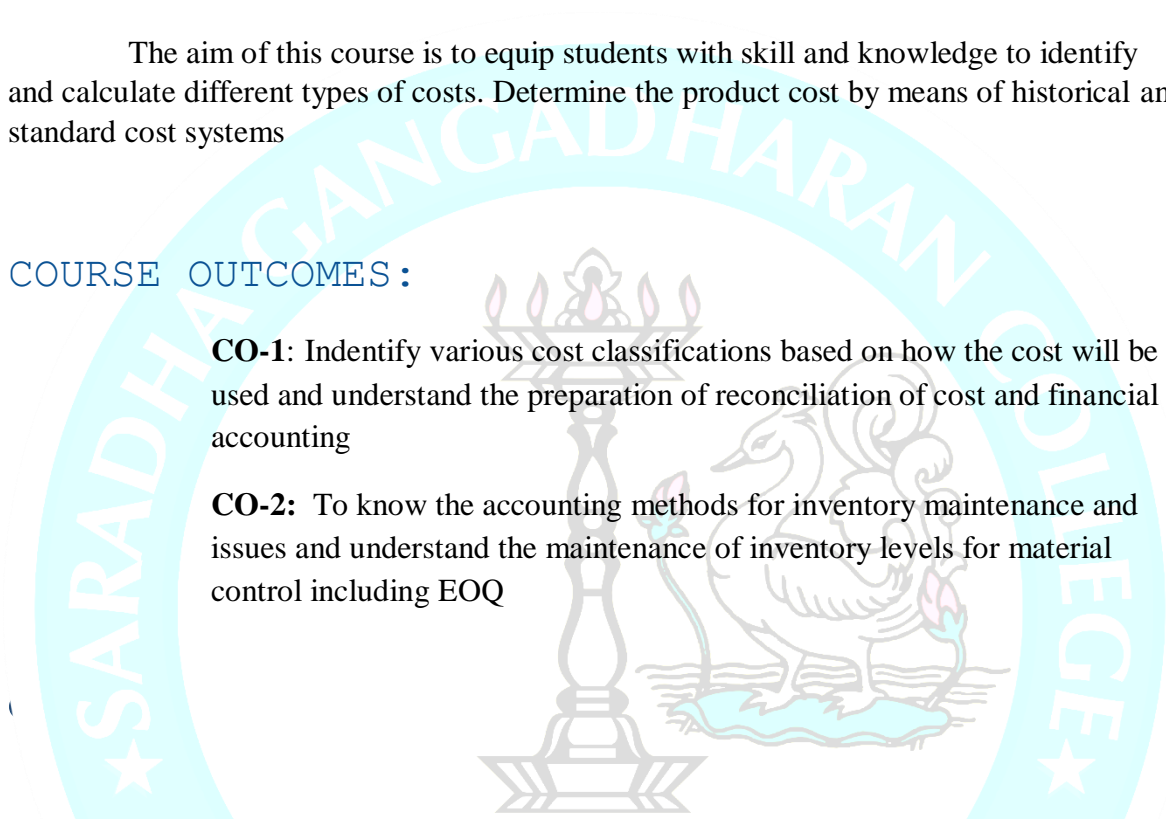
CO-3: To know the cost ascertainment of labour cost including various incentive plans

CO-4: Appropriate and apportionment of overheads for a department or activity

CO-5: To know the preparation of process cost accounting, job costing and report

YEAR: II
SEMESTER: IV

**SUBJECT: INCOME TAX**   **SUB CODE:**

BCCS 243

COURSE OBJECTIVE:

    This course is designed to know the basic principles underlying the provisions of direct and indirect tax laws and to develop a broad understanding of the tax laws and accepted tax practices

COURSE OUTCOMES:

CO-1: To enable the students to develop conceptual and application skills in Indiantax laws and to ascertain the exempted income, residential status and incidence of taxliability
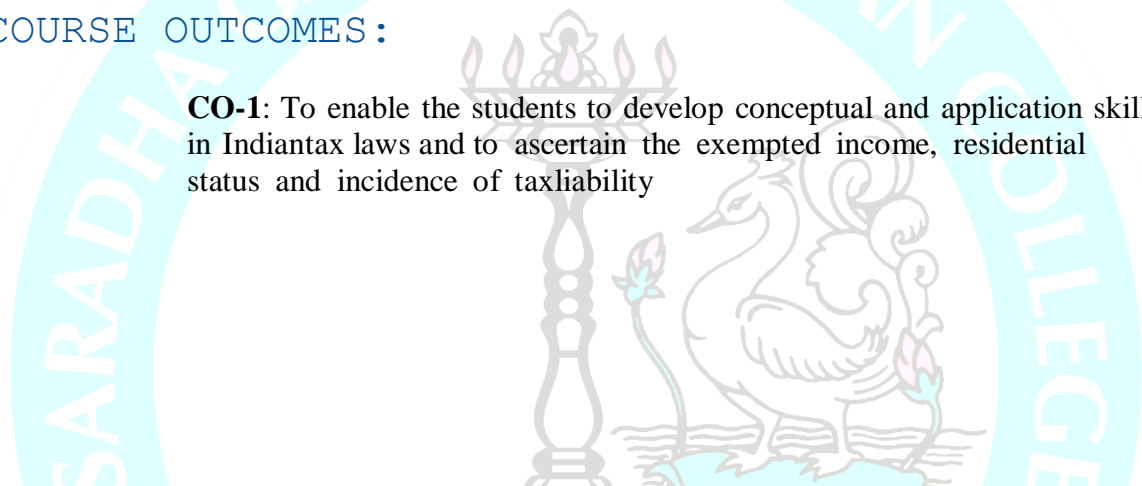
CO-2: To understand the procedure involved in calculation of salary income and house property income

CO-3: To understand the procedure involved in calculation of income from business or profession and other Sources

CO-4: To understand the Computation of total income and tax liability

CO-5: To know the preparation of online filing and TDS - provisions

YEAR: II
SEMESTER: IV

SUBJECT: ARITHMETIC SKILLS   **SUB CODE:**

BCCS 244

COURSE OBJECTIVE:

This course is designed to gain understanding of mathematical applications to business activities

COURSE OUTCOMES:

CO-1: To understand Concept of Ratio, proportion and percentage analysis

CO-2: To understand the key elements of Matrices and Determinates – Multivariable data

CO-3: To understand the relationship between function, constants and variables

YEAR: III

SEMESTER: V

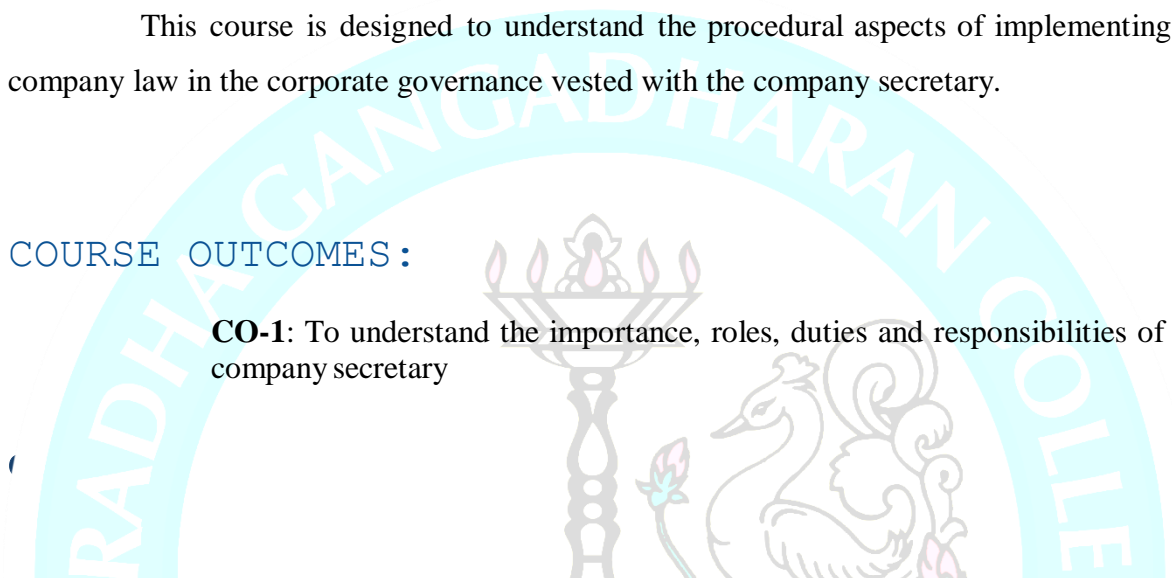**SUBJECT: SECRETARIAL PRACTICE**   **SUB CODE:**

BCCS 352

COURSE OBJECTIVE:

This course is designed to understand the procedural aspects of implementing company law in the corporate governance vested with the company secretary.

COURSE OUTCOMES:

CO-1: To understand the importance, roles, duties and responsibilities of a company secretary

CO-2: To gain knowledge regarding alterations o f memorandum of association, articles ofassociation and procedures involved in issuing prospectus

CO-3: To understand the concepts of allotment of share capital and preparation of annual reports.

CO-4: To learn the procedures about appointment and removal of key managerial personnel

CO-5: To understand the procedure of conducting board meeting and members rights and liabilities
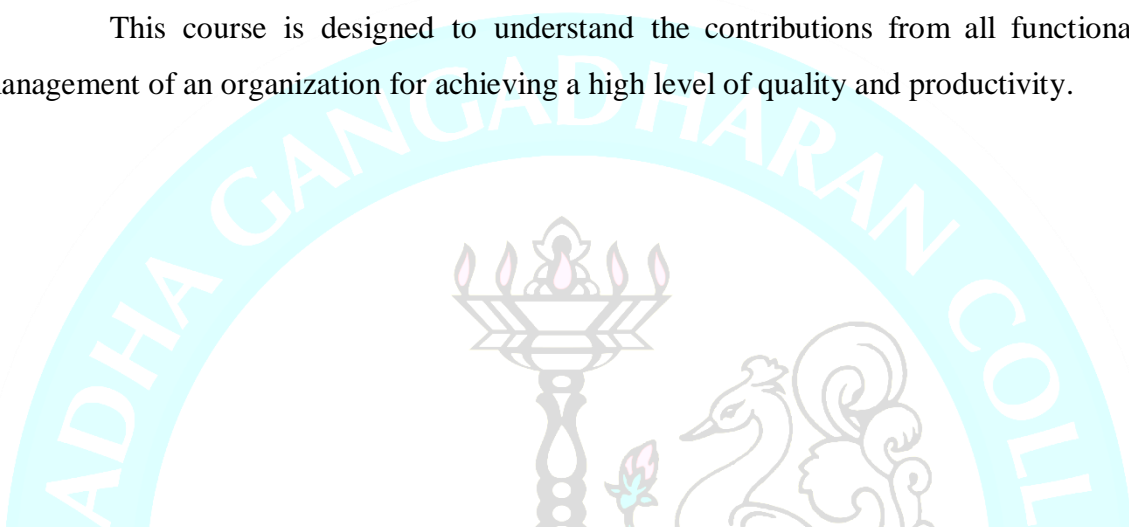
YEAR: III
SEMESTER: V

SUBJECT: CORPORATE CONTROL SYSTEM   **SUB CODE:**

BCCS 353

COURSE OBJECTIVE:

This course is designed to understand the contributions from all functional management of an organization for achieving a high level of quality and productivity.

c

COURSE OUTCOMES:

CO-1: To provide an understanding about strategic planning and its formulation

CO-2: To render knowledge about the concepts of responsibility accounting and profit planning

CO-3: To give an understanding about the standard costing and budgetary control

CO-4: To enable an idea about management Information system

CO-5: To render knowledge about all the functional management of an organization to ensure high level of quality, productivity and innovation

.

YEAR: III
SEMESTER: V

SUBJECT: CORPORATE FINANCIAL MANAGEMENT   **SUB**

CODE: BCCS 354

COURSE OBJECTIVE:

This course is designed to understand the conceptual framework of corporate financial management.

COUR

COURSE OUTCOMES:

CO-1: To understand the various classification and description of Finance function

CO-2: To learn about the detailed analysis of Capital Structure

CO-3: To learn about the detailed analysis of Cost of Capital

CO-4: To understand the Concepts of Capital Budgeting Techniques

CO-5: To learn about the various types of Dividend policy

YEAR: III
SEMESTER: V

SUBJECT: CORPORATE ACCOUNTING   **SUB CODE:**

BCCS 356

COURSE OBJECTIVE:

COURSE O

This course is designed to acquire the basic knowledge of the corporate accounting and to learn the techniques of preparing the financial statement

COURSE OUTCOMES:

CO-1: A Conceptual understanding of the features of shares and debentures
CO-2: To give an exposure to the company final accounts

CO-3: To know about the valuation of Goodwill and Shares

CO-4: Enable the students to understand about amalgamation, absorption andExternal reconstruction

CO-5: To understand the preparation of Holding Companies

YEAR: III
SEMESTER: VI

SUBJECT: CORPORATE AUDITING   **SUB**

CODE: BCCS 362

COURSE OBJECTIVE:

COURSE OUTCOME-

This course is designed to impart knowledge about the principles and methods of auditing and their applications

COURSE OUTCOMES:

CO-1: Explain the objectives, types and procedure for auditing

CO-2: To provide knowledge on internal control, internal check and internal audit and their relations.

CO-3: To understand the concept of vouching and duties of auditor as regards vouching

CO-4: Understanding the qualification, appointment and removal of auditor

CO-5: To understand about Investigations and Audit of Non-profit Companies

YEAR: III
SEMESTER: VI

SUBJECT: CORPORATE GOVERNANCE   **SUB**

CODE: BCCS 363

COURSE OUTCOME-B.COM(CS)

COURSE OBJECTIVE:

This course is designed to understand the concept of corporate Governance and impart knowledge of Corporate Social Responsibility and Accountability

COURSE OUTCOMES:

CO-1: To enable an understanding of the Concept of Corporate Governance

CO-2: To render knowledge about legal framework of corporate Governance.

CO-3: To bring out the types & functions of the Board of Directors regarding Corporate Governance

CO-4: To given an understanding about the duties and functions of stakeholder in corporate governance

CO-5: To render knowledge of corporate social responsibility and accountability

COURSE OUTCOME-B.COM(CS)

YEAR: III

SEMESTER: VI

SUBJECT: PRINCIPLES OF MARKETING   **SUB**

CODE: BCCS 364

COURSE OBJECTIVE:

The aim of this course understand the conceptual framework of marketing and process of decision making under various environmental constraints.

COURSE OUTCOMES:

CO-1: To understand nature and scope of marketing

CO-2: To know about the steps in the development of new product .

CO-3: To know the determinants of pricing and methods of pricing

CO-4: To know the different kinds of channels of distribution and their uses

CO-5: To have a comparative knowledge on advertising and personal selling.

YEAR: III
SEMESTER: VI
SUBJECT: RESEARCH TECHNIQUES   SUB

CODE: BCCS 365

COURSE OBJECTIVE:

This course is designed to understand the formulation of research objectives to determine the scope, depth and overall direction of the research

COURSE OUTCOMES:

CO-1: To familiarize about the research and its types

CO-2: To know the sources of research problem and research design.

CO-3: To understand the different methods of data collection

CO-4: To familiarize about the analysis of data and its types

CO-5: To know the preparation of report

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COURSE OUTCOME-B.COM(CS)

YEAR: III

SEMESTER: VI

SUBJECT: ENTREPRENEURIAL SKILLS   SUB

CODE: BCCS 361

COURSE OBJECTIVE:

This course is designed to orient the learner toward entrepreneurship as a career option and creative thinking and behaviour

COURSE OUTCOMES:

CO-1: To understand the types, qualities and classification of entrepreneur.

CO-2: To learn the selection and feasibility analysis of product and preparation of projectreport.

CO-3: To understand role and significance of Entrepreneurial Development Programme

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome
B.C.A.

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

COURSE OUTCOMES

I BCA

Semester I

INTRODUCTION TO PROBLEM SOLVING USING C	SUBJECT CODE: CSCA113
In this course, the students will	
CO1:	Illustrate the flowchart and design an algorithm for a given problem and to insight on types programming languages and problem solving concepts.
CO2:	Develop C programs using data types, operators, conditional and iterative statements
CO3:	Exercise user defined functions to solve real time problems
CO4:	Inscribe C programs to access arrays, strings and functions. Exercise user defined data types including structures and unions to solve problems
CO5:	Inscribe C programs that use Pointers to access arrays and functions. Exercise files concept to show input and output of files in C

LAB: PROGRAMMING IN C	SUBJECT CODE: CSCA116
In this course, the students will	
CO1:	Illustrate flowchart and algorithm to the given problem.
CO2:	Understand basic Structure of the C-PROGRAMMING, declaration and usage of Variables.
CO3:	Write C programs using operators with basic expressions.
CO4:	Exercise conditional and iterative statements to Write C programs.
CO5:	Write C programs using arrays, strings, functions, structures and union.
CO6:	Write C programs using Pointers to access arrays and functions. Exercise files concept to show input and output of files in C.

DIGITAL ELECTRONICS	SUBJECT CODE: CSCA114
In this course, the students will	
CO1:	Understand and examine the structure of various number systems . Be familiar with basic logic gates -- AND, OR & NOT, XOR, XNOR; independently or work in team to build simple logic circuits using basic
CO2:	Understand Boolean algebra and basic properties of Boolean algebra; able to simplify simple Boolean functions by using the basic Boolean properties
CO3:	Understand, analyze and design various combinational Circuit
CO4:	Understand, analyze and design various sequential Circuit, Registers and Counters.
CO5:	Understand, analyze Register Transfer logic and to design a simple computer

LAB: DIGITAL LAB	SUBJECT CODE: CSCA117
In this course, the students will	
CO1:	To study and understand various Basic Logic Gates- AND, OR, NOT
CO2:	To study and understand various Basic Logic Gates- NAND, NOR, XOR
CO3:	To simplify a given Boolean function and to implement using basic gates.
CO4:	To understand and design a Half Adder
CO5:	To understand and design a Half Subractor
CO6:	To understand and design a Full Adder
CO7:	To understand and design a Full Subractor
CO8:	To understand and design an Encoder
CO9:	To understand and design a Decoder
CO10:	To understand and design a Multiplexer

I BCA

Semester II

PYTHON PROGRAMMING	SUBJECT CODE: CSCA123

In this course, the students will

CO1:	To learn the basics of Python, IDLE, Standard Library, Literals and its types, Identifiers - Variable Assignment ,Keywords, Operators and its types, Precedence & Associativity –Expression
CO2:	To learn about Control Structure and various types -Selection Control, Iterative Control-Loops.
CO3:	To learn about List, Tuples, Sequences, Dictionaries and sets and its Operations.
CO4:	To learn about Functions and various operations on Functions and its types - Exception Handling - Catching and Handling Exceptions -Exception Handling .
CO5:	To learn more about String Processing, Traversal and Methods - Using Text Files - Opening Text Files - Reading Text Files - Writing Text Files

LAB: PYTHON PROGRAMMING	SUBJECT CODE: CSCA128

In this course, the students will

CO1:	Write a simple Python programs using arithmetic Boolean and logical operators
CO2:	To develop Python program using control flow tools like IF.
CO3:	To develop Python program using LOOP control structures
CO4:	To implement Data structures stack using List in Python.
CO5:	To implement Data structures Queue using List in Python.
CO6:	To develop Python program using tuple, sequence,
CO7:	To develop Python program using to read and write files, create and delete directories
CO8:	To develop Python program with exception handling
CO9:	To develop Python program using string handling and regular expressions.

DATA STRUCTURES AND ALGORITHMS   SUBJECT CODE: CSCA124

In this course, the students will

CO1:	Understand the different types of data structures. Learn simple array concept and stack using arrays. Understand linear and binary search using arrays.
CO2:	Understand the behavior of Queue ADT using arrays, singly linked list and doubly linked list and their applications.
CO3:	Have the ability to understand and use the concept of trees, its types, its basic definitions, representation and traversals.
CO4:	Know the concept of graphs, its basic definitions, representation and traversals
CO5:	Understand the functioning of sorting methods, including bubble, selection, merge sort insertion and Quick sort.

LAB: DATA STRUCTURES AND ALGORITHMS   SUBJECT CODE: CSCA129

In this course, the students will

CO1:	Learn to implement simple array concept and implement stack using arrays. Implement linear and binary search using arrays.
CO2:	Implement the Queue ADT using arrays. Implement singly linked list.
CO3:	Implement doubly linked list and tree traversal (Inorder, pre-order and post-order.
CO4:	Implement expression evaluation using stack
CO5:	Implement sorting methods, including bubble, selection, merge sort insertion and Quick sort.

II BCA

Semester III

OBJECT ORIENTED PROGRAMMING

USING JAVA   **SUBJECT CODE: CSCA231**

In this course, the students will

CO1:	Know the principles of object oriented programming concepts and solve simple problems using the fundamental syntax and semantics of the java programming language and arrays.
CO2:	Understand the behavior of primitive data types, operators and decision& iteration control structures. Learnt to use the concept of classes and its types, constructors, overloading and overriding, interfaces, packages, exception handling
CO3:	Have the ability to use AWT components, Swing components and program these concepts for event handling.
CO4:	Know file concept for input and/or output.
CO5:	Acquire knowledge about applets and creating animation using applets. Learn the concept of multi-threading.

LAB: JAVA LAB   **SUBJECT CODE: CSCA237**

In this course, the students will

CO1:	Write, compile, and execute Java programs that may include basic data types, arrays and control flow constructs.
CO2:	Write, compile and execute Java programs using object oriented concept like classes, constructors, and calculations methods, including inheritance, packages, interfaces, overriding and overloading and exception handling.
CO3:	Write, compile, and execute Java programs using GUIs and event driven programming
CO4:	Write, compile, and execute Java programs manipulating Strings and processing of file input and output.
CO5:	Write, compile, and execute Java programs on applets and multithreading.

COMPUTER NETWORKS   **SUBJECT CODE: CSCA232**

In this course, the students will

CO1:	Acquire knowledge about the basic communication / networking terms like networking hardware cum software and OSI reference model.
CO2:	Understand the use of transmission media, guided, wireless communication, multiplexing and switching, Protocols of DLL.
CO3:	Acquire knowledge about the Data link layers, and different error detection and correction techniques.
CO4:	Acquire knowledge of networking and internetworking devices, routing algorithms and congestion control algorithm.
CO5:	Understand the working concepts of various protocols of transport and application layer.

COMPUTER NETWORKS LAB   **SUBJECT CODE: CSCA238**

In this course, the students will

CO1:	To have an idea of Sending and Receiving text message by using python or java languages.
CO2:	To gain knowledge of File Transmission between client and server.
CO3:	To impart the basic concepts of Chat Applications.
CO4:	Understand the use of Simple Mailing Application.
CO5:	Acquire knowledge of Client Server Applications.

SOFTWARE ENGINEERING	SUBJECT CODE: CSCA233
In this course, the students will	

CO1:	Acquire strong fundamental knowledge in evolving role of software engineering and
	Role of software development. Select and implement different software development process models.
CO2:	Understand the software cost estimation techniques and Estimating Software Maintenance Costs.
CO3:	Determine the different steps followed in fundamental design concept and Detailed Design Consideration
CO4:	To gain knowledge of structure coding techniques and coding styles
CO5:	Apply different testing and debugging techniques and analyzing their effectiveness.

OPERATING SYSTEMS   **SUBJECT CODE: CSCA234**

In this course, the students will

CO1:	Understand the functions, structures and history of Operating Systems.
CO2:	Understand the concept of Memory management and its various schemes.
CO3:	Understand the concept of process and scheduling algorithms
CO4:	Understand the concept of Device management and its schemes
CO5:	Understand the concept of Information management and its schemes

OPERATIONS RESEARCH   **SUBJECT CODE: CSCA236**

tIn this course, the students will

CO1:	Understand origin & development of OR. Principal components of decision problems - phases of OR study.
CO2:	Develop the skills in solving LPP using various methods. Linear Programming - graphical solution - simplex method including artificial variable technique - duality.
CO3	Transportation and assignment models - Sequencing
CO4:	Game theory - optimal solution of two-person zero-sum games - mixed strategies - graphical solution of (2 X n) and (m X 2) games - solution of (m

	X n) games by linear programming.
CO5:	PERT and CPM - network diagrams - determination of the floats and critical path - probability considerations in project scheduling.

LAB: MULTIMEDIA TOOLS   **SUBJECT CODE: CSCA803**

In this course, the students will

CO1:	Understanding the key principles of animation and its applications . Acquire knowledge of how to create animation using Flash.
CO2:	Action Scripting Using actions to control a timeline.
CO3:	Design and Implement an animation for various themes.
CO4:	Implement Guide Motion tween and Shape tween.
CO5:	Acquire knowledge of how to create story board, work with files create movies and publish

II BCA

Semester IV

LAB: VISUAL BASIC PROGRAMMING   **SUBJECT CODE: CSCA241**

In this course, the students will

CO1:	Understand the fundamentals of visual programming and Graphical User Interface and Event Driven Programming
CO2:	Understand basics concepts of Visual Programming Language and OOPS
CO3:	Understand the properties and usage of various controls
CO4:	Acquire knowledge about developing windows applications
CO5:	Understand the connecting and accessing database in VB.NET and ADO.NET. Ability to develop simple project with database using data source. Develop real world applications.

LAB: VB and DBMS Lab   **SUBJECT CODE: CSCA248**

In this course, the students will

CO1:	Building simple applications.
CO2:	Working with controls.
CO3:	Application with multiple forms.
CO4:	Application with dialogs
CO5:	Application with Menus
CO6:	Develop any Three Database listed below: Students marksheet processing ii) Electricity bill processing iii) Bank Transaction iv) Payroll processing v) Gas booking and delivery vi) Library information system.

DATABASE MANAGEMENT SYSTEMS   **SUBJECT CODE: CSCA242**

In this course, the students will

CO1:	Acquire knowledge about the basics of Database systems, entities, attributes and Data models.
CO2:	Understand the concepts Tree and Plex structures, DDL and Relational Databases. Learn about the Normalization, Canonical data structures and Varieties of data independences.
CO3:	Acquire knowledge about the basic SQL reports and commands. Gain knowledge about Data types, Notations and Data and String functions. Understand the concept of DDL, DML and DLL.
CO4:	Gain knowledge about the approach and advantages of PL/SQL, variables, Data manipulation. Understand the Procedures, triggers, functions and packages and exception handling.

CO5:	Acquire knowledge about the Locking techniques , Recovery concepts and Database security.

DATA WAREHOUSING   **SUBJECT CODE: CSCA243**

In this course, the students will

CO1:	Acquire knowledge about the basics of Data warehouse ,working, needs, advantages ,disadvantages and Implementation of Data warehouse
CO2:	Understand the concepts Data warehouse architecture and ETL. Learn about the ETL process, data mart and steps to implement data mart.
CO3:	Acquire knowledge about Data modeling, needs, types and advantages of data modeling. Gain knowledge about OLAP and steps in the OLAP creation process.
CO4:	Gain knowledge about the Hardware and operational design and learn about Physical layout and service level agreement.
CO5:	Acquire knowledge about the Planning and Development of Data warehouse, testing data warehouse, developing test plan and testing the data base and operational environment.

IT PROJECT MANAGEMENT   **SUBJECT CODE: CSCA247**

In this course, the students will

CO1:	Acquire knowledge about the Nature and conceptualizing of IT projects and Developing project charter and Baseline project plan.
CO2:	Gain knowledge about the Human side of project management and understanding of Defining and Managing project scopes.
CO3:	Acquire knowledge about the Work Breakdown Structure and Project estimation. Understand the Project Schedule, Budget and Managing project risk.
CO4:	Acquire knowledge of project communication, tracking and reporting. Gain knowledge about IT project quality management.
CO5:	Understand the concepts of Managing Organizational Change, Resistance and Conflict. Learn about the Project implementation, Closure and Evaluation.

INTRODUCTION TO E-BUSINESS   **SUBJECT CODE: CSCA704**

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In this course, the students will

CO1:	Introduces the basic concepts, types of transactions, benefits and limitations and business models of e-business.
CO2:	To gain knowledge of EC mechanisms, EC applications and E-marketplaces.
CO3:	Understand the various B2B, E-Commerce, Online Travel and Tourism.
CO4:	Acquire knowledge of On-Demand Delivery Systems and E-Grocers, Implementation of E-Government Services.
CO5:	Understand the concept of e-governance and e-learning.

PHP PROGRAMMING   **SUBJECT CODE: CSCA804**

In this course, the students will

CO1:	Introduction to PHP – brief history – installing PHP – Language basics – Lexical structure – data types – variables – expressions
CO2:	Operators – flow-control statements – including code – embedding PHP in web pages
CO3:	Functions – Strings – Arrays - Multidimensional Arrays- Extracting Multiple Values - Slicing an Array - Checking Whether an Element Exists - Traversing Arrays – Sorting
CO:4	Objects – Terminology - Creating an Object - Accessing Properties and Methods - Declaring a Class – Introspection
CO:5	Web Techniques - HTTP Basics - Server Information - Processing Forms - Setting Response Headers - Maintaining State - Databases - Using PHP to Access a Database - Relational Databases

PHP PROGRAMMING   **SUBJECT CODE: CSCA804**

In this course, the students will

CO1:	Create a PHP page using functions for comparing three integers and print the Largest number. Write a function to calculate the factorial of a number (non-negative integer). The function accept the number as an argument.
CO2:	Write a Program to check whether the given number is prime or not. Create a PHP page which accepts string from user. After submission that page displays the reverse of provided string
CO3:	Write a PHP function that checks if a string is all lower case. Write a PHP script that checks whether a passed string is palindrome or not?
CO4:	Write a Program to sort an array. Write a PHP script that removes the whitespaces from a string.
CO5:	Write a PHP script that finds out the sum of first n odd numbers. Create a login page having user name and password. On clicking submit, a welcome message should be displayed if the user is already registered (i.e.name is present in the database) otherwise error message should be displayed.

Course Outcome - BCA

III BCA

Semester V

LAB: WEB TECHNOLOGY   **SUBJECT CODE: CSCA351**

In this course, the students will

CO1:	Acquire knowledge and skills of WWW of simple HTML commands, Graphics and image formats and hyperlinks
CO2:	Create Web application using HTML formatting tags and techniques used in industry.
CO3:	Impart skills of applying DHTML tags , Style sheets and its types to design web pages. Gain confidence to create dynamic website on real world problems.
CO4:	Have a Good grounding of Web Application Terminologies, Javascripts, DOM, event handlers and other web services.
CO5:	To be familiarized ASP with Database management, ADO tools and objects, also gains acquaintance to combine multiple web technologies to create advanced web components

LAB: WEB TECHNOLOGY LAB   **SUBJECT CODE: CSCA357**

In this course, the students will

CO1:	Understand the fundamentals of Simple HTML commands, Graphics and image formats and hyperlinks
CO2:	Acquire knowledge for the basics concepts of Tables, Frames, Forms, Background Graphics and Color.
CO3:	Learn how to simple application using HTML, DHTML and Cascading style sheet.
CO4:	Understand the concept of designing web pages using Java scripts.
CO5:	Ability to develop simple project using ASP with database using data source and also develop real world applications.

DATA MINING   **SUBJECT CODE: CSCA352**

In this, the students will

CO1:	Understand the difference between Data Warehousing and general databases
CO2	Determine the different steps followed in Data mining and pre-processing for Data mining
CO3	Describing data cleaning, integration, reduction, transformation and data Discretization.
CO4	Describe the algorithms used for Classification and Pattern mining in data mining.
CO5	Describe the Clustering basics and approaches, data mining applications and tools.

SOFTWARE TESTING   **SUBJECT CODE: CSCA356**

In this course, the students will

CO1:	Understand the Objectives and principles of software Testing and the Software testing life cycle.
CO2:	Understand the White Box Testing Techniques: Statement Coverage – Branch Coverage - Condition Coverage – Multiple Condition Coverage – Data flow Coverage- loop coverage. Black Box Testing Techniques: Boundary Value Analysis – Decision tables - Equivalence Partitioning - State based or graph based testing.
CO3:	Understand the Levels of Testing, functional Vs Non-functional testing and a few of its types
CO4:	Understand the Regression Testing Types, smoke test – criteria for selecting the and classifying the test case – executing test cases and concluding the results and best practices.
CO5:	Understand the Challenges in software test automation and its types. Learn few Software Test Automation tools.

**FUNDAMENTALS OF ACCOUNTANCY   SUBJECT CODE:
CSCA705**

In this course, the students will

CO1:	Provide knowledge regarding basic concept of accounting, Accounting principles and Accounting rules
CO2:	Get Knowledge regarding types of accounts, preparation of journal, Ledger and trial balance.
CO3:	Understand the use of Subsidiary books including cash book, bank Reconciliation statement
CO4:	Preparation of trading account- preparation of profit and loss account and balance sheet- Final accounts with adjustments
CO5:	Basics of cost Accounting , cost of production, concept of inventory, reorder level, safety stock.

LAB: ACCOUNTING TOOLS	**SUBJECT CODE: CSCA811**
In this course, the students will	
CO1:	Provide knowledge regarding basic concept of accounting, Accounting principles and Accounting rules.
CO2:	Fundamentals of Tally - Creation / Setting up of Company in Tally. Accounting masters in Tally
CO3:	Types of accounts, preparation of Journal, Ledger and Groups
CO4:	Voucher Entry in Tally, Accounting Vouchers, Inventory Vouchers.
CO5:	Preparation of trading account, trial balance, preparation of profit and loss account and balance sheet.

LAB: Online Certification Course/ Mini Project/2 weeks Internship/

1 month In-Plant Training   **SUBJECT CODE: CSCA806/**

                                                          CSCA807/CSCA808/CSCA809

In this course, the students will

CO1:	To upgrade the student's knowledge with trending tools and techniques by doing an Online Certification Course.
CO2:	To get an idea on Software development by develop a design solution for a set of requirements by doing a Mini Project
CO3:	To learn about the implementation of non-academic field by doing a 2 weeks Internship
CO4:	To associate the student's activity with an Industrial working environment by doing a 1 month In-Plant Training

III BCA

Semester VI

VISUAL PROGRAMING USING C#   **SUBJECT CODE: CSCA351**

In this course, the students will

CO1:	Acquire knowledge about the .NET Framework and the Common Language Runtime. Gain knowledge about the Object Technology, C# Applications and Creating a Simple Application in Visual C# Express.
CO2:	Understand the concepts of UML Class Diagram with a Property, Initializing Objects with Constructors and Software Engineering with Properties. Learn about the Floating-Point Numbers and Type decimal.
CO3:	Acquire knowledge about the Indexers, Default and Parameter less Constructors, Composition and Destructors. Gain knowledge about the static Class Members.
CO4:	Gain knowledge about the Graphical User Interfaces with Windows Forms, Control Properties and Layout.
CO5:	Acquire knowledge about the Databases and LINQ. Gain knowledge about the Retrieving Data from Multiple Tables with LINQ.

LAB: VISUAL PROGRAMMING WITH LAB   SUBJECT CODE: CSCA359

In this course, the students will

CO1:	Implement Classes and Objects, Inheritance &Polymorphism
CO2:	Implement Interfaces, Operator Overloading, Delegates and Events
CO3:	Implement Exception Handling &Multi-Threading
CO4:	Create Console application & Window Applications.
CO5:	Create programs using SDI & MDI
CO6:	Create program using Database Controls. Use ADO.NET to create application to read, insert, and update data in a database.
	Develop any TWO case studies listed below: I. Inventory Control II. Retail Shop Management III. Employee Information System IV. Personal Assistant Program V. Students' Information System

FOUNDATIONS OF DATA ANALYTICS   SUBJECT CODE: CSCA363

In this course, the students will

O1:	Understand the Introduction, Definition and Need for Data Science, Components of data science process and Introduction to NoSQL.
CO2:	Understand the Introduction, Definition and advantages of Big data, its architecture. Business Intelligence vs Data Science - Big Data Analytics: Methodology - Technologies – Advantages.
CO3:	Understand the Big data Management and Non-Relational databases, key value pair database, document database, columnar database, graph database, spatial database
CO4:	Understand the MapReduce Fundamentals: Understanding the map Function, the reduce Function, Putting map and reduce Together with an example
CO5:	Understand the Introduction, Need and Types of ML learning algorithms for Data Analysis: Supervised and Semi-supervised, Unsupervised, reinforcement.

SOFTWARE QUALITY MANAGEMENT   SUBJECT CODE: CSCA367

In this course, the students will

CO1:	Acquire knowledge about the Software Quality Factors. Gain knowledge about the Development and Quality Plans
CO2:	Understand the concepts Assuring the quality of Software maintenance Learn about the SQA Components in the project life cycle.
CO3:	Acquire knowledge about the Software Quality Infrastructure components. Gain knowledge about the Assuring the Quality of Software Maintenance
CO4:	Gain knowledge about the Project Process Control, components of project progress control.
CO5:	Acquire knowledge about the Software Quality Metrics, Maturity Models. Gain knowledge about the basic idea in Software process.

PROJECT & VIVA-VOCE   SUBJECT CODE: CSCA362

In this course, the students will

CO1:	The course outcome is the ability of the student to apply Software Development Cycle to develop a software module. The student will be able to use the techniques, skills and modern software engineering tools necessary for software development. Develop a software product along with its complete documentation. Formulate a real world problem and develop its requirements. Test and validate the conform Work as a responsible member and possibly a leader of a team in developing software solutions. Self learn new tools, algorithms, and/or techniques that contribute to the software solution of the project.

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome BBA

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

SARADHA GANGADHARAN COLLEGE

DEPARTMENT OF MANAGEMENT STUDIES

COURSE OUTCOMES

SEMESTER-I

Subject Name:Principles of Management   Subject Code:PPLM111

In this course the studentswill

CO1:	Familiarize the nature and dimensions of evolving management functions.
CO2:	Understand the planning concepts in management.
CO3:	Acquaint knowledge about organization.
CO4:	Understand the motivation concepts and staffing function in Management.
CO5:	Understand the leadership and controlling concepts in Management.

Subject Name:Financial Accounting   Subject Code:FNAC112

In this course the studentswill

CO1:	Develop conceptual understanding of the basic accounting system through book-keeping mechanism.
CO2:	Will describe the meaning of journal, ledger, subsidiary books, cash book and trial balance.
CO3:	Analyse subsidiary books like sales book, purchase book, cash book and petty cash book.
CO4:	Prepare the final accounts by distinguishing capital expenditure and revenue expenditure.
CO5:	Write down the various methods of calculating depreciation.

Course Outcome BBA

Subject Name: Introduction To PublicAdministration   Subject Code: PADM113

In this course the studentswill

CO1:	Know the basic information of public administration and its relation with other disciplines with its evolution
CO2:	Understand about administration in enactment of Indian constitution
CO3:	Understand the determinants of state and union territory administration
CO4:	Have knowledge about the emerging issues in Indian constitution

SEMESTER: II

Subject Name: Business Law   Subject Code:BSLA121

In this course the studentswill

CO1:	Analyse the law of contract with types of agreement, know about offer, acceptance and essentials of valid consideration, free consent, coercion, fraud and mistake.
CO2:	Understand contract of agency and rights and duties of an agent and principal.
CO3:	Analyse the Sale of Goods Act with rights of buyer and unpaid seller.
CO4:	Know the provisions of Negotiable Instruments Act.
CO5:	Understand the Companies Act and its provisions, kinds of companies, directors, winding up, minutes and resolutions.

Subject Name: BUSINESS STATISTICS   Subject Code: BSTA122

In this course the studentswill

Co1:	Understand about statistics.collection of data with its presentation
Co2:	Know ffrequency distribution .measures of central tendency and dispersion
Co3:	Study about the measures of relation like correlation and regression

Course Outcome BBA

Co4:	Analyse test of significance with the help of paired t test and ANOVA
Co5:	Have knowledge and probability and theoretical distribution

Subject Name: ENVIRONMENTAL STUDIES   Subject Code: ENVS123

In this course the studentswill

CO1:	Know the basic structure of environmental studies
CO2:	Understand about ecosystem, energy flow and ecological succession
CO3:	Have knowledge on land resources, deforestation .water and energy resources.
CO4:	Acquaint information on biodiversity and its conservation
CO5:	Understand the reasons of environmental pollution
CO6:	Know about the environmental changes ,laws and its protocol for conservation
CO7:	Enrich knowledge about human communities and the environment
CO8:	Field visit to any polluted local area or study of natural resources or study of ponds or rivers

SEMESTER: III

Subject Name:BusinessEnvironment   Subject Code: BEVT231

In this course the studentswill

CO1:	Describe the internal and external environment and Micro and MacroEnvironment
CO2:	Analyze the social and cultural environment with understanding some basicBusiness ethics.
CO3:	Identify Business and Economic Systems : Socialism, Capitalism, Private sector, Public sector and Cooperation sector

Course Outcome BBA

CO4:	Understand the areas of government regulations of business.
CO5:	Analyze the concept of privatization with basic consumer rights.

Subject Name:OrganisationalBehaviour   Subject Code: OGBH232

In this course the studentswill

CO1:	To know about the challenges, roles, models and approaches of organizational behavior.
CO2:	Have knowledge on the behavior of individual and its theories.
CO3:	Understand Group dynamics, Group norms, and Consequences of groupcohesiveness.
CO4:	Analyse the forces for change and cause of resistance to change and steps in OD.
CO5:	Describe conflict management and its effectiveness.

Subject Name:FinancialManagement   Subject Code: FNCM233

In this course the studentswill

CO1:	Know the various functions of financial management, financial planning and functions of finance.
CO2:	Have knowledge on capital budgeting, forms of dividend and factors affecting dividendpolicy.
CO3:	Have knowledge on the leverage, types of leverage and capital structure theories.
CO4:	Understand cost of capital, cost of Debt and cost of equity.
CO5:	Understand the determinants and estimations of working capital and alsodividend decision

Course Outcome BBA

Subject Name:MarketingManagement   Subject Code: MKTM234 In this course the studentswill

CO1:	Develop a basic knowledge on concepts of marketing and selling.
CO2:	Analyse marketing mix, consumer behavior and STP
CO3:	Know about product planning, branding, packaging and labelling.
CO4:	Describe the factors influencing pricing decisions, and types of channel of distribution
CO5:	Know the features of advertising, qualities of good advertisement copy and media selection, Advertising budget, Advertising agency and Sales promotion.

Subject Name:SoftSkills Development   Subject Code: SSDM235 In this course the studentswill

CO1:	Understand the basic knowledge about business communication.
CO2:	Develop knowledge on presentation and writing skills of business letter.
CO3:	Acquaint with the qualities to be needed for interviews.
CO4:	Understand the common things to be followed in GD.
CO5:	Understand the knowledge on preparation of resumes.

SEMESTER IV

Subject Name: Business Ethics   Subject Code: BSET241

 In this course the studentswill

CO1:	Have knowledge on ethics and ethical decision making
CO2:	Understand business ethics ,its role and moral obligations

Course Outcome BBA

CO3:	Know the factors of corporate social responsibility ,its mechanisms and corporate governance
CO4:	Inculcate the knowledge of workplace ethics ,sterss at workplace and how to manage ethics in workplace
CO5:	Acquaint knowledge about Indian values, requisites of ethics globally, management of ethics holistically.

Subject Name:Business Economics   Subject Code: BSTA 242

In this course the studentswill

CO1:	Differentiate Economics and Business Economics and Micro and MacroEconomics
CO2:	Basic Theory of Consumer Behaviour
CO3:	Understand about various methods of demand forecasting and supply analysis
CO4:	Get the knowledge over various provision relating to production and cost analysis
CO5:	Get the idea on Pricing in different market structure

Subject Name:Operations Management   Subject Code: OPSM243

In this course the studentswill

CO1:	Study the various functions of production management, manufacturing Practices, operations management, CRP and factors affecting forecasting
CO2:	Understand the factors affecting plant location and the principles of plant layout.
CO3:	Know about materials management with its objectives, functions and importance. Analyse Double Bin System, ABC analysis, and Production Planning Control
CO4:	Know the Production Planning, Modern Production Management and Work Study
CO5:	Have knowledge about Quality control, Quality circles, TQM and Maintenance Management

Course Outcome BBA

Subject Name:Human Resource Management   Subject Code: HREM244

In this course the studentswill

CO1:	Enable to secure basic knowledge in Human resource management and Humanresource role of a manger.
CO2:	Describe Job analysis, Job description. Job specification, HR planning, Recruitment andselection.
CO3:	Understand the meaning of Job Evaluation and wage and salary administration.
CO4:	Know the performance appraisal and worker's participation in management.
CO5:	Understand the importance of Industrial relations and importance of collectivebargaining.

Subject Name:System Skill Development   Subject Code: SSDT 245

In this course the studentswill

CO1:	Know basic knowledge about computer systems, Hardware, CPU and Software
CO2:	Study word processing concepts: MS Word and creating word documents.
CO3:	Inculcate the knowledge of electronic spread sheets and entering data in worksheet
CO4:	Develop knowledge of creating presentations using power point, design power point, design templates and Blank presentation
CO5:	Acquaint in knowledge in Accounting software tally (Version .9 and ERP)

SEMESTER: V

Subject Name: Rural Entrepreneurship (Field based Project work)

Subject Code: RETP 351

In this course the studentswill

CO1:	Undergo one week field visit to rural areas or any rural reality
CO2:	Study on social structure, Consumption pattern, Government schemes, Status of women and Strategies of finance and marketing.
CO3:	Field Study Seminar assists in analysing and interpreting their life skill experiences

Course Outcome BBA

	and functional literacy which will help to operate and manage the enterprise.
CO4:	Report writing about Rural visit
CO5:	Submit the report writing and present PPT Presentation about evaluation of rural visit.

Subject Name: Consumer Behaviour   Subject Code: CNBH352

In this course the studentswill

CO1:	Learn to apply the knowledge of consumer behavior in marketing.
CO2:	Develop an understanding of environmental, cultural and social influence on consumer behavior.
CO3:	Gain insights on perception, values and lifestyles of a consumer.
CO4:	Possess knowledge on innovation and opinion leadership.
CO5:	Understand the types and models of consumer decision.

Subject Name: Retail Marketing   Subject Code: RTLM 353

In this course the studentswill

CO1:	.Develop the marketing competencies in retailing and retail consulting.
CO2:	Concept of merchandising helps to know the presenting products at the right time,at the right place,in the right quantity and at the right price to maximize sales.
CO3:	Analyze Retail Market and Strategy including product pricing andunderstand the functions of retail business and various retail formats and retail channels.
CO4:	Gain knowledge on the Components of Retail Store Operation
CO5:	Greater insight of Foreign Direct Investment in Retail Industry.

Subject Name:Training & Development   Subject Code: TADT 354

In this course the studentswill

CO1:	To analyse problems and provide solutions
CO2:	To enable effective presentation of input and activities
CO3:	To provide constructive feedback to trainees
CO4:	To evaluate training materials for trainees of different experiential levels
CO5:	To establish a check list of evaluation criteria.

Course Outcome BBA

Subject Name:Compensation Management   **Subject Code: CMPM 355**

In this course the studentswill

CO1:	To enable the students to understand the various aspects of Compensation Management.
CO2:	To Acquire basic compensation concepts and the context of compensation practices.
CO3:	To Learn the concepts of Payment and employee benefits
CO4:	To Learn implications for strategic compensation and possible employer approaches to manage legally required benefits to employees
CO5:	To Develop appropriate reward and compensation policies.

Subject Name:Taxation Management   **Subject Code: TXNM 356**

In this course the studentswill

CO1:	To provide an over view of the Indian taxation system
CO2:	To comprehend when income is chargeable under the head income from house property.
CO3:	To understand the meaning of business and profession and the scope of Income chargeable to tax under the head and compute the deductions available while computing business income applying the relevant provisions.
CO4:	To know the meaning of short term capital asset and long term capital asset and to determine the cost of acquisition and indexed cost of acquisition, in case of long term capital asset for the purpose of computing the capital gain
CO5:	To enable the student to prepare tax returns and other tax relation documents

Subject Name:Cost Accounting   **Subject Code: COAC 357**

In this course the studentswill

CO1:	Familiarise the basic cost concepts, allocation and control of various cost.
CO2:	Analyse the various methods of material control and valuation of material issues
CO3:	Understand the concept of labour turnover with various methods of wage payment and Incentive plans.
CO4:	Describe the allocation, apportionment and absorption of overheads.

Course Outcome BBA

CO5:	Preparation of cost sheet by understanding the meaning of Job costing, Batch costing and Contract costing.

Subject Name:Tourism Principles and Practice   Subject Code: TPAP358

In this course the studentswill

CO1:	Possess fundamental knowledge on the nature, scope, significance, components and interdisciplinary approaches to tourism.
CO2:	Familiarise with various forms of tourism
CO3:	Gain insights on the functions, constituents and structure of tourism industry.
CO4:	Understand various theories of tourism.
CO5:	Learn about various tourism organisations and initiate a travel agency.

Subject Name: Event Management   Subject Code: ETMP359

In this course the studentswill

CO1:	Gain concrete understanding of the practicalities of Event Management
CO2:	Knowledge about comprehensive know-how of event planning, organising and marketing.
CO3:	Realise the importance of MICE and its role in tourism development.
CO4:	Familiarize with Event Marketing
CO5:	Develop capabilities of organising travel marts.

Subject Name:ResearchMethodology   Subject Code: RSMD 360

In this course the studentswill

CO1:	Understand the basic theoretical framework of the concepts of research methodology.
CO2:	Know about Research problems, its sources, techniques involved in defining a problem.

Course Outcome BBA

CO3:	Understand the various methods of data collection and the requisites of a good questionnaire.
CO4:	Analyze data processing, Editing, coding, tabulation in to Central Tendency, Correlation, Regression and chi square test.
CO5:	Understand the essentials of report writing and steps in report writing with its Contents along with interpretation of data.

SEMESTER –VI

Subject Name:Field Study (Industry Based Internship Report)SubjectCode: FDST 361

In this course the studentswill

CO1:	Field visit of three different organizations for example one small entrepreneurial company, one big store or shop and an agency company or any other venture the guide sees fit, helps the students to get well acquainted with the observed.
CO2:	Understand about the industry profile, company profile and functions of various departments in the Organization which will enable to operate the enterprise in a successful way.
CO3:	Gain knowledge in presenting the field study report through report writing
CO4:	Improves the communication skills by presenting the field study report through PPT presentation.
CO5:	Conducting viva voce helps to know about the observation knowledge about the field study

Subject Name:ServiceMarketingSubject Code: SRVM 362

In this course the studentswill

CO1:	Understand the concept of service marketing, nature and classification of service.
CO2:	Know product concept, Pricing, Place, Promotion, Place, People and Physical Evidencesinservices.
CO3:	Understand the role of customer in service delivery, quality perceptions in services and SERVQUAL
CO4:	Know STP, demand and supply management of services, advertising, branding, role of employees in service delivery

Course Outcome BBA

CO5:	Understand services of Tourism marketing, educational institutions, Bank marketing, finance, Hospitalmarketing and Hotel marketing.

Subject Name:Integrated Marketing CommunicationSubjectCode:IMCN363

In this course the studentswill

CO1:	Gain basic knowledge on Integrated Marketing Communication, Planning etc.
CO2:	Understand the nature, importance and functions of a sales organization.
CO3:	Familiarize with the concepts, objectives and process of advertisement, various advertisement approaches etc.
CO4:	Understand the various concepts in sales promotion: steps, activities, objectives, significance, strategies etc.
CO5:	Identify the objectives, importance, theories and functions of personal selling.

Subject Name:Industrial Relations Management   Subject Code: IRLM 364

In this course the studentswill

CO1:	To develop necessary understanding among students of various labour management relation issues and policies in the Indian Context in particular.
CO2:	To familiarize with the role of management and unions in the promotions of industrial relations.
CO3:	To examine the Code of Industrial Discipline and its management.
CO4:	To acquire skills in handling employer-employee relations
CO5:	To understand the basic knowledge of Industrial Disputes and Workers Participation in management in India.

Subject Name:Fundamentals Of Labour Legislation   Subject Code: FOLL 365

In this course the studentswill

CO1:	To understand the origin of labour legislations in India.
CO2:	To enable the students to familiarize with labour laws.
CO3:	To identify the wage developments and the judicial setup of Labour Laws.
CO4:	To acquire the laws relating to Industrial Relations and Workmen's Compensation

Course Outcome BBA

CO5:	To understand the laws relating to Social Security and Working conditions and also learn the enquiry procedures and industrial discipline

Subject Name:Banking and Indian Financial System   Subject Code: BIFS 366

In this course the studentswill

CO1:	To describe the role of financial system
CO2:	To summarize the reasons to study about financial institutions
CO3:	To identify roles of financial intermediaries within existing financial markets
CO4:	To understand the Structure of Indian Banking System.
CO5:	To provide expertise in managing banking functions and understand the Role of RBI

Subject Name:ManagementAccounting   Subject Code: MNAC 367

In this course the studentswill

CO1:	Know the various functions, Tools and Techniques of Management accounting.
CO2:	Knowledge about Financial Statement Analysis with Techniques.
CO3:	Understand about Ratio analysis with its merits, demerits.
CO4:	Gain Knowledge on Fund flow statement with its merits, demerits and also cash flowstatement with its uses.
CO5:	Understand the meaning of Marginal costing, Break – even analysis, Profit volume ratio and Margin of safety and related Decision-making.

Subject Name: Airline And Cargo Management   Subject Code: ALCM 368

In this course the studentswill

CO1:	To understand the structure and dynamics of airlines and air cargo industry;
CO2:	To gain thorough insight into various operations, management of airlines and cargo;
CO3:	To enable the students to acquire skills in managing airlines and cargo.
CO4:	Students will acquire a great deal of confidence and knowledge in airline and cargo operations that would go a long way in their taking up careers in those fields.
CO5:	The inputs on air cargo will enable the students to develop skills part of the industry

Course Outcome BBA

Subject Name:Hospitality ManagementSubject Code: HPMP369

In this course the studentswill

CO1:	Possess knowledge on the features of hospitality industry, types of hotels and itsoperations.
CO2:	Gain understanding on various operations in a hotel industry.
CO3:	Understand the various activities of housekeeping.
CO4:	Develop an understanding on the duties and responsibilities of hotel staff and other supplementary activities.
CO5:	Evaluate the performance of hotels using various yardsticks.

Subject Name:Strategic Management   **Subject Code: STGM 370**

In this course the studentswill

CO1:	To make the students to understand the concepts of strategic Management
CO2:	Gain an in-depth understanding of business environment.
CO3:	Analysis business situation identify craft and execute strategies at different levels in business
CO4:	To understand growing importance of strategies in uncertain business environment.
CO5:	Appreciate the unique challenges faced by firms in competitive environment and develop skills to deal with ever changing business situations.

Course Outcome BBA

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome
B.A(English)

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

SARADHA GANGADHARAN COLLEGE

(Affiliated to Pondicherry University)

Recognized by UGC Under Section 2(f) of the UGC Act 1956 as a PG Institution

Department of English

B.A., English (CBCS)

Course Outcome

Semester-I

SUBJECT NAME: English - I   **SUBJECT CODE: ENGL 112**

In this course the students will

CO1	Recite the genre poetry of various poets and acquire LSRW skills
CO2	Recall the biographies of the twentieth century prose writers
CO3	Revise the various grammatical items that help in the appropriate sentence construction
CO4	Identify and learn new words through synonyms and antonyms to improve vocabulary
CO5	Acquire the conversational skills through Dialogue writing, comprehension

SUBJECT NAME: INDIAN WRITING IN ENGLISH   SUBJECT CODE: ENGL 111

In this course the students will

CO1	Trace out the development of history of Indian English
CO2	Comprehend How and Why Indian Literature emerged as a distinct field of study
CO3	Acquaint with the work of significant Indian writers of poetry, prose, fiction and drama
CO4	Cognize the social, political and cultural issues reflected in Indian writing in English
CO5	Identify the major literary features in Indian English Writings.

SUBJECT NAME: PROSE   **SUBJECT CODE: ENGL 112**

In this course the students will

CO1	Comprehend the growth of the prose writing in English Literature.
CO2	Cognize difference between personal and impersonal essays.
CO3	Perceive the writing styles and literary devices to analyse the context in the works of various prose writers viz. Bacon, Charles Lamb, Hazlitt, Russel, Goldsmith, Doris Lessing, and so on.
CO4	Inculcate prose reading with interpretive and analytical proficiency.
CO5	Decipher the importance of brevity in writing and involve in writing creatively and critically.

Semester-II

SUBJECT NAME: English-II   **SUBJECT CODE: ENGL 122**

In this course the students will

CO1	Develop the language skills of the learners'
CO2	Enhance the learners' competencies in English
CO3	Train the learners' to express themselves in English
CO4	Empower the learners' to communicate both oral and written skills with speakers of languages other than their mother tongue
CO5	Equip the learners' writing skills to be effective communicators of English Language

SUBJECT NAME: Poetry   **SUBJECT CODE: ENG-121**

In this course the students will

CO1	Recognize Poetry from socio-political context of varioushistoric periods.
CO2	Understand and appreciate Poetry as a distinctive literary art form
CO3	Appreciate and identify unique characteristics of Poetry penned by Seminal British Poets.
CO4	Comprehend the various elements of Poetry, such as diction, tone, imagery, figures of speech, symbolism , theme, etc.
CO5	Inculcate critical way of analysing poetry and equip poetry

Course Outcome – B.A(English)

SUBJECT NAME: Fiction   **SUBJECT CODE: ENGL 122**

In this course the students will

CO1	Trace out the growth of English Fiction
CO2	Recognise the elements of Fiction
CO3	Conceptualise the genre of novel and its types viz. Allegorical, Gothic, Historical, Epistolary, Picaresque and Psychological
CO4	Learn the elements of Fiction Narrative Technique, Setting, Point of View, Style
CO5	Get a wide exposure of eminent British Novelist like Jane Austen, Charlotte Bronte, Charles Dickens, Virginia Woolf

Semester-III

SUBJECT NAME: English- III   **SUBJECT CODE: ENGL 232**

CO1	Recite and recall the new phrases employed by the writer
CO2	Acquire and recall the various elements of poetry, rhyme and meter
CO3	Recall the elements of drama and explain how these elements combine to form a theatrical experience
CO4	Recite and recall the different sentence structures, gerunds,, infinitive phrases, types of questions, use of modal verbs
CO5	Classify and demonstrate concepts of various forms of written communication and train the learners' on drafting a resume

SUBJECT NAME: HISTORY OF ENGLISH LITERATURE   **SUBJECT CODE: ENGL 231**

In this course the students will

CO1	Trace out the development of History of English Literature from Elizabethan Age to Modern Age.
CO2	Decipher how literature influences the social and political history of each period.
CO3	Learn works of major writers and their style and techniques employed in chronological order.
CO4	Comprehend how literary trends emerge , function, and dissolve.
CO5	Acquainted with major religious, political and social movements from 14th to 21st century and their influences on literature.

Course Outcome – B.A(English)

Subject Name: English Language and Linguistics   Subject Code: ENGL 232

In this course the students will

CO1	Acquire the basic knowledge of the structure of English and the theoretical background to phonetics and English Phonology
CO2	Procure high proficiency in the use of English Language and basic concepts in morphology, syntax, semantics and pragmatics
CO3	Know the dynamics and analytical aspects of the use of Language.
CO4	Understand the sound system and the structure of English Language.
CO5	Attain the knowledge of applications of English Language and Linguistics.

SUBJECT NAME: COMMUNICATION SKILLS   SUBJECT CODE: ENGL 233

In this course,

Co 1	The Students will be able to learn the concept of communication, different types of communication, miscommunication and barriers of communication and apply them while communicating to others for better understanding between the sender and receiver.
Co 2	To make them learn the strategies involved while talking to strangers and familiar people and use various linguistics and non-linguistic techniques at the end of the of the classes.
Co 3	They will be able learn the telephone etiquette and apply them while making phone calls for social and business purposes.
Co 4	At the end of the class, students will enhance their skills of attending interviews and to participate in group discussion to become suitable employees in the business World, after learning specific strategies.
Co 5	The students, after the class is over, will be able to learn and apply techniques of public speaking and compering to improve their speech skills.

Course Outcome – B.A(English)

Semester-IV

SUBJECT NAME: English-IV   **SUBJECT CODE: ENGL 242**

In this course the students will

CO1	be able to use English effectively by understanding the curriculum
CO2	Understand and develop the use of four skills –Listening, Speaking, Reading and Writing
CO3	enable to communicate effectively and appropriately in real life situation
CO4	Learn with the practical, emotional, intellectual and creative aspects of language by integrating knowledge and skills.
CO5	learn to think beyond the text by doing exercises and reading activities which is prescribed by Pondicherry University

SUBJECT NAME: British Drama   **SUBJECT CODE: 241**

In this course the students will

CO1	Learn various types of dramas viz. Tragedy, Comedy, Farce, Melodrama, Historical Plays through the prescribed texts and understand the its different characteristics and representation.
CO2	Understand the structure of a play and interpret the text using various dramatic devices.
CO3	Gain knowledge about various types of Dramas and learn to discern various cultural and moral values associated with the texts.
CO4	Be taught various interpretative techniques to approach dramatic narratives to reach well-reasoned conclusions and elucidation.
CO5	Learn the importance of socio-cultural and political context through the historical references in the text.

SUBJECT NAME: LITERARY FORMS   **SUBJECT CODE: ENGL 242**

In this course the students will

CO1	Students critically understand and analyze the kinds of poetry along with the forms of poetry. Realize that literature field is viable for experimentation in further subgenres.
CO2	Students understand distinctive features of novels, shorter fiction and essays. The students will comprehend the difference between Fiction and Non Fiction to understand the meaning and its forms found in Fiction.
CO3	Students critically understand the idea or meaning of what is Drama along with its various Forms. Achieve a bird's eye view on the nuances of English Literature, thereby strengthening expertise in literature studies that amounts to their intertextualizing content and form of works of art.
CO4	Understand the origin and development of the different genres of literature. Identify the unique features of each literary form by way of comprehending its characteristics and conventions.
CO5	Students will become familiar with the Prose, and its various forms or kinds. Apply knowledge of the various forms of literature to the study of individual works.

Course Outcome – B.A(English)

SUBJECT NAME: WRITING SKILLS   **SUBJECT CODE: ENGL 243**

In this course,

Co 1	Students will be able to make notes from study materials using different indent and use them for future use
Co 2	At the end of this unit, they will be able to write an effective report to the higher officials based on social, educational and administrative matters.
Co 3	It will enhance the skills of organizing meeting with agendas and make them learn how to write minutes at the end of the meeting.
Co 4	They will be able to understand what paragraph is and further they will depict their skills in writing different paragraphs.
Co 5	Students will understand how digital communication is powerful when compared to ordinary business communication techniques
Co 6	At the end of this unit, they will acquire the skills of formal communication which leads them to write formal and informal letters.

Semester-V

SUBJECT NAME: ENGLISH FOR COMPETITIVE EXAMINATIONS
SUBJECT CODE: ENGL 351

In this course,

Co 1	The students will be able to learn the rules of Basics of English Grammar such as: Articles, Prepositions, Active and Passive voice, Direct to Indirect, Modal verbs, Conditionals, Tenses, Concord, Phrasal verbs, Idiomatic expressions and Foreign expressions and apply them while speaking and writing in formal and informal situations.
Co 2	At the end of the class, the students will be able to learn how to identify the error part in the sentence and to rewrite them correctly after recalling some grammatical rules or recalling some clues or hints available in the sentence itself.
Co 3	They will be able to learn how to provide appropriate suitable words and phrases to the blank after understanding the clues and hits provided along with the sentences
Co 4	At the end of the class, students will be able to understand the techniques of reading comprehension and use different techniques of reading such as Skimming, Scanning, Intensive reading and Extensive reading to understand the content clearly.
Co 5	It will enhance the skills of students how to write paragraph with the help of main points, supporting points and cohesive devices in order to write a well-knit paragraph.
Co 6	The students using the skills of précis writing will write summarising by eliminating unwanted ideas and other disconnected references from the given paragraph so that they will attain the skills of simplifying and condensing the message
Co 7	They are able to learn and apply the knowledge of Foreign expressions while writing and speaking in different contexts as a way of increasing stylistic pattern of their writing.

Course Outcome – B.A(English)

Co 8	After the class id over, the students will be able learn and use different shades of meaning of the Idiomatic expressions in different contexts.
Co 9	It will enhance the skills among the students how to use different types of phrasal verbs in different writings as a way of stylistic purposes.
Co 10	The students will be to learn and write different types of letters such as Formal and Informal letters using apt words and phrases depending upon the category of the letters.
Co 11	At the end of the class, they will be able to understand how to write a report to the authority concerned with a view to finding out the cause and remedy of the social and other problems being prevalent in the industry or in the colleges or Universities.
Co 12	After the class is over, the students will be able to learn how to write different essays with suitable content with respect to the types of the topics and thy will practise intermittently so that they can improve stylistic pattern.

SUBJECT NAME: Literary Criticism   SUBJECT CODE: ENGL 352

In this course the students will

CO1	understand the evolution of critical thoughts of prescribed literary theorists.
CO2	examine the techniques of early criticism of Aristotle, Longinus,Horace, Dr.Johnson,T.S.Eliot, Mathew Arnold and I.A.Richards
CO3	think critically about the range of critical theories
CO4	write a critical appreciation after reading the literary pieces.
CO5	articulate the relations among culture, history, and texts of classic and early British literary critical theories.

SUBJECT NAME: American Literature   SUBJECT CODE: ENGL 354

In this course the students will

CO1	Understand the origin and development of American Literature and trace the history of American poetry, drama and fiction.
CO2	Identify key ideas, representative authors and works, significant historical or cultural events, and characteristic perspectives or attitudes expressed in the American literature of different periods.
CO3	Analyze literary works as expressions of individual or communal values within the social, political, cultural, or religious contexts of different literary periods.
CO4	Learn notable movements and theories emerged and understand the theoretical implementation in the literary text.
CO5	Able to differentiate American Literature from other Literatures of the world and figure out the important features and significance of American Literature.

Course Outcome – B.A(English)

SUBJECT NAME: Soft Skills   **SUBJECT CODE: ENGL 357**

In this course the students will

CO1	Learn to employ soft skills to attain other skills and essential qualities to connect himself or herself with the work place to achieve a set task
CO2	Become more effective or ideal individual through goal/target setting, self-motivation and creative thinking
CO3	Develop thinking ability and polish his/her expression in group discussion
CO4	Understand the role of communication in personal and professional success
CO5	Ethically use document and integrate sources

Semester-VI

SUBJECT NAME: Translation Studies   **SUBJECT CODE: ENG-361**

In this course the students will

CO1	Cognize the History of Translation and its nuances
CO2	Apprehend Translation and its essential components
CO3	Take in the knowledge of the most important Translation theories and areas of applied Translation studies
CO4	Perceive the techniques of Translation
CO5	Comprehend the career opportunities in the field of career

SUBJECT NAME: CONTEMPORARY LITERARY THEORIES
SUBJECT CODE: ENGL 363

In this course the students will

CO1	1. Inculcate interests to focus on Contemporary Literary Theories.
CO2	Interpret literary works and authors of Post Modernism, Post Colonialism, Subaltern Studies, Gender Studies, Marxism and Eco Criticism..
CO3	Students will comprehend, and interpret prescribed critical texts.
CO4	Explore possible applications of critical theory to various literary texts.
CO5	Appreciate the relevance and the value of theoretical models in literary study.

Course Outcome – B.A(English)

SUBJECT NAME: **ADVANCED ENGLISH GRAMMAR AND USAGE**
SUBJECT CODE: **ENGL 364**

In this course,

Co 1	Students will be able to learn determiners and make them use determiners accurately in the day to-day application
Co 2	They will be able to learn different types of question tags and related structures including exceptional question tags.
Co 3	At the end of the unit, it will enhance them to understand different usages of infinitive, gerund and participle and convert them from one form to the other form.
Co 4	They will apply their knowledge of be-verbs, auxiliary verbs and modal verbs in different social contexts after their learning.
Co 5	Students will be able learn and use the meaning of reflexive and emphatic pronouns in various situations and realize the difference between them.
Co 6	They have the capability to understand relative clauses by using appropriate relative pronouns and they will also be good at understanding defining and non-defining clauses and their relative meanings.
Co 7	At the end of the unit, students will be able to understand the agreement between subject and verb and apply this knowledge in the competitive examinations in the later period
Co 8	They will acquire the skills of how sentences are meaningfully connected using various types of conjunctions. With this skill, they will be to write meaningful sentences without ambiguity.
Co 9	Students will be able to learn what phrasal verbs are and how they are working differently in various and typical contexts
Co 10	At the end of this class, students will be able to learn different usage of words in different contexts and also analyses the correctness of the sentences through the techniques of error analysis. This will pave way for them to become competent in English language

SUBJECT NAME: Women Writing   **SUBJECT CODE: ENGL365**

In this course the students will

CO1	Understand and discover women's contribution to literary and cultural history in a new perspective. The students will also be familiarized to the tradition of Women Writing in English Literature.
CO2	Be able to acquire social, political, economic and intellectual equality for women and men. The students will also know different movements of feminism.
CO3	In this course the students will appreciate the goal of feminism and will understand the concept of gender and the struggle of women.

Course Outcome – B.A(English)

CO4	The course reflects on the aspects of non-discrimination, society, class and equality. It also introduces you to the texts that reflect a range of historical and cultural values.
CO5	The outcome of the course is to initiate critical thinking on the evaluation of various constructions of identity crisis, alienation and loneliness.

SUBJECT NAME: INDIAN CULTURE THROUGH LITERATURE
SUBJECT CODE: ENGL 367

In this course the students will

CO1	Students will understand Indian Culture through various genres of Literature.
CO2	Students will become familiar with the Drama and its events depicted In GirishKarnad's Nagamandala and how the drama relied on authorial choice and source material .
CO3	Students comprehend the fiction and understand the value of generations throughout their life time.
CO4	Students comprehend the central idea, themes and various point of view of Short Stories.
CO5	Students will understand the new genre of the Indian Culture through prose.

Course Outcome – B.A(English)

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome
B.Sc(Physics)

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

SARADHA GANGADHARAN COLLEGE

(Affiliated to Pondicherry University)

(Recognized by UGC under Section 2(f) of the UGC Act 1956 as PG Institution)

COURSE OUTCOME

DEPARTMENT OF PHYSICS

SEMESTER 1

Subject Name: Mechanics of Particles, rigid bodies and continuous media

Subject Code: PHYS-111

In this course student will learn

CO1:	To understand the Elementary concepts of vector, differential of vectors in coordinate system. Types of differential equation. Basic parameter of motion such as displacement velocity, acceleration etc,. Newton's law and its significance.
CO2:	To understand the Concepts gravity, gravitational field, gravitational potential and their calculation for sphere like object. To understand planetary motion using Kepler's law and understand the principle behind GPS
CO3:	To develop the concepts Moment of inertia and its calculation, construction of frame reference, pseudo force and collision.
CO4:	Understand the principle of elasticity, fluid flow theorem, viscosity as intrinsic properties of liquid and surface tension phenomena

Subject Name: Kinetic theory and thermodynamics

Subject Code: PHYS-112

In this course student will learn

CO1:	To build the concepts of heat and laws of thermodynamics, various thermodynamically process, concepts of entropy and heat engine.
CO2:	To understand thermo dynamical potentials, to develop Maxwell's equation, explain Joule –Thompson effect and to build kinetic theory of gases to explain transport phenomena's and heat capacity.
CO3:	Get knowledge about theory of radiation and the radiation laws.
CO4:	To build basic concepts statistical physics and three types of statistical distribution.

Course Outcome B.Sc(Physics)

SARADHA GANGADHARAN COLLEGE
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COURSE OUTCOME

DEPARTMENT OF PHYSICS

SEMESTER 2

Subject Name: Oscillations, Wave & Acoustics

Subject Code: PHYS-121

In this course student will learn

CO1:	To build basic ideas of SHM, superposition of SHM and analytical & graphical methods to analyses
CO2:	To develop analytical expression for the propagation of wave in medium, deliberate the ideas of normal mode and concepts of group wave.
CO3:	To understand forced vibration Fourier transformation and wave speed and factor affecting it
CO4:	Understand the concepts of sound and building Acoustics.

Subject Name: Optics

Subject Code: PHYS-122

In this course student will learn

CO1:	To understand fundamentals of phenomena exhibited by light, Fermat's principle and paraxial ray approximation and to build system matrix
CO2:	To provide knowledge about lens function. Cardinal points and aberration.
CO3:	Gain knowledge about interference, diffraction and their theory.
CO4:	To build knowledge on polarization , light propagation- Maxwell equation and concepts of double refraction

Course Outcome B.Sc(Physics)

SARADHA GANGADHARAN COLLEGE

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COURSE OUTCOME

DEPARTMENT OF PHYSICS

SEMESTER 3

Subject Name: Electricity and Magnetism

Subject Code: PHYS-231

In this course student will learn

CO1:	Learn the important of Vector operation and vector integration and their significance
CO2:	Build knowledge to calculate electric field and potential using gauss theorem and capacitance &capacitors.
CO3:	Explain the principle connecting electricity and magnetism, magnetic field for different geometry and material magnetism.
CO4:	To build the basis of induction principle, propagation of electromagnetic field and enrgy propagation of E&M Field.

Subject Name: Modern physics and Relativity

Subject Code: PHYS-231

In this course student will learn

CO1:	To understand the formation of quantum theory, experiment supporting dual nature and predicting atomic models
CO2:	To describe the physical observable, the difficulty (uncertainty principle) in measuring them and superposition principle for formation of wave packet.
CO3:	To develop knowledge about formation of Schrödinger Equation, meaning & nature of wave function and its significance and application of S.E for simple one dimensional problems. To formulate operator approach for microscopic system
CO4:	To explain the relative concepts of transformation equation and their consequence.

Course Outcome B.Sc(Physics)

SARADHA GANGADHARAN COLLEGE

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COURSE OUTCOME

DEPARTMENT OF PHYSICS

SEMESTER 4

Subject Name: Quantum Mechanics

Subject Code: PHYS-241

In this course student will learn

CO1:	To develop knowledge about formation of Time dependent Schrodinger Equation, meaning & nature of wave function and its significance. To formulate operator approach for microscopic system.
CO2:	To develop knowledge about formation of Time Independent Schrodinger Equation, Concepts of wave packets and Fourier transforms.
CO3:	Gain knowledge about bound states in an arbitrary potentials, Application of S.E for simple one dimensional problems. To formulate operator approach for microscopic system.
CO4:	To learn angular momentum operators and commutation relations. To get the ideas of Quantum theory of Hydrogen like atoms.

Subject Name: Electronics

Subject Code: PHYS-242

In this course student will learn

CO1:	To acquire the knowledge on Network theorems and their applications, varying current, integrating and differentiating circuits.
CO2:	To learn the concepts of construction, working, voltage behavior of Junction diode, special diodes and their applications.
CO3:	To understand the concepts of construction, working, voltage behavior of BJT, JFET, MOSFET and their applications.
CO4:	Learn the importance of OP-AMP, Oscillator and their circuit functions and applications

Course Outcome B.Sc(Physics)

SARADHA GANGADHARAN COLLEGE

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COURSE OUTCOME

DEPARTMENT OF PHYSICS

SEMESTER 5

Subject Name: Solid state physics

Subject Code: PHYS-352

In this course student will learn

CO1:	To understand the concepts of crystallography and techniques to determine crystal structures.
CO2:	Impart knowledge on types of bonding, propagation of phonon (elasticity) modes and theoretical explanation of Einstein's and Debye's theory.
CO3:	To build knowledge on AC &DC conductivity in solids by statistics and semiconductors.
CO4:	To get the background of Magnetic properties of solids and superconductors.

Subject Name: Atomic and molecular spectroscopy

Subject Code: PHYS-352

In this course student will learn

CO1:	To get detail knowledge of angular momentum coupling scheme, spectra of atoms and X-ray& X-ray spectra
CO2:	To build the fundamental concepts Spin, spatial quantization, L & μ_B and Bohr Magneton
CO3:	To acquire the knowledge of different types of molecules, Rotation spectra, vibration- rotation spectra, Raman spectra, IR spectra and their selection rules.
CO4:	Learn the concepts of Laser system, Types of Laser and their applications.

Course Outcome B.Sc(Physics)

SARADHA GANGADHARAN COLLEGE

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COURSE OUTCOME

DEPARTMENT OF PHYSICS

SEMESTER 5

Subject Name: Digital electronics

Subject Code: PHYS-354

In this course student will learn

CO1:	To understand the Number system and their conversions, Basic and Universal gate operations, characteristics and parameters of logic families and combinational logic design.
CO2:	To learn the construction and working of different types of Flip-Flops and Counters. NE-555 timer.
CO3:	To get the knowledge about various types of A/D and D/A converters, Frequency counters and digital voltmeters.
CO4:	To build the concepts of Architecture and addressing modes of 8085 and introduction to 8086 Microprocessor.

Subject Name: Astro physics

Subject Code: PHYS-355

In this course student will learn

CO1:	Gain the knowledge about Galaxies and Quasars. Know about the interaction of cosmic rays with earth's magnetic field.
CO2:	Learn the different stages of a star. Understand the theories about the formation of the planet formation.
CO3:	Get the ideas about the different layers of sun. Understand the theories of formation of universe.
CO4:	Build the ideas about extra terrestrial civilizations. Get the knowledge about satellite and rocket science.

Course Outcome B.Sc(Physics)

SARADHA GANGADHARAN COLLEGE

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COURSE OUTCOME

DEPARTMENT OF PHYSICS

SEMESTER 6

Subject Name: Numerical methods and computational physics

Subject Code: PHYS-362

In this course student will learn

CO1:	Develop the Numerical ability by various Numerical methods such as curve fitting, finding roots, solving simultaneous equations.
CO2:	Develop the Numerical ability by various Numerical methods such as numerical differentiation &integration, interpolation and power methods.
CO3:	Understand the knowledge of computers and various mode of expressions and statements in FORTRAN..
CO4:	Acquire knowledge about programming, algorithm and flow charts for various problems using FORTRAN.

Subject Name: Nuclear Physics

Subject Code: PHYS-363

In this course student will learn

CO1:	Understand the intrinsic properties of nuclei and features of binding energy curve.
CO2:	Gain knowledge about nuclear models.
CO3:	Produce basic knowledge about radioactive decay, nuclear reactions and Scattering.
CO4:	Understand the types of particles, symmetries and conservation laws, quark model.

Course Outcome B.Sc(Physics)

SARADHA GANGADHARAN COLLEGE

(Affiliated to Pondicherry University)

(Recognized by UGC under Section 2(f) of the UGC Act 1956 as PG Institution)

COURSE OUTCOME

DEPARTMENT OF PHYSICS

SEMESTER 6

Subject Name: Renewable energy and energy harvesting

Subject Code: PHYS-364

In this course student will learn

CO1:	Understand the concepts of various kinds of energy systems.
CO2:	Get knowledge about solar and wind energy.
CO3:	Impart knowledge on ocean, geothermal energy and hydro energy.
CO4:	Gain knowledge about electromagnetic energy harvesting.

Subject Name: Communication Electronics

Subject Code: PHYS-365

In this course student will learn

CO1:	Learn different types of modulation and demodulation. Get the idea about detectors and receivers.
CO2:	Impart ideas about image transmission and reception. Gain knowledge about B/W and colour TV transmitter and receiver.
CO3:	Get the knowledge about different ways of wave propagation and its parameters.
CO4:	Know about the principles, action of various antennas and parameters.

Course Outcome B.Sc(Physics)

SARADHA GANGADHARAN COLLEGE

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COURSE OUTCOME

DEPARTMENT OF PHYSICS

Subject Name: **Allied Chemistry -I**

Subject Code: UCHEM A01

In this course student will learn

Unit -1	To understand the interdisciplinary nature of organic compounds and the reaction intermediates.
Unit-2	To develop the knowledge about the configuration, isomerism and projection of the molecules.
Unit-3	To understand the concepts of concentrations and basic concepts of chemical equilibrium
Unit-4	To impart the knowledge about the radioactivity and their applications in medicine agriculture etc.
Unit-5	To know the structure and significance of hydrocarbons in Biomolecules

Subject Name: Allied Chemistry -I I

Subject Code: UCHEM A03

In this course student will learn

Unit -1	To gain the knowledge about various thermodynamics law and their state functions.
Unit-2	To acquire various concepts of separation techniques in chromatography, band theory of solids and crystal defects
Unit-3	Learn the classification, structure of proteins, amino acids and enzymes host system interaction.
Unit-4	To impart the knowledge about structure and industrial applications of polymer and dyes.
Unit-5	To build the ideas of nucleic acid behavior with biological cell receptors and the action of drug molecule in cells.

Course Outcome B.Sc(Physics)

SARADHA GANGADHARAN COLLEGE

(Affiliated to Pondicherry University)
(Recognized by UGC under Section 2(f) of the UGC Act 1956 as PG Institution)

COURSE OUTCOME

DEPARTMENT OF PHYSICS

Subject Name: Allied Chemistry -I

Subject Code:

In this course student will learn

Unit -1	To understand the interdisciplinary nature of organic compounds and the reaction intermediates.
Unit-2	To develop the knowledge about the configuration, isomerism and projection of the molecules.
Unit-3	To understand the concepts of concentrations and basic concepts of chemical equilibrium
Unit-4	To impart the knowledge about the radioactivity and their applications in medicine agriculture etc.
Unit-5	To know the structure and significance of hydrocarbons in Biomolecules

Subject Name: Allied Chemistry -I I

Subject Code:

In this course student will learn

Unit -1	To gain the knowledge about various thermodynamics law and their state functions.
Unit-2	To acquire various concepts of separation techniques in chromatography, band theory of solids and crystal defects
Unit-3	Learn the classification, structure of proteins, amino acids and enzymes host system interaction.
Unit-4	To impart the knowledge about structure and industrial applications of polymer and dyes.
Unit-5	To build the ideas of nucleic acid behavior with biological cell receptors and the action of drug molecule in cells.

Course Outcome B.Sc(Physics)

SGC

SARADHA GANGADHARAN COLLEGE

NAAC II Cycle
SSR 2020 - 2021

Course Outcome
B.Sc(Computer Science)

2 Teaching – Learning and Evaluation

2.6 Student Performance and Learning Outcome

COURSE OUTCOME

B.Sc. COMPUTER SCIENCE

Semester I

INTRODUCTION TO PROBLEM SOLVING USING C　　　**PAPER CODE: CSCS113**

In this course, the students will gain in-depth understanding of various concepts of C and will improve their skills to write program code in C to solve real world problems.

C01	Identify the process of problem solving using computer and design an algorithmic Solution
C02	Understand the logical flow of simple and complex computation.
C03	Understand how to organize, reuse the code that is used to perform a single related action
C04	Realize how data can be grouped together as a single unit, stored, processed and retrieved using structures.
C05	Realize how blocks of memory can be dynamically allocated.

DIGITAL LOGIC & COMPUTER ORGANIZATION　　　**PAPER CODE: CSCS114**

In this course, the students will attain skills to use the methods of systematic reduction of Boolean expression and to interpret logic gates and its operations. Familiarize with combinational and sequential logic circuits in electronics.

C01	Be familiar with basic logic gates -- AND, OR & NOT, XOR, XNOR; independently work to build simple logic circuits; Provides in-depth coverage of Boolean algebra, Number systems.
C02	Able to simplify simple Boolean functions by using the basic Boolean properties and K-Map
C03	Pertain the Knowledge of combinational circuit design.
C04	Better exposure to flip-flops and Counters and their role in designing the registers of a digital computer.
C05	Understand the relationship between instruction set architecture, system architecture, addressing modes, program sequencing and memory operations.

PROGRAMMING IN C LAB　　　**PAPER CODE: CSCS116**

In this course, the students will

C01	Enhance the analyzing and problem solving skills and use the same for writing programs in C.
C02	Illustrate flowchart and algorithm to the given problem
C03	Write diversified solutions, draw flowcharts and develop a well-documented and indented program according to coding standards
C04	To have enough practice in use of conditional statements.

Course Outcome – B.Sc.(CS)

C05	To have enough practice in use of switch case and looping statements.
C06	To implement arrays.
C07	To implement functions and pointers.
C08	Gain skills to handle strings and data files.

DIGITAL LAB   **PAPER CODE: CSCS117**

In this course, the students will

C01	Understand the procedure to draw pin diagram and construct logic gates.
C02	Construct the boolean expression and verify the result using truth table or K-Map
C03	Design adders and subtractors.
C04	Design and implement Multiplexers and De-Multiplexers
C05	Design and implement Encoder and Decoder.

Semester II

PYTHON PROGRAMMING   **PAPER CODE: CSCS123**

In this course, the students will gain in-depth Skills to write codes in Python; Ability to isolate and fix common errors in Python programs.

C01	Understand the basics of Python language and its syntax
C02	Familiarize with the coding sheet, indentation and looping constructs
C03	Understand the concepts of List, Tuples and Dictionaries in Python
C04	Expand the knowledge in code reusability and Exception handling
C05	Thorough knowledge on string handling and file handling in Python

Course Outcome – B.Sc.(CS)

DATA STRUCTURES & ALGORITHMS   **PAPER CODE: CSCS124**

In this course, the students will get Skills to analyze data and to determine appropriate data structure; Knowledge of various data structures and their implementations.

C01	Gain Knowledge about types of data structures and manipulation of data; Understand the basics of algorithms
C02	Able to choose appropriate data structure as applied to specified problem definition.
C03	Able to use linear data structures like stacks, queues , linked list etc
C04	Able to use non-linear data structures like trees and graphs
C05	Ability to implement algorithms to perform various operations on data structures

PYTHON LAB   **PAPER CODE: CSCS128**

In this course, the students will

C01	Describe the Numbers, Math functions, Strings
C02	Express different Decision Making statements and Functions
C03	Interpret Object oriented programming in Python
C04	To program with the concepts of List, Tuples and Dictionaries in Python
C05	Understand and summarize different File handling operations

DATA STRUCTURE & ALGORITHM LAB   **PAPER CODE: CSCS129**

In this course, the students will be able to handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures.

C01	Implement Linear and Binary Search
C02	Implementation and Application of stack and Queue data structure
C03	Understand the concept of singly and doubly linked list
C04	Establish the operations on tress and graphs
C05	Implement the logic behind various sorting techniques like bubble sort, quick sort and merge sort

Course Outcome – B.Sc.(CS)

MATHEMATICS FOR COMPUTER SCIENCE   PAPER
CODE: CSCS125

In this course, the students will

C01	To learn rules and techniques to recognize valid logical argument
C02	To learn Principal conjunctive and disjunctive normal forms
C03	Understand graph, applications and its related theorems
C04	Understand Euler and Hamilton path and circuit
C05	Understand tree and its properties; Spanning tree; Shortest path spanning tree

NUMERCIAL METHODS   PAPER CODE: CSCS126

In this course, the students will

C01	Understand the linear interpolation method
C02	Able to get direct solution for linear equation
C03	Understand the numerical integration
C04	Understand the numerical Differentiation
C05	Able to understand Ordinary Differential Equation

Semester III

OBJECT ORIENTED PROGRAMMING USING JAVA   PAPER CODE: CSCS231

In this course, the students will gain skill to write Java application programs using OOP principles and proper program structuring.

C01	Discuss basic object oriented concepts
C02	Demonstrate object oriented programming through real time entities
C03	Create own packages and handle runtime errors by exception handler
C04	Demonstrate GUI through awt controls; Understand swing Components
C05	Explain how multitasking is achieved and processor efficiency is improved by multithreading. Compare and analyze I/O streams;

Course Outcome – B.Sc.(CS)

OPERATING SYSTEMS   PAPER CODE: CSCS232

In this course the students will

C01	Understand how operating system acts as user interface and various types of Operating systems
C02	Elucidate Memory management techniques like paging, segmentation, demand paging
C03	Discuss various process management concepts like scheduling, concurrent processing , mutual exclusion and synchronizations
C04	Comprehend disk management algorithms for better utilization of external memory
C05	Recognize file system and their mechanisms

COMPUTER NETWORKS   PAPER CODE: CSCS233

In this course the students will

C01	Provide foundation knowledge of Network Hardware and Network Software; Identify the different types of network topologies and protocols
C02	Identify the different types of network devices and their functions within a network
C03	Identify data link layer design issues
C04	Understand and building the skills of subnetting and routing mechanisms
C05	Understand Domain Name System; E-Mail.

SOFTWARE ENGINEERING   PAPER CODE: CSCS234

In this course the students will

C01	Understand and demonstrate basic knowledge in software engineering; Know the different approaches of developing an efficient software
C02	Be aware about the development of process of software; Develop the skills in cost estimation
C03	Delineate the ways of designing a software product effectively
C04	Understand the different ways of implementing the software
C05	Able to identify various testing strategies; Maintain a wholesome quality software

Course Outcome – B.Sc.(CS)

APPLIED STATISTICS   **PAPER CODE: CSCS235**

In this course the students will

C01	Analyze statistical data graphically using frequency distributions and cummulative frequency distributions.
C02	Analyze statistical data using measures of central tendency, dispersion and location.
C03	Perform statistical inference in several circumstances and interpret the results in an applied context
C04	Calculate and interpret the correlation between two variables
C05	Calculate the simple linear regression equation for a set of data.

JAVA LAB   **PAPER CODE: CSCS237**

In this course the students will

C01	Gain the elementary programming knowledge in object oriented paradigm
C02	Practice core java fundamentals
C03	Implement the concepts like polymorphism, inheritance and reusability
C04	Gain knowledge with complex concepts like multi-threading and exception handling
C05	The lab also gives practice treatment with file manipulation in java

COMPUTER NETWORKS LAB   **PAPER CODE: CSCS238**

Upon completion the students will

C01	Understand how to send and receive messages
C02	Attach a file from server to client
C03	Implement basic chat application
C04	Understand TCP ways of communication
C05	Understand UDP ways of communication

Course Outcome – B.Sc.(CS)

INTRODUCTION TO OFFICE AUTOMATION   **PAPER CODE : CSCS802**

Upon completion the students will

C01	Understand how formatting can be done using MS-Word
C02	Understand the concept ofMail-Merge
C03	Applying formulas using MS-Excel
C04	Creating charts using MS-Excel
C05	Create effective presentation using MS-Powerpoint

Semester IV

PROGRAMMING USING VISUAL BASIC   **PAPER CODE: CSCS241**

In this course, the students will

C01	Educate the students about VB. Dot Net programming methods, tools to techniques.
C02	Gain the Practical on object oriented concepts, VB. Net platform.
C03	Acquire the ability in string processing and array handling exposed them the processing and structurization concepts in VB.Net.
C04	Invent and deploy real time web applications

DATABASE MANGEMENT SYSTEM   **PAPER CODE: CSCS242**

In this course, the students will

C01	Educate the students on the essentials of database and database components.
C02	To enrich the students on functional dependencies and the different ways of normalizing a database.
C03	To recognize the importance of data models and its operations of SQL
C04	Understand PL/SQL procedures and functions
C05	Create awareness the students on effectively protecting the database by giving exposure of on transaction processing, concurring control techniques and database security.

DATA WAREHOUSE   **PAPER CODE: CSCS244**

Course Outcome – B.Sc.(CS)

In this course, the students will

C01	Identify the difference between database and warehouse. The need for data warehouse.
C02	Acquire knowledge in the fundamental concepts, benefits and problem areas associated with data warehousing
C03	Understand the various architectures and main components of a data warehouse
C04	Ability to design a data warehouse
C05	Be able to address issues that arise when implementing a data warehouse.

OBJECT ORIENTED SYSTEM DESIGN   **PAPER**
CODE: CSCS245

In this course, the students will

C01	Understand software modeling and Architectural Concepts
C02	Understand and apply UML notations in designing software
C03	Gain knowledge about Static and Dynamic modeling
C04	Ability to develop the design phase of software development using UML
C05	Evaluate a software for its quality by using various testing strategies.

COMPUTER GRAPHICS   **PAPER**
CODE: CSCS708

In this course, the students will

C01	Understand the basics of computer graphics, graphics systems and applications of Computer graphics. Get an idea about graphics hardware devices and software used.
C02	Learn the basic principles and implementation logic of graphics primitives
C03	Understand the two dimensional graphics and their transformations.
C04	Know about geometric transformations on graphics objects and their application in composite form and animation of objects.
C05	Explore projections and visible surface detection techniques for display of 3D scene.

Course Outcome – B.Sc.(CS)

VISUAL PROGRAMMING & DBMS LAB   PAPER CODE: CSCS248

C01	Become familiar with the IDE
C02	Building simple applications using the tools and controls
C03	Working with multiple forms and creating dialog boxes
C04	Implementing menu based application
C05	Involve to develop a sample software with database connectivity

PHP LAB   PAPER CODE: CSCS805

C01	To describe the PHP scripting language, and create basic PHP scripts
C02	To create elaborate scripts, write HTML forms, and program PHP to handle the forms
C03	How to use PHP to create dynamic Web sites that are responsive to users.
C04	Enrich the knowledge of PHP language data types, logic controls, built-in and user-defined functions.
C05	Gain the PHP programming skills needed to build interactive, data-driven sites

Semester V

WEB TECHNOLOGY   PAPER CODE: CSCS351

In this course, the students will

C01	Understand the fundamental technology used to define the structure of a webpage
C02	Appreciate the client side and server side web programming. Design an own simple homepage using HTML Tags
C03	Understand CSS and implement in designing a webpage
C04	Gain knowledge in javascript and to validate the forms
C05	Understand the various steps in designing Creative and dynamic website. To design interactive web pages using Style sheets, Java-script and ASP

Course Outcome – B.Sc.(CS)

DATA MINING   **PAPER CODE: CSCS353**

In this course, the students will

C01	Understand the essentials of database and knowledge base
C02	Analyze the architecture of data mining and its components educated.
C03	Inculcate the effective ways of data pre-processing educated to students.
C04	Make the students know the importance association mining educated to students. Learn the essentials of classification mining
C05	Impart the knowledge on cluster mining and different clustering techniques.

SOFTWARE TESTING   **PAPER CODE: CSCS354**

In this course, the students will

C01	Design an appropriate software test process for a software Project.
C02	Develop test strategies, design test cases, prioritize and execute them.
C03	Manage software problems and defects efficiently
C04	Formulate different ways to test an application.
C05	Prepare and predict checkpoints for software Applications.

ARTIFICIAL INTELLIGENCE   **PAPER CODE: CSCS704**

In this course, the students will

C01	Understand concepts of artificial intelligence and underlying characteristics
C02	Learn various techniques of knowledge representation
C03	Representing the facts using predicate logic
C04	Understand the concept of AI and solve various problems
C05	Gain knowledge in expert system

Course Outcome – B.Sc.(CS)

WEB TECHNOLOGY LAB   **PAPER CODE: CSCS357**

In this course, the students will

C01	Write simple programs using HTML tags
C02	Become familiar with CSS and html forms
C03	Be able to create a sample form with validation using java script
C04	Create dynamic web pages

MULTIMEDIA TOOLS LAB   **PAPER CODE: CSCS804**

In this course, the students will

C01	Acquire knowledge of how to create animation using Flash.
C02	Acquire knowledge of how to create story board, work with files
C03	Acquire knowledge of how to create movies and publish

MINI PROJECT / INTERNSHIP / IN-PLANT TRAINING / ONLINE COURSE

C01	Understand, plan and execute a Mini Project with team
C02	Gain valuable work experience, confidence. Develop and refine skills
C03	Gain practical knowledge about how an industry functions
C04	Gain Self-Motivation. Gain new thinking. Help to manage time

Course Outcome – B.Sc.(CS)

Semester VI

MICROPROCESSOR AND CONTROLLER   PAPER
                          CODE: CSCS361

In this course, the students will

C01	Assess and solve basic binary math operations using the microprocessor
C02	Apply knowledge and demonstrate programming proficiency using the various addressing modes and data transfer instructions
C03	Compare accepted standards and guidelines to select appropriate Microprocessor (8085 & 8086)
C04	Analyze assembly language programs; select appropriate assemble into machine a cross assembler utility of a microprocessor and microcontroller
C05	Get clear idea about the architectures and instruction of microcontroller.

PROJECT WORK   PAPER
CODE: CSCS362

Upon successful completion

C01	The students should be able to apply mathematical, scientific, to identify, understand, evaluate and formulate solutions to meet industry needs.
C02	An ability to analyze a problem, and identify and define the computing requirements
C03	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
C04	The students should use and apply current technical concepts and practices in the core information technologies.

FOUNDATION OF DATA ANALYTICS   PAPER
CODE: CSCS364

In this course, the students will

C01	To learn to explore data, sample and model them
C02	Understand need for big data and its associated methodologies
C03	To gain knowledge about Big Data and analyse them.
C04	Understand the various techniques to analyze and learn from data

Course Outcome – B.Sc.(CS)

SOFTWARE QUALITY MANAGEMENT   **PAPER CODE: CSCS365**

In this course, the students will

C01	Learn how to apply quality assurance tools &techniques
C02	Learn about standards and certifications
C03	Able to understand the importance of quality and standards
C04	Understand various models of dealing with software quality

MICROPROCESSOR LAB   **PAPER CODE: CSCS368**

In this course, the students will

C01	Understand how to implement basic arithmetic and logical operations
C02	Gain knowledge on the code conversion
C03	Become familiar with floating point operations
C04	Acquire knowledge in sorting techniques

Course Outcome – B.Sc.(CS)