

2.6.1 (15)

Program Outcomes and Course Outcomes for all Programs offered by the institution are stated and displayed on the website and communicated to teachers and students.

Index

Sr. No	PARTICULARS	PAGE NO
1	COURSE OUTCOMES : UNDER GRADUATE	
	A) BBA	
	i) PART I	2
	ii) PART II	3
	iii) PART III	5
	B) BCCA	
	i) PART I	7
	ii) PART II	9
	iii) PART III	12
	C) B.COM	
	i) PART I	14
	ii) PART II	17
	iii) PART III	20
	D) B. Sc (IT)	
	i) PART I	22
	ii) PART II	26
	iii) PART III	29
	E) BCA	
	i) PART I	31
	ii) PART II	35
	iii) PART III	38
2	COURSE OUTCOME : II POST GRADUATION	
	A) M. Sc (CS)	
	i) PART I	40
	ii) PART II	42

1. Course Outcomes: Under Graduate

1. A) Course outcomes of BBA

Program: BBA Part I (Semester I)

Paper: 1T1

Course: English

Course outcomes:

CO1	Explain the following in detail: <ul style="list-style-type: none">• Tense, Forms of the verb• Preposition, Articles• Punctuation• Single word for a group of words• Sentence construction and comprehension
CO2	Explain 'Business letter writing' in detail.
CO3	Describe the various business manners.
CO4	Describe the different personalities of human being from fourth unit.

: Paper: 1T2

Course: Fundamentals of Business Management

Course outcomes:

CO1	Understand management and functions of manager. Interpret various contributions in development of management thoughts.
CO2	Differentiate between management and administration.
CO3	Gain knowledge of management planning.
CO4	Apply the concepts of decision making in organization.

Paper: 1T3

Course: Computer Applications for Business

Course outcomes:

CO1: Describe basics of computers and networking concepts.

CO2: Describe working with computers and MS-Office.

CO3: Basics of E-Commerce.

CO4: Explain business consulting, strategy and operation.

Paper: 1T4

Course: Cost Accounting

Course outcomes:

CO1	Cope with the cost sheet, tender sheet and evaluate the cost of production to determine selling price and profit.
CO2	Understand various types of operating costs viz. cost of transportations, hospitals, hotels, etc.
CO3	Understand the costing of various types of process accounts under the manufacturing, construction and oil companies.

CO4	Knowledge about break even analysis, break-even point, profit volume ratio, margin of safety, etc.
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Program: BBA Part I (Semester II)

Paper: 2T1

Course: Principles of Marketing Management

Course outcomes:

- CO1: Understand the core concept of marketing.
 CO2: Get knowledge on segmentation, targeting and positioning (STP model).
 CO3: Determine new product and its life cycle.
 CO4: Determine use of different promotional mix in marketing.

Paper: 2T2

Course: Financial and Management Accounting

Course outcomes:

CO1	To understand the accounting procedure, how to apply golden rules of accounts as well as preparation of journal entries.
CO2	To deal with the preparation of Final Accounts of Joint Stock Companies including Trading A/c, Profit & Loss A/c, Balance sheet and various adjustments.
CO3	The applications of various management ratios in the business and to determine break even analysis.
CO4	To understand how to prepare cash and flexible budgets and it's applicability in the business organization.

Paper: 2T3

Course: Micro-Economic Fundamentals

Course outcomes:

- CO1: Difference between micro economics and macroeconomics.
 CO2: Understand the concept of demand and supply.
 CO3: Apply production function and cost function in economics.
 CO4: Determination price in various market structures.

Paper: 2T4

Course: English

Course outcomes:

- CO1: Explain the following in detail:
- Subject-verb-agreement / concord of nouns, pronouns and possessive adjectives
 - Spotting errors and rewriting sentences correctly
 - Phrasal verbs, collocations and idioms
 - Words often confused
- CO2: Explain 'Business communication'?
- CO3: Describe the various human personalities mentioned in third unit.
- CO4: Describe the different aspects of knowledge.

Program: BBA Part II (Semester III)

Paper: 3T1**Course: Principles of Financial Management****Course outcomes:**

- CO1: Understand the concept of business finance.
 CO2: Describe short term and long term sources of finance.
 CO3: Estimate cost of different sources of finance.
 CO4: Determine working capital requirement and its management.

Paper: 3T2**Course: Basic Statistical Techniques****Course outcomes:**

- CO1: Describe functions, importance, scope and role of statistics in business.
 CO2: Explain importance and requisites of a good statistical average and types of averages.
 CO3: Explain the significance of dispersion and methods of measuring dispersion.
 CO4: Describe significance of correlation, types of correlation, merits, calculation of coefficient of correlation and probable error.

Paper: 3T3**Course: Evolution of Business & Commercial Geography****Course outcomes:**

CO1	Explain industrial revolution and rise of European business, impact of First World War on international business and concept of the great depression.
CO2	Evolution of business in post WWII scenario, dawn of IT era, OPEC crises, concept of cold war and gulf war and its effects on international business.
CO3	Explain the importance of geography and relationship between commerce and commercial geography.
CO4	Understand the role of industries, growth and development of iron and steel industries, cotton and textile industries in India and USA economy. Explain the growth and development of the engineering industries in India and the world, major industrial units in India and the world.

Paper: 3T4**Course: Environment Management****Course outcomes:**

- CO1: Understand the concept of environment management and natural resources.
 CO2: Perceive knowledge on different types of pollution.
 CO3: Describe population explosion and its control.
 CO4: Determine social issues in environment.

Program: BBA Part II (Semester IV)**Paper: 4T1****Course: Principles of Human Resource Management****Course outcomes:**

- CO1: Understand the concept of human resource management.
 CO2: Know the process of job analysis and job design.
 CO3: Determine the process of human resource planning.

CO4: Identify training need and training methods.

Paper: 4T2

Course: Money, Banking & Finance

Course outcomes:

CO1: Understand the concept of money.

CO2: Differentiate between commercial bank and central bank.

CO3: Get idea about estimation of national income.

CO4: Students can differentiate between monetary policy and fiscal policy.

Paper: 4T3

Course: Introduction to Sociology and Psychology

Course outcomes:

CO1: Sociology as the science of society.

CO2: Social structure and social change.

CO3: Introduction to Psychology.

CO4: Social Psychology.

Paper: 4T4

Course: Business Legislation

Course outcomes:

CO1: Understand administration of laws & legal system in India.

CO2: Understand Indian Contract Act, 1872.

CO3: Understand the Companies Act, 1956.

CO4: Describe the Consumer Protection Act, 1986.

Program: BBA Part III (Semester V)

Paper: 5T1

Course: Entrepreneurship Development

Course Outcome : On completion of the course, student will be able to

CO1: Describe entrepreneur & entrepreneurship.

CO2: Describe entrepreneurial growth.

CO3: Describe small enterprises.

CO4: Describe institutional & financial support to entrepreneurs.

Paper: 5T2

Course: Principles of Operations Management

Course Outcome : On completion of the course, student will be able to

CO1: Differentiate between production, manufacturing and services.

CO2: Make decision about plant location and plant layout.

CO3: Know how to make material management.

CO4: Determine quality management system.

Paper: 5T3

Course: International Business Environment

Course Outcome : On completion of the course, student will be able to

CO1: Describe international business and international collaborative arrangements and

strategic alliances.

CO2: Describe international business environment.

CO3: Describe global trading and investment environment.

CO4: Describe international economic institutions and agreements.

Paper: 5T4

Course: Research Methodology

Course Outcome : On completion of the course, student will be able to

CO1: Design research methodology suitable for any organization to achieve its goals.

CO2: Knowledge of sampling design and formulation of hypothesis.

CO3: Understand the measurement and scaling techniques.

CO4: Identify methods of data collection and explain various techniques of data interpretation. Design project layout and prepare research report.

Program: BBA Part III (Semester VI)

Elective A – Financial Management

Paper: 6T1

Course: Fundamentals of Business Finance

Course Outcome : On completion of the course, student will be able to

CO1: Describe time value of money.

CO2: Make decisions on capital budgeting.

CO3: Make dividend decisions.

CO4: Understand reasons for corporate restructuring.

Paper: 6T2

Course: Advanced Financial Management

Course Outcome : On completion of the course, student will be able to

CO1: Understand banking services and operations.

CO2: Describe various insurance services.

CO3: Explain concepts of mutual funds.

CO4: Describe structure of capital market.

Elective B – Human Resource Management

Paper: 6T1

Course: Fundamentals of Human Resource Management

Course Outcome : On completion of the course, student will be able to

CO1: Describe evolution of HRM and role of HRM in strategic management.

CO2: Describe performance appraisal with traditional & modern methods.

CO3: Describe job evaluation and compensation management.

CO4: Describe Provident Fund Act, Employee State Insurance Corporation Act, Minimum Wages Act, Industrial Relations Act and Industrial Dispute Act.

Paper: 6T2

Course: Advanced Human Resource Management

Course Outcome : On completion of the course, student will be able to

CO1: Describe job analysis, job design and job evaluation.

CO2: Understand performance appraisal.

CO3: Describe industrial relations.

CO4: Explain goal setting, promotions, transfers, separations and recruitment process.

Elective C – Marketing Management

Paper: 6T1

Course: Fundamentals of Marketing Management

Course Outcome : On completion of the course, student will be able to

CO1: Describe concept of integrated communication mix.

CO2: Understand the importance of branding, advertising and digital marketing.

CO3: Know the purpose of sales organisation.

CO4: Describe the concept of service marketing.

Paper: 6T2

Course: Advanced Marketing Management

Course Outcome : On completion of the course, student will be able to

CO1: Understand salesmanship.

CO2: Know distribution network management.

CO3: Describe service quality information system.

CO4: Understand customer retention and relationship marketing.

Paper: 6P1

Course: Project work

Course Outcome : On completion of the course, student will be able to

CO1: Student develop his/her ability to apply multi-disciplinary concepts, tools and techniques to solve organizational problems and/or to evolve new/innovative theoretical frame work in marketing Management / Finance management / Human resource management.

1. B Course outcomes of BCCA

Program: BCCA Part I (Semester I)

Paper: 1T1

Course: English and Business Communication - I

Course outcomes:

CO1	Explain a) Comprehension of an Unseen Passage. b) Synonyms and Antonyms, Single Word for a Group of Words, Change of Word from Noun to Adjective & vice-versa.
CO2	Explain the term “Business Correspondence”.
CO3	Describe various aspects of Communication?
CO4	Explain the human nature according to various authors in this unit.

Paper: 1T2

Course: Financial Accounting

Course outcomes:

CO1: Understand accounting procedure, apply golden rules of accounts, preparation of

journal entries.

CO2: To deal with the preparation of Final Accounts of Sole Traders including Trading A/c, Profit & Loss A/c, Balance sheet and various adjustments.

CO3: To provide the knowledge regarding consignment account and why the consignor sends goods on invoice price to consignee.

CO4: To determine value of goodwill by applying various methods of goodwill.

Paper: 1T3

Course: Fundamental of Computer

Course outcomes:

CO1: Understanding the computer, Memory and storage system.

CO2: Input Devices, Output Devices, Computer Codes.

CO3: Computer Software, Programming Language, Data Communication and Network

CO4: Operating System, Microsoft Software.

Paper: 1T4

Course: Programming in C

Course outcomes:

CO1: Understand data types, operators, control statements and writing program in C.

CO2: Describe function and arrays.

CO3: Describes pointers, pre-processors, macros, header files and standard functions.

CO4: Understand structures, unions, files handling and data file operations.

Paper: 1P1

Course: Practical

Course outcomes:

CO1: Understand practical implementation of all concepts of every unit of 'Fundamentals of computer' and 'Programming in C' by attempting problems.

Program : BCCA Part I (Semester II)

Paper: 2T1

Course: English and Business Communication – II

Course outcomes:

CO1: Explain a) Comprehension of an Unseen Passage.

b) Punctuation, Words often confused.

CO2: Explain the term "Business Correspondence"

CO3: Describe various aspects of Communication?

CO4: Explain the human nature according to various authors in this unit.

Paper: 2T2

Course: Principles of Business Management

Course outcomes:

CO1: Describe meaning of management and its function.

CO2: Describe meaning of organization, its type and staffing.

CO3: Describe training and development, direction and supervision.

CO4: Describe communication and types.

Paper: 2T3**Course Name: Programming in C++****Course outcomes:**

CO1	Understand difference between object oriented concept and procedure oriented concept and also becomes eligible to construct simple program with conditional paradigm.
CO2	Describe advanced features like function, array, pointer, structure and union and their use in programming.
CO3	Understand object oriented structure of C++ along with certain object oriented features like inheritance and different types of it's.
CO4	Describe objected oriented features like “function and operator overloading, polymorphism and virtual functions and Data file operations”.

CO1: CO2: CO3: CO4: **Paper: 2T4****Course: E-Commerce and Web Designing****Course outcomes:**

CO1: Electronics commerce, Business strategy, Competitive advantage.

CO2: Inter Organization transaction, Electronic Market, EDI, Inter-organization E Commerce

CO3: Business to customer E-Commerce, Elements of E- Commerce, Introduction to HTML.

CO4: Ordered and unordered lists, Table headings, Sheets, Frames, Forms.

Paper: 2P1**Course: Practical****Course outcomes:**

CO1	Understand practical implementation of all concepts of every unit of ‘Programming in C++’ and ‘E Commerce and web designing’ by attempting problems.
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Program : BCCA Part II (Semester III)**Paper: 3T1****Course: Environmental Studies****Course outcomes:**

CO1: Describe Multidisciplinary Nature of Environmental Studies and Natural Resources.

CO2: Describe Ecosystem and Biodiversity and its Conservation.

CO3: Describe Environmental Pollution and Its Effects.

CO4: Describe Social Issues, population and the Environment.

Paper: 3T2**Course: Business Economics****Course outcomes:**

CO1: Describe basic Problems in Economics and Price Mechanism Laws of Demand and Supply and Market Equilibrium.

CO2: Describe Production, Cost Analysis and Pricing Decisions.

CO3: Explain Factors of Demand and Supply, Theory of Wage Determination, Rent, Quasi Rent And Economic Rent, Theory of Interest, Theory of Profit.

Paper: 3T3**Course : Visual Basic Programming****Course outcomes:**

- CO1 : Understand Visual Basic.
 CO2 : Understand Working with Visual Basic
 CO3 : Create Mdi Applications.
 CO4 : Understand Debugging Techniques.

Paper: 3T4**Course: Database Management System****Course outcomes:**

- CO1: Understand database and basic database concepts.
 CO2: Describe data model, database design and implementation design.
 CO3: Understand basics of structured query language.
 CO4: Understand advanced structured query language.

Paper: 3P1**Course: Practical****Course outcomes:**

- CO1: Understand practical implementation of all concepts of every unit of 'Visual basic programming' and 'Database management system' by attempting problems.

Program: BCCA Part II (Semester IV)**Paper: 4T1****Course: Mathematics****Course outcomes:**

CO1	Describe Primary Data and Secondary Data, Fundamental Rules of Counting And Result on Permutation.
CO2	Explain Laws of Logarithm and Useful Mathematics devise such as Rounding Of Numbers Some Short Processes of Calculation, Roots and Reciprocals Expressed as Power, A.P Series and G.P.
CO3	Describe Objects of Diagrammatic Representation, Types of Charts and Diagrams and Useful Terms Associated with Grouped Frequency Distributions, Construction of frequency Distribution
CO4	Describe Relation between central and Non-Central moments, Beta coefficients and Gamma- coefficients.

Paper: 4T2**Course: Business Law****Course outcomes:**

- CO1: Describe Indian Contract Act 1872.
 CO2: Describe The sales of Goods Act, 1930 & The information Technology Act, 2000.
 CO3: Describe the Indian Partnership Act 1932 & The limited Liability Partnership Act, 2008 (LLP).
 CO4: Describe the Negotiable Instrument Act 1881(Part I & Part II).

Paper: 4T3**Course: Core Java****Course outcomes:**

- CO1: Describe the features of Java programming.
- CO2: Explain the concept of java API and exceptional handling.
- CO3: Describe Applet and Layout Manager.
- CO4: Differentiate Data Input Stream and Data Output Stream.

Paper: 4T4**Course : PHP & MYSQL****Course outcomes:**

- CO1: Understand basic HTML, PHP and their relation.
- CO2: Describe string, control structure and array.
- CO3: Describes creating of web application, cookies and sessions and functions.
- CO4: Understand files and directories, introduction to database and putting all together.

Paper: 4P1**Course: Practical****Course outcomes:**

- CO1: Understand practical implementation of all concepts of every unit of 'Core Java' and 'PHP & MySQL' by attempting problems.

Paper: 3T1**Course : Environmental Studies****Course outcomes:**

- CO1: Describe Multidisciplinary Nature of Environmental Studies and Natural Resources.
- CO2: Describe Ecosystem and Biodiversity and its Conservation.
- CO3: Describe Environmental Pollution and Its Effects.
- CO4: Describe Social Issues, population and the Environment.

Course : Business Economics**Course outcomes:**

- CO1: Describe basic Problems in Economics and Price Mechanism Laws of Demand and Supply and Market Equilibrium.
- CO2: Describe Production, Cost Analysis and Pricing Decisions.
- CO3: Explain Factors of Demand and Supply, Theory of Wage Determination, Rent, Quasi Rent And Economic Rent, Theory of Interest, Theory of Profit.

Paper: 3T3**Course : Visual Basic Programming****Course outcomes:**

- CO1: Understand Visual Basic.
- CO2: Understand Working with Visual Basic
- CO3: Create Mode Applications.
- CO4: Understand Debugging Techniques.

Paper : 3T4**Course : Database Management System****Course outcomes:**

CO1: Understand database and basic database concepts.

CO2: Describe data model, database design and implementation design.

CO3: Understand basics of structured query language.

CO4: Understand advanced structured query language.

Paper: 3P1**Course: Practical****Course outcomes:**

CO1: Understand practical implementation of all concepts of every unit of 'Visual basic programming' and 'Database management system' by attempting problems.

Program: BCCA Part III (Semester V)**Paper: 5T1****Course : Computerized Accounting using Tally****Course outcomes :**

CO1	Discuss about company in Tally, installation procedure of Tally, components of Tally and also explain Stock Group, multiple Stock Categories, multiple godowns with screen.
CO2	Explain primary group, Multiple Groups, Multiple Ledger, steps to create voucher types, a purchase orders, sales.
CO3	Discuss Service Tax, TDS, TCS, create VAT reports and also explain tax Deduction procedure in Tally.
CO4	Understand back-up, restore, migrate data and explain security levels and Security Controls in Tally.

Paper: 5T2**Course: VB.NET****Course outcomes:**

CO1: Explain Common Language Common Language Runtime, Visual Basic .NET IDE and various control flow statements.

CO2: Describe structure with syntax and example, Array, Lookup Tables, Hash table, Dialog Box Control.

CO3: Explain menu, errors, debugging, concept of inheritance, .net framework.

CO4: Explain the concept of database, SQL statement, data access components, ADO.Net, properties and methods of DataSet Class.

Paper: 5T3**Course: System Analysis and Design****Course outcomes:**

CO1	Describe System Concept and the Information Systems Environment, System Development Life Cycle and Role of System Analyst.
CO2	Describe System Analysis, System Design- Forms Design ,File Organization and

	Data Base Design.
CO3	Describe System Implementation.

Paper: 5T4

Course: Cost and Management Accounting

Course outcomes:

CO1	Understand cost and management accounting, framework, taxonomy.
CO2	Understand the concept of strategic management accounting, it's value chain, life cycle costing, target costing and Kaizen Costing.
CO3	Understand costing system and job order costing.
CO4	Understand costing of various types of process accounts under the manufacturing, Construction and oil companies, activity based costing, customer profitability analysis.

Paper: 5P1

Course Name : Practical

Course outcomes:

CO1: Understand practical implementation of all concepts of every unit of 'Tally' and 'VB.Net' by attempting problems.

Program : BCCA Part III (Semester VI)

Paper: 6T1

Course Name : C#.Net

Course outcomes:

CO1: Describe .NET Framework and structure of C# programming.

CO2: Explain Decision making, Loop statements and Methods and Array.

CO3: Describe Structures, Classes, Enum, Constructor, Abstract Classes, Inheritance and Polymorphism.

CO4: Discuss Interface, Operator Overloading and Exceptional Handling concepts with Syntaxes and Programs.

Paper: 6T2

Course Name : Python

Course outcomes:

CO1: Understand basic of python, operations and statement making in python.

CO2: Describe functions and understand importing modules.

CO3: Understand managing string and describe programming objects.

CO4: Understand processing request, building interfaces and developing applications.

Paper: 6T3

Course Name : Entrepreneurship Development

Course outcomes:

CO1: Describe meaning of entrepreneurship types.

CO2: Describe Agri- Preneurship, Factors affecting Entrepreneurship growth.

CO3: Explain Entrepreneurship Development Programmes (EDPs).

CO4: Describe Project Appraisal and Forms of business Ownership.

Paper: 6P1

Course : Practical**Course outcomes:**

CO1: Understand practical implementation of all concepts of every unit of 'C#.Net' and 'Python' by attempting problems.

Paper: 6P2**Course : Project work****Course outcomes:**

CO1: Students are expected to work out a project in some industry / research and development laboratories / educational institutions / software export companies. The Applications Areas of project – Financial / Marketing / Database Management System / Relational Database Management System / E-Commerce / Internet / Manufacturing / web Designing / Scientific / ERP etc.

1 (C) Course Outcomes of B. Com.**Program: B. Com. Part I (Semester I)****Paper: 1T1****Course: Financial Accounting - I****Course outcomes:**

CO1	Describe objectives, principles of Accounting, Accounting concepts & Conventions, and Accounting Standards- AS 1 to AS 10.
CO2	Distinguish between Hire Purchase and Instalment System and computation of Hire Purchase System
CO3	Explain Types of Co-operative societies and Preparation of Trading & Profit and Loss A/C and Balance Sheet.
CO4	Describe Methods of joint venture accounting and computation of Joint venture accounting.

Paper: 1T2**Course: Business Organization****Course outcomes:**

CO1	Explain nature and scope of business, Classification, Commerce and trades, Social responsibility, Forms of Business units, Service sector business, Advantage in economy.
CO2	Describe Organization and its types, Recent trends, E-Commerce, E-Business, E-banking.

Paper: 1T3**Course: Company Law****Course outcomes:**

CO1: Describe Background of New Company Act 2013.

CO2: Describe Memorandum of Association, Articles of Association.

CO3: Understand Share and share capital, Debt Capital (Borrowing and Debenture).

CO4: Describe Membership in a company.

Paper: 1T4**Course: Business Economics – I**

Course outcomes:

CO1	Understand the concept of Business Economics, Decisions, Social Responsibilities Micro and Macro Economics, Law of Demand, Demand, Demand, Forecasting, Production
CO2	Identify the Economies and Diseconomies of Scale. Internal Economies & Diseconomies, External Economies & Diseconomies
CO3	Understand the Concept of Law of Supply and factors influencing Supply. Costing Concepts in Short- Run & Long-Run, Concept of Revenue.

Paper: 1T5**Course : Compulsory English****Course outcomes:**

CO1	According to authors what is the concept of “Short Stories” ?
CO2	Describe the theme of the poems prescribed in this unit?
CO3	Describe the different aspects of HUMAN NATURE
CO4	Explain the following: a) BUSINESS CORRESPONDENCE b) Précis writing c) Comprehension of an Unseen Passage

Paper: 1T6**Course: Second Language – Marathi****Course Outcomes :**

CO1	आत्मवृत्त, वर्णन पर विषयांवर आधारित निबंध सविस्तरपणे लिहणे.
CO2	गद्य विभागातील लेखक परिचय, पाठांचा आशय पटवून देणे.
CO3	पद्य विभागातील कवी, कवयित्री परिचय तसेच कवितेचा आशय, रसग्रहण विद्यार्थ्यांना समजवून देणे.
CO4	व्यावहारिक मराठीतील मुलाखत तंत्र, महणी व वाकप्रचार अवगत करणे.

Paper: 1T6**Course: Second Language – Hindi****Course outcomes:**

CO1	पर्यावरण, सामाजिक, राजनैतिक विषयों पर आधारित निबंध विस्तार से लिखना I
CO2	पाठ के लेखक परिचय देना एवं संपूर्ण पाठ का सरांश लिखना I
CO3	पाठ्यक्रम पर आधारित सभी कविताओं का भावार्थ लिखना एवं कवि परिचय देना I
CO4	निम्नलिखित अंग्रेजी परिभाषिक शब्द के हिंदी परिभाषिक शब्द लिखिए एवं कल्पना विस्तार कीजिए I

Program: B. Com. Part I (Semester II)

Paper: 2T1**Course: Statistic & Business Mathematics****Course outcomes:**

CO1	Describe the Importance, Function of Statistics and measures of Central Tendency (Mean, Median, Mode Geometric Mean and Harmonic Mean.)
CO2	Explain the significance of dispersion and methods of measuring dispersion, Mean Deviation, Standard Deviation, Co- efficient of Variation.
CO3	Describe Absolute Measures of Skewness , Relative Measures of Skewness. Karl Pearson's Coefficient of Skewness Bowley's Coefficient of Skewness.
CO4	To prepare students to use basic <i>mathematics</i> in solving monetary problems in <i>business</i> and personal.

Paper: 2T2**Course: Business Management****Course outcomes:**

CO1: What is Management, Principal, Scope and Significance, Process.

CO2 : Planning, Decision Making, Traditional and modern decision making.

CO3 : Delegation of Authority, Co-ordination and controlling.

CO4 : Recent trends in Management.

Paper: 2T3**Course: Secretarial Practice****Course outcomes:**

CO1	Explain the Procedure for Incorporation of Companies & Conversion of Companies, Alteration of Memorandum of Association and Article of Association, concept of Company Secretary.
CO2	Understand Procedure for Appointment of Directors and Director's Identification Number (DIN) - allotment and surrender, company meetings, concept of Voting and resolution, concept of Report Writing, secretarial audit.
CO3	Explain the concept of E-Governance and E-Filing, Key managerial personnel, Procedure for appointment Directors, Managerial Remuneration.

Paper: 2T4**Course: Business Economics - II****Course outcomes:**

CO1: Identify market structures and pricing strategies.

CO2: Distinguish between Firm and Industry.

CO3: Explain Perfect and Imperfect competition market and price determination.

CO4: Identify, Rents and its applicability, Wages and its usage, Interest, Profits and its importance.

CO5: Explain Business Cycle, National Income and methods of calculations.

Paper: 2T5**Course: Compulsory English****Course outcomes:**

CO1: According to authors what is the concept of "Short Stories"?

CO2: Describe the theme of the poems prescribed in this unit?

CO3: Describe the different aspects of knowledge.

CO4: Explain the following:

- Degrees of Comparison
- Words often confused
- Comprehension of an Unseen Passage

Paper: 2T6

Course: Second Language – Marathi

Course outcomes :

CO1	आत्मवृत्त, वर्णनपर विषयांवर आधारित निबंध सविस्तरपणे लिहिण्यास प्रवृत्त करणे.
CO2	गद्य विभागातील लेखक परिचय, पाठांचा आशय पटवून देणे.
CO3	पद्य विभागातील कवी, कवयित्री परिचय तसेच कवितेचा आशय, रसग्रहण विद्यार्थ्यांना समजवून देणे.
CO4	व्यावहारिक मराठीतील मुलाखत तंत्र, महणी व वाकप्रचार अवगत करणे.

Paper: 2T6

Course: Second Language – Hindi

Course outcomes:

CO1: जीवनी, वर्णनात्मक तथा शक्षणिक विषयों पर आधारित निबंध विस्तारसे लिखना I

CO2: निर्धारित पाठ पर आधारित पठों का परिचय देना I

CO3: पाठ्यक्रम पर आधारित सभी कविताओं का भावार्थ लिखना एवम् कवि परिचय देना I

CO4: पत्रों के प्रकार, गुण एवम् विशेषताएं लिखना तथा मुहावरे और लोकोक्तियां का अर्थ एवम् वाक्य प्रयोग का अध्ययन करना I

Program: B. Com. Part II (Semester III)

Paper: 3T1

Course : Financial Accounting – II

Course Outcomes :

CO1	Difference between a consignment and a sale and Accounting Procedure of Consignment.
CO2	Explain Maintenance of Accounting Records, Transactions relating to Branch and Accounting Procedure of Branch
CO3	Describe Flotation of Joint Stock Companies and their Capital Structure and Methods of issue of shares
CO4	Describe Final Accounts of Joint Stock Companies and Statutory provisions Regarding preparation of companies final accounts

Paper: 3T2

Course: Business Communication & Management

Course outcomes:

- CO1: Describe Communication, Objectives of Communication and its type.
 CO2: Describe Business communication and customer care communication in business.
 CO3: Describe Technology and business communication and Social media as a mean of Communication.
 CO4: Describe MS-office aided communication.

Paper: 3T3

Course: Business Law

Course outcomes:

- CO1: Describe Business law.
 CO2: Describe Law relating to Sale of Goods.
 CO3: Describe Law relating to Negotiable Instruments.
 CO4: Law relating to Consumer protection in India.

Paper: 3T4

Course: Monetary Economics - I

Course outcomes:

- CO1: Explain the concept of Money, it's functions, Quantity Theory, Paper Currency. Functions of Money, Inflation and Deflation, Money Market, Monetary and Fiscal Policies and its working.
 CO2: Understand the Concept of Public Finance and its Importance, theory of Maximum Social Advantage.
 CO3: Understand the concept of Taxation., Canons of Taxation, Taxation Process, Directs Tax, Indirect Tax

Paper: 3T5

Course: Compulsory English

Course outcomes:

- CO1: Explain the struggle of life which inspires us in prose.
 CO2: Describe the theme of the poems prescribed in this unit?
 CO3: Understand the "Transformation of Sentences".
 CO4: Explain the term "Business Correspondence"

Paper: 3T6

Course: Second Language – Marathi

Course outcomes:

CO1	पर्यावरण, आधुनिक ज्ञानविज्ञान आणि प्रसारमाध्यमे या विषयावर आधारित निबंध सविस्तरपणे लिहणे.
CO2	गद्य विभागातील लेखक परिचय, पाठांचा आशय पटवून देणे.
CO3	:पद्यविभागातील कवी, कवयित्री परिचयत सेचक वितेचा आशय, रसग्रहण विद्यार्थ्यांना समजवून देणे.
CO4	व्यावहारिक मराठीतील प्रसारमाध्यमांसाठी वृत्तलेखन आणि कल्पना विस्तारअवगत करणे

Course: Second Language – Hindi

Course outcomes:

CO1	शैक्षणिक राष्ट्रनिर्माण मे विद्यार्थियों का महत्व, नारी शिक्षाका महत्व एवं
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	पर्यावरण एवं प्रदूषण विषयों पर आधारित निबंध विस्तार से लिखना I
CO2	निर्धारित पाठ पर आधारित पाठों का सारांश लिखना एवं लेखक परिचय देना I
CO3	पाठ्यक्रम पर आधारित सभी कविताओं का भावार्थ लिखना एवं कवि परिचय देना I
CO4	जीवनवृत्त की परिभाषा बताते हुए उनका प्रारूप, विशेषताएं एवं प्रकार बताइए तथा साक्षात्कार का उद्देश्य एवं सिधांत पर प्रकाश डालना I

Program: B. Com. Part II (Semester IV)

Paper: 4T1

Course: Financial Accounting - III

Course outcomes:

CO1: To deal with the financial statements of Banking Companies as per the Banking Regulation Act, 1949, preparation of Form 'A' Balance Sheet and Form 'B' Profit & Loss A/c including various schedules.

CO2: To understand the preparation of final accounts of Insurance Companies according to Insurance Companies Regulation Act, 1938.

CO3: To determine value of goodwill by applying various methods of goodwill.

CO4: To discuss the liquidator's final statement of accounts containing various modes of collections and payments of money.

Paper: 4T2

Course : Skill Development

Course outcomes:

CO1: Basic of Personality, human skills and behaviour, motivation and morality, skill development and employment.

CO2: Communication Skill and Personality Development.

CO3: Techniques in personality development.

CO4: Entrepreneurial skill development.

Paper: 4T3

Course : Income Tax

Course outcomes:

CO1: Describe basic concepts of Income Tax.

CO2: Understand tax saving on salary income.

CO3: Calculate income from house property.

CO4: Explain Income Tax Slab Rates.

Paper: 4T4

Course: Monetary Economics – II

Course outcomes:

CO1: Understand Banking system and its working.

Paper: 4T5

Course: Compulsory English

Course outcomes:

CO1: Explain the struggle of life which inspires us in prose.

CO2: Describe the theme of the poems prescribed in this unit?

CO3: Understand the "Transformation of Sentences" and "Change the Voice".

CO4: Explain the term “Business Correspondence”

Paper: 4T6

Course: Second Language – Marathi

Course outcomes:

CO1	पर्यावरण, आधुनिक ज्ञानविज्ञान आणि प्रसारमाध्यमे या विषयावर आधारित निबंध सविस्तरपणे लिहणे.
CO2	गद्य विभागातील लेखक परिचय, पाठांचा आशय पटवून देणे.
CO3	:पद्यविभागातील कवी, कवयित्री परिचयत सेचक वितेचा आशय, रसग्रहण विद्यार्थ्यांना समजवून देणे.
CO4	व्यावहारिक मराठीतील प्रसारमाध्यमांसाठी वृत्तलेखन आणि कल्पना विस्तारअवगत करणे

Paper: 4T6

Course: Second Language – Hindi

Course outcomes:

CO1	साहित्यिक विषयों , भारतीय त्यौहारों तथा स्वस्थ्य विषयोंपर आधारित निबंध विस्तार से लिखना I
CO2	निर्धारित गद्य पर आधारित निबंध विस्तार से लिखना I
CO3	पाठ्यक्रम पर आधारित सभी कविताओं का भवार्थ लिखना एवं कवि परिचय देना I
CO4	प्रतिवेदन का अर्थ ,परिभाषा एवं विशेषताए लिखना तथा समाचार लेखन की प्रक्रिया को स्पष्ट करना एवं एक अच्छे समवाददाता की योग्यता बताइए I

Program: B. Com. Part III (Semester V)

Paper: 5T1

Course: Financial Accounting - IV

Course outcomes:

CO1: Explain the concept of amalgamation and absorption of companies and it's accounting procedure.

CO2: Understand accounting procedure of internal and external reconstruction of company.

CO3: Prepare the financial statements with respect to electricity, gas and water supply company including Revenue A/c, Capital A/c and General Balance Sheet.

CO4: Determine the value of shares by adopting net assets method, yield value method and fair value method.

Paper: 5T2

Course: Management Accounting

Course outcomes:

CO1: Explain Cost Accounting and Financial Accounting, Simple Problems.

CO2: Explain Need for reconciliation of profit, cost accounts and financial accounts.

CO3: Describe Methods of Process Costing and job costing.

CO4: Explain contract costing.

Paper: 5T3**Course: Management Process****Course outcomes:**

- CO1: Understand Management and Administration.
 CO2: Describe Managerial Development and Group Dynamics.
 CO3: Understand Managerial Style.
 CO4: Understand Motivation.

Paper: 5T4**Course: Indian Economics - I****Course outcomes:**

- CO1: Describe Indian Economy & Planning.
 CO2: Describe Indian Economy & Policy.
 CO3: Describe Population & Unemployment.
 CO4: Describe India's Public Finance.

Paper: 5T5**Course: Computerized Accounting****Course outcomes:**

CO1	Discuss advantages of Computerised accounting over Traditional accounting, Accounts organisation, Financial statements, Inventory management system
CO2	Discus customisation of Accounting Software.
CO3	Discuss Numeric Symbols, procedure to create single group and multiple groups, advance and normal information, Ledgers, Cost Centres, Budget in Tally.
CO4	Explain types of Vouchers, cheque printing, interest calculations, Multi currencies, creation of Stock group, Stock categories and stock items, creation of measuring units and Godown.
CO5	Discuss Accounting and Inventory Reports. Income and expenditure statements, Purchase order and sales order, MIS Report, Reconciliation, security controls, security levels, Tally Auditing.

Paper: 5T6**Course: Business Finance - I****Course outcomes:**

- CO1: Describe Objects and Scope of Business Finance.
 CO2: Explain Steps involved in Project Financing.
 CO3: Understand Working Capital.
 CO4: Explain Debtors and Creditors Management, Venture Capital Industry.

Program: B. Com. Part III (Semester VI)**Paper: 5T1****Course: Financial Accounting - V****Course outcomes:**

- CO1: Understand the consolidation of accounts between holding and subsidiary company.
 CO2: Calculate amount of claim to be lodged with Insurance Companies for the loss of stock.
 CO3: Calculate profit or loss related to investments in securities, amount of cum and ex Interest.
 CO4: Understand the concept of profit for prior incorporation period and after incorporation period.

Paper: 6T2**Course: Cost Accounting****Course outcomes:**

CO1: Understand Cost Accounting and Management Accounting.

CO2: Describe Objectives, Advantages of Business Budget & Budgetary Control.

CO3: Explain Importance, Classification and Computation of Ratio Analysis.

CO4: Describe Source, Uses of fund, fund flow statement & Balance Sheet

Paper: 6T3**Course: Advanced Statistics****Course outcomes:**

CO1: Described correlation.

CO2: Explain Regressions.

CO3: Explain Index Number.

CO4: Describe Measurement of Trend Line.

Paper: 6T4**Course: Indian Economics - II****Course outcomes:**

CO1: Describe Indian Agriculture.

CO2: Describe Indian Industry.

CO3: Understand Indian Service Sector and International Trade.

CO4: Describe Contribution of Indian Economic Thinkers.

Paper: 6T5**Course: Human Resources Management****Course outcomes:**

CO1: Describe Human Resource Management Objectives, Functions, Scope, Importance.

CO2: Describe Recruitment selection and training.

CO3: Describe Labour welfare and Collective bargaining.

CO4: Describe Human resource planning and accounting.

Paper: 6T6**Course: Business Finance – II****Course outcomes:**

CO1	Understand the concept of financial market, money market, capital market, SEBI, their objectives, functions and reforms
CO2	Understand the applicability of capital budgeting in order to determine net present value, pay back period, accounting rate of return, discounted pay back period.
CO3	Explain of dividend policies by adopting Walter's Approach, Gordon's Model and MM Approach .
CO4	Prepare cash flow statements as per AS – 3 by applying direct and indirect method

1. (D) Course Outcomes of B. Sc. (IT)**Program: B. Sc. (IT) Part I (Semester I)****Course : English****Course Outcomes :**

CO1	According to authors what is the concept of “Short Stories” ?
CO2	Describe the theme of the poems prescribed in this unit?
CO3	Describe the different aspects of HUMAN NATURE.
CO4	Explain the following: a) Business correspondence b) Precise writing c) Comprehension of an Unseen Passage

Course: Marathi

Course outcomes:

CO1: वर्तमान कालीन सामाजिक, पर्यावरणावर आधारित निबंध सविस्तर पणे लिहणे.

CO2: गद्य विभागातील लेखक परिचय, पाठांचा आशय पटवून देणे.

CO3: पद्य विभागातील कवी, कवयित्री परिचयतसेच कवितेचा आशय, रसग्रहण विद्यार्थ्यांना समजवून देणे.

CO4: सारांशलेखन, कार्यालयीनपत्र, इंग्रजीउताऱ्याचे मराठीत भाषांतर, शुद्धलेखन अवगत करणे.

Course: Hindi

Course outcomes:

CO1: भावनात्मक ,वर्णनात्मक तथा विचारात्मक विशयो पर आधारित निबंध विस्तार से लिखना।

CO2: पत्रों के प्रकार ,गुण एवं विशेषताए लिखना तथा आवेदन पत्र का प्रारूप तैयार करना ।

CO3: पाठ्यक्रम पर आधारित सभी कविताओं का भावार्थ लिखना एवं कवि परिचय देना ।

CO4: निर्धारित पाठ परआधारित पाठों का सारांश लिखना एवं लेखक का परिचय देना।

Paper: I

Course: Fundamentals of Information Technology

Course outcomes:

CO1: Describe basic components of digital computers, CPU, number systems, language evolution, Translators.

CO2: Explain memory, storage devices.

CO3: Understand input and output Devices.

CO4: Can elaborate network.

Paper: II

Course: Programming Methodology in C

Course outcomes:

CO1: Understand programming structure, problem solving techniques and developing Algorithms and flowcharts.

CO2: Work with data types, operators, library functions and control structure.

CO3: Write programs using arrays, string and functions.

CO4: Differentiate structure and union, work with pointers and file handling.

Course: Practical

Course outcomes:

CO1: Write algorithms, draw flowchart and execute C programs on data types, conditional statements, control statements, operators, string functions, arrays, structure, union, pointers, file handling and command line program.

Paper: III**Course: System analysis and design****Course outcomes:**

CO1: Understand concepts of system development life cycle.

CO2: Work with different types of design use to make software.

CO3: Understand testing and conversion of system.

CO4: Understand the concept of project planning, risk management, maintenance process.

Paper: IV**Course: Web Technology****Course outcomes:**

CO1: Describe Internet, Internet Security, Security Issues and Procedure.

CO2: Describe how to create web pages with HTML tags.

CO3: Describe how to create Images, Tables and Form Design in HTML.

CO4: Describe Cascading Style Sheet and Java Script.

Course: Practical**Course outcomes:**

CO1: HTML practical based on basic html tags, table, form designing, linking, cascading style sheet and Java Script Programming.

Paper: V**Course: Multimedia Application Development****Course outcomes:**

CO1: Understand the basic concepts used in Multimedia and hypermedia.

CO2: Understand the fundamental concepts in video and digital audio.

CO3: Work confidently with object-oriented Action Script- I and II.

CO4: Understand with different Multimedia data compression algorithms.

Course: Practical**Course outcomes:**

CO1: Executed simple Action Script programs on windows media Flash Player software.

Paper: VI**Course: Applied Mathematics – I****Course outcomes:**

CO1: Perceive Propositional Calculus.

CO2: Learn disjunctive and conjunctive normal forms.

CO3: Understand predicate Calculus.

CO4: Solve problems based on predicate calculus.

Program: B. Sc. (IT) Part I (Semester II)**Course: English****Course outcomes:**

CO1: Describe how the lessons in this prose inspire you?

CO2: Describe the theme of the poems prescribed in this unit?

CO3: Explain the following in detail:

a) Subject-Verb Agreement

b) Transformation of Sentences

c) Exercises on Common Errors

CO4: Explain the term “CURRICULUM VITAE”

Course: Marathi

Course outcomes:

CO1: विज्ञानावर, कल्पकतेवर आधारित निबंध सविस्तरपणे लिहणे.

CO2: गद्यविभागातील लेखक परिचय, पाठांचा आशय पटवून देणे.

CO3: पद्यविभागातील कवी, कवयित्री परिचयत सेच कवितेचा आशय, रसग्रहण विद्यार्थ्यांना समजवून देणे.

CO4: सारांशलेखन, कौटुंबिकपत्र, माहितीचाअधिकार, शुद्धलेखन व वाकप्रचार अवगत करणे.

Course: Hindi**Course outcomes:**

CO1: विज्ञान, कल्पनाशील, आत्मकथा तथा समय का सदुपयोग विषय पर आधारित निबंध विस्तार से लिखना।

CO2: मुहावरे और लोकोक्तियां का अर्थ एवं वाक्य प्रयोग तथा उनकी परिभाषा लिखना एवं परिभाषिक शब्द के हिंदी परिभाषिक शब्द लिखना एवं कल्पना विस्तार करना ।

CO3: पाठ्यक्रम पर आधारित सभी कविताओं का भावार्थ लिखना एवं कवि परिचय देना।

CO4: निर्धारित पाठपर आधारित पाठों का सारांश लिखना एवं लेखक का परिचय देना।

CO5: पाठ्यक्रम पर आधारित सभी कविताओं का भावार्थ लिखना एवं कवि परिचय देना।

Paper: I**Course: Fundamentals of Digital Electronics****Course outcomes:**

CO1: Explain features of Digital Systems, Number Systems, Representation of Data, Codes.

CO2: Understand Boolean algebra, Boolean identities, Karnaugh maps.

CO3: Understand Combinational Circuits, Sequential Circuit Design, Shift registers and their types, Counters: Synchronous and Asynchronous counters.

CO4: Understand Basic Organization, Secondary Memory.

Paper: II**Course: Object Oriented Programming Using C++****Course outcomes:**

CO1: Understand object oriented methodology, conceptualize classes and objects.

CO2: Interpretation of constructors, destructors and operator overloading.

CO3: Gain knowledge on dynamic objects and inheritance.

CO4: Perceive virtual functions, exception handling and write programs in C++.

Course: Practical**Course outcomes:**

CO1: Write algorithms, draw flowchart and execute C++ programs on classes, objects, outside and inside function, static data member, access specifier, constructor, destructor, overloading, operator overloading, virtual function, virtual class, inheritance, pointer to a class.

Paper: III**Course: Operating System****Course outcomes:**

CO1: Understand concepts of process management and different type of CPU scheduling.

CO2: Work with deadlocks and different conditions of deadlock.

CO3: Understand swapping, paging, segmentation.

CO4: Understand I/O management, file management

Paper: IV**Course: Web Programming****Course outcomes:**

CO1: Describe the fundamental concepts of Internet, WWW and browsers.

CO2: Work confidently with JavaScript and solve problems by using JavaScript.

CO3: Work confidently with ASP and solve problems by using ASP.

CO4: Understand XML documents and Java Server Pages and solve problems.

Course: Practical**Course outcomes:**

CO1: Executed simple HTML programs. Program wrote on notepad and ran through Mozilla browser.

Paper: V**Course : Database Management System****Course outcomes:**

CO1: Describe DBMS and architecture of DBMS.

CO2: Describe Entity Relationship Model, Specialization and aggregation.

CO3: Describe various relational algebra operations.

CO4: Describe Normalization. Explain different types of Normal Form.

Course: Practical**Course outcomes:**

CO1: Write a Query to Create Table, Insert Table, Update Table, Delete Table and also access the value from the Table. To perform query apply Data Definition Language (DDL) and Data Manipulation Language (DML).

Paper: VI**Course: Applied Mathematics – II****Course outcomes:**

CO1: Solve problems based on set theory.

CO2: Understand functions.

CO3: Can answer algebraic structures semi groups and lattices.

CO4: Graph theory and trees concept understand.

Program: B. Sc. (IT) Part II (Semester III)**Paper: I****Course: Microprocessor & ALP****Course outcomes:**

CO1: Understand an over view of 8085, architecture of 8086 microprocessor, assembly language programs.

CO2: Understand pin diagram of 8086, need for DMA, 8255 PPI, D/A and A/D converter interfacing.

CO3: Describe interrupt structure of 8086, serial data transfer schemes.

CO4: Understand advanced micro processors.

Paper: II**Course: Data Structure****Course outcomes:**

CO1: Describe linked list - single and double.

CO2: Work with stacks and its operations.

CO3: Understand Queue, sorting and searching methods.

CO4: Elaborate trees and graphs.

Course: Practical**Course outcomes:**

CO1: Can write programs based on linked list, stack, queue, sorting, searching.

Paper: III**Course: Data Communication & Network – I****Course outcomes:**

CO1: Understand the fundamental concepts of data communications and Network Architecture.

CO2: Perceive the used of different Transmission Media.

CO3: Differentiate wireless communication systems and their data format.

CO4: Understand with different types of Network Topologies & Connectivity Devices.

Paper: IV**Course: Linux Operating System****Course outcomes:**

CO1: Work on Linux environment and master the basics of Linux commands.

CO2: Work efficiently on vi editor, manage and print Linux files.

CO3: Administrate users, groups and manage accounts.

CO4: Work with X windows, KDE and GNOME environment.

Course: Practical**Course outcomes:**

CO1: Can work with basic Linux commands, filters, creating and managing users and groups, taking backup and restore, communication utilities, shell scripts, GNOME and KDE.

Paper: V**Course: E-Commerce****Course outcomes:**

CO1: Understand scope of e-Commerce, e-Market, value and supply chain.

CO2: Explain various Business Strategies in electronics age.

CO3: Understand Business to Business e-Commerce and E-Market.

CO4: Understand Business to Consumer Electronics Commerce & elements of e-Commerce.

Paper: VI**Course: Statistical Methods****Course outcomes:**

CO1: Explain definition of statistics, importance and scope of statistics, limitations of statistics, presentation of statistical data.

CO2: Understand measures of central tendency, relationship amongst different averages.

CO3: Measures of dispersion, meaning and significance of dispersion, methods of measuring dispersion.

CO4: Understand correlation and regression.

Course: Practical**Course outcomes:**

CO1: Statistical methods program based on requisites for an ideal measure of central tendency arithmetic, methods of measuring dispersion.

Program: B. Sc. (IT) Part II (Semester IV)**Paper: I****Course: Software Engineering – I****Course outcomes:**

CO1: Understand concepts of software engineering and generic view of process.

CO2: Work with different process models and understand software requirements.

CO3: Understand requirements engineering process and system model.

CO4: Can design engineering.

Paper: II

Course: Java Programming

Course outcomes:

CO1: Describe Variables, Data types and Operators in Java.

CO2: Describe how to create object, array, inheritance and interface in Java.

CO3: Describe how to create Packages, Applet, Threads in Java.

CO4: Describe various components, Graphics control, Layout and Container using awt in Java.

Course: Practical

Course outcomes:

CO1: Java Program based on application, Applets , Objects , Methods, Inheritance, Loops, Conditions, Threads and various abstract window toolkit at controls

Paper: III

Course: Data Communication and Network – II

Course outcomes:

CO1: Understand Communication Architecture and Internetworking.

CO2: Understand Transport Protocols.

CO3: Explain Session Services & Protocols.

CO4: Understand Digital Network, ISDN.

Paper: IV

Course: Oracle

Course outcomes:

CO1: Understand Oracle, Introduction to (SQL), Data types.

CO2: Execute SQL Command, Aggregate function, PL/SQL, Join, Sub queries, Views.

CO3: Perform Cursor, Exception Management.

CO4: Describe Database Triggers & Built in Packages, Nested tables, Varrays.

Course: Practical

Course outcomes:

CO1: Executing SQL query based on select and creates Queries based on join, view, cursor and trigger.

Paper: V

Course: Compiler Construction

Course outcomes:

CO1: Understand the compiler and translator and describe the structure of compiler.

CO2: Perceive the structure of high level programming language.

CO3: Know the role of the lexical analyzer and their implementation.

CO4: Understand parsers, code optimization and Code generation in details.

Paper: VI

Course: Numerical Methods

Course outcomes:

CO1: Understand Roots of Non-Linear Equations, Starting & Stopping Iterative method, determining all possible roots.

CO2: Understand Solution to Linear Equations, Round off errors and refinement, m Conditioned system, Matrix inversion method.

CO3: Understand Linear interpolation, Least Square regression Fitting, m conditioning in Least square, Transcendental equations.

CO4: Describe Integration & Differentiation, Multistep method for differential equations.

Course: Practical

Course outcomes:CO1: Numerical Methods programs based on Roots of Non-Linear Equations, Solution to Linear Equations, Linear interpolation and Integration.

Program: B. Sc. (IT) Part III (Semester V)

Paper: I

Course: Software Project Management

Course outcomes:

CO1: Elaborate process and project management, models, project planning infrastructure.

CO2: Explain Process planning, effort estimation & scheduling, effort.

CO3: Know quality planning, risk management.

CO4: Describe measurement and planning, project management plan.

Paper: II

Course: Dot Net Framework and C#

Course outcomes:

CO1: .Net framework, Common Language Runtime, Common Type System, Common Language Specification, Microsoft Intermediate Language (MSIL).

CO2: C-Sharp Language, Data Types, Variables, Array and Strings, Object and Classes, Inheritance, Operator Overloading, Delegates and Events, Interfaces.

CO3: C# Using Libraries, Multi-Threading, Windows Forms, Error Handling.

CO4: Advanced Features Using C#, Web Form Controls, ADO.Net, .Net Assemblies and Attribute.

Course: Practical

Course outcomes:

CO1: Execute programs based on variables, array and string, object and classes, inheritance, operator overloading, delegates and events, interfaces, multi-threading, windows forms, error handling, web form controls.

Paper: III

Course: Network Security

Course outcomes:

CO1: Explain security, threats, risks, attacks, authentication, model for internetwork security.

CO2: Access control model, cryptography and its methods.

CO3: Elaborate encryption, security protocols, network and transport layer security.

CO4: Network security applications and different firewalls.

Course: Practical

Course outcomes:

CO1: C++ Programs based on cryptography, encryption, implement DES, RSA and EIGamal algorithms.

Paper: IV

Course: Data Warehousing

Course outcomes:

CO1: Understand data warehouse, data mart.

CO2: Understand data and dimensional modelling.

CO3: Work with OLAP in data warehouse.

CO4: Build data warehouse.

Paper: V**Course : VB Programming****Course outcomes:**

CO1: Describe working with VB Window components, Forms and basic programming fundamentals.

CO2: Describe Array, Procedure, Function and Module.

CO3: Describe menus and Database handling Concepts using DAO.

CO4: Describe how to use ADO data control and Error handling concepts.

Course : Practical**Course outcomes:**

CO1: VB Program based on different VB window components like Textbox, Combobox, Checkbox, List box, Images and different database controls.

Paper: VI**Course : Graph Theory****Course outcomes:**

CO1: Work with graphs and its operations.

CO2: Understand connected graph.

CO3: Solve theorems.

CO4: Efficiently manage directed graphs.

Program: B. Sc. (IT) Part III (Semester VI)**Paper: I****Course: Enterprise Resource Planning****Course outcomes:**

CO1: Introduction to business needs and ERP, overview of ERP, Data Mining, Data Warehousing.

CO2: ERP Client server architecture and ERP, ERP implementation life cycle.

CO3: The business module business models in an ER.

CO4: Selection of ERP, SWOT analysis of various ER? Electronic Data Interchange (EDI).

Paper: II**Course: Advance Java Programming****Course outcomes:**

CO1: Describe different controls in java swing.

CO2: Describe JDBC-ODBC model in detail.

CO3: Describe Java bean, Enterprise java bean (EJB) and RMI (Remote Method Invocation).

CO4: Describe Java Servlet and JSP in detail.

Course: Practical**Course outcomes:**

CO1: Advance Java Program based on different controls present in swing such as Text Field, Combo box, Checkbox, Windows, Dialog box, Tabbed pane and jdbc- odbc connectivity with the database.

Paper: III**Course: Cloud Computing****Course outcomes:**

CO1: Describe cloud computing, IaaS, MaaS, PaaS, SaaS.

CO2: Explain federation, security, standards in cloud.

CO3: Elaborate utility application architecture, service oriented architecture, data centre, hyper threading, blade servers, automated provisioning.

CO4: Software utility application architecture, characteristics of SaaS, software utility applications, cost versus value, software application services framework, common enablers, and conceptual view to reality.

Paper: IV

Course: Data Mining

Course outcomes:

CO1: Understand the fundamental concept of data mining and frequent pattern mining.

CO2: Understand the concept of classification and decision tree construction algorithm.

CO3: Understand the different clustering techniques and classification of clustering.

CO4: Understand the different types of partitioned methods using in Data Mining.

Course: Practical

Course outcomes:

CO1: Implemented different types of databases in WEKA software, case study on different databases.

Paper: V

Course: Animation Techniques

Course outcomes:

CO1: Understand techniques and principles of animation techniques.

CO2: Create animation using Flash.

CO3: Explain 3D animation & its concepts.

CO4: Explain motion caption, concept development.

Paper: VI

Course: Operation Research

Course outcomes:

CO1: Understand overview of operations research, linear programming.

CO2: Know dual problems, transportation model.

CO3: Perceive network models, dynamic programming.

CO4: Describe assignment problem.

Course: Practical

Course outcomes:

CO1: Operation research programs based on linear programming, transportation model, network models, assignment problem.

1. (e) Course Outcomes of BCA

Program: BCA Part I (Semester I)

Course: English

Course outcomes:

CO1: According to authors what is the concept of “Short Stories”?

CO2: Describe the theme of the poems prescribed in this unit?

CO3: Describe the different aspects of HUMAN NATURE.

CO4: Explain the following: a) Business correspondence

b) Precise writing

c) Comprehension of an Unseen Passage

Course: Marathi

Course outcomes:

CO1: वर्तमान कालीन सामाजिक, पर्यावरणावर आधारित निबंध सविस्तर पणे लिहणे.

CO2: गद्यविभागातील लेखक परिचय, पाठांचा आशय पटवून देणे.

CO3: पद्यविभागातील कवी, कवयित्री परिचयत सेच कवितेचा आशय, रसग्रहण विद्यार्थ्यांना समजवून देणे.

CO4: सारांशलेखन, कार्यालयीनपत्र, इंग्रजीउताऱ्याचे मराठीत भाषांतर, शुद्धलेखन अवगत करणे.

Course: Hindi

Course outcomes:

CO1: भावनात्मक ,वर्णनात्मक तथा विचारात्मक विशयोपर आधारित निबंध विस्तार से लिखना।

CO2: पत्रों के प्रकार ,गुण एवं विशेषताए लिखना तथा आवेदन पत्र का प्रारूप तैयार करना ।

CO3: पाठ्यक्रम पर आधारित सभी कविताओं का भावार्थ लिखना एवं कवि परिचय देना ।

CO4: निर्धारित पाठ पर आधारित पाठों का सारांश लिखना एवं लेखक का परिचय देना।

Paper: I

Course: Computer Fundamentals

Course outcomes:

CO1: Understand Basic Components of Digital Computers, CPU, Number Systems, Language Evolution, Translators.

CO2: Understand Memory, Storage Devices.

CO3: Understand Input Devices, Output Devices.

CO4: Understand Network.

Paper: II

Course: C Programming

Course outcomes:

CO1: Understand programming structure, problem solving techniques and developing algorithms and flowcharts.

CO2: Work with data types, operators, library functions and control structure.

CO3: Write programs using arrays, string and functions.

CO4: Differentiate structure and union, work with pointers and file handling.

Course: Practical

Course outcomes:

CO1: Conduct Practical's based on C Programming language.

Paper: III

Course: Statistical Methods

Course outcomes:

CO1: Understand about the definition Statistics, Importance and scope of Statistics, Primary and Secondary data collection, study of Classification, Tabulation, Frequency Distribution, Diagrams and Graphs.

CO2: Understand about Measures of Central Tendency, Graphic Representation of a Frequency Distribution, Study of Mean, Medium and Mode.

CO3: Understand about the Standard of Deviation, Kurtosis Deviation.

CO4: Study of Correlation, regression, Scatter Diagram.

Course: Practical

Course outcomes:

CO1: Conduct Practical's based on CPP Programming language.

Paper: IV

Course: Discrete Mathematics - I**Course outcomes:**

- CO1: Understand and study of connectives, conjunction and disjunction.
 CO2: Study of disjunctive normal forms.
 CO3: Study of Predicate calculus.
 CO4: Understand the Theory of inference for predicate calculus.

Paper: V**Course: Operating System****Course outcomes:**

- CO1: Explain Structure of Operating System, Operating System functions, Process Management, CPU Scheduling.
 CO2: Understand Performance comparison, Deadlock and Starvation.
 CO3: Understand Memory Management, Memory Allocation Method.
 CO4: Explain I/O Management, File Management, Protection Mechanisms.

Paper: VI**Course: Office Automation****Course outcomes:**

- CO1: Windows Operating System, operating with windows, windows XP/Vista versions.
 CO2: MS- Word.
 CO3: MS-Excel.
 CO4: MS-PowerPoint.

Course: Practical**Course outcomes:**

- CO1: Conduct practical's based on MS Word, Excel and Power Point. Based on practical's prepared record book.

Program: BCA Part I (Semester II)**Course: English****Course outcomes:**

- CO1: Describe how the lessons in this prose inspire you?
 CO2: Describe the theme of the poems prescribed in this unit?
 CO3: Explain the following in detail:
 a) Subject-Verb Agreement
 b) Transformation of Sentences
 c) Exercises on Common Errors
 CO4: Explain the term "CURRICULUM VITAE"

Course: Marathi**Course outcomes:**

CO1	विज्ञानावर, कल्पकतेवर आधारित निबंध सविस्तरपणे लिहणे.
CO2	गद्यविभागातील लेखक परिचय, पाठांचा आशय पटवून देणे
CO3	: पद्यविभागातील कवी, कवयित्री परिचयत सेचकवितेचा आशय, रसग्रहण विद्यार्थ्यांना समजवून देणे.
CO4	सारांश लेखन, कौटुंबिकपत्र, माहितीचा अधिकार, शुद्धलेखन ववाकप्रचार अवगत करणे.

Course: Hindi**Course outcomes:**

CO1	विज्ञान, कल्पनाशील, आत्मकथा तथा समय का सदुपयोग विषय पर आधारित निबंध विस्तार से लिखना।
CO2	मुहावरे और लोकोक्तियों का अर्थ एवं वाक्य प्रयोग तथा उनकी परिभाषा लिखना एवं परिभाषिक शब्द के हिंदी परिभाषिक शब्द लिखना एवं कल्पना विस्तार करना।
CO3	पाठ्यक्रम पर आधारित सभी कविताओं का भावार्थ लिखना एवं कविपरिचय देना।
CO4	निर्धारित पाठ पर आधारित पाठों का सारांश लिखना एवं लेखक का परिचय देना।
CO5	पाठ्यक्रम पर आधारित सभी कविताओं का भावार्थ लिखना एवं कवि परिचय देना।

Paper: I**Course: Object Oriented Programming Using C++****Course outcomes:**

CO1: Understand Object oriented methodology, conceptualize classes and objects.

CO2: Interpretation of constructors, destructors and operator overloading.

CO3: Gain knowledge on dynamic objects and inheritance.

CO4: Perceive virtual functions, exception handling and write programs in C++.

Course: Practical**Course outcomes:**

CO1: Conduct practical's based on CPP Programming language.

Paper: II**Course: System Analysis and Design****Course outcomes:**

CO1: Understand concepts of system development life cycle.

CO2: Work with different types of design use to make software.

CO3: Understand testing and conversion of system.

CO4: Understand the concept of project planning, risk management, maintenance process.

Paper: III**Course: Numerical Methods****Course outcomes:**

CO1 : Understand Roots of Non-Linear Equations, Starting & Stopping Iterative method, determining all possible roots.

CO2 : Understand Solution to Linear Equations, Round off errors and refinement, m Conditioned system, Matrix inversion method.

CO3 : Understand Linear interpolation, Least Square regression Fitting, m conditioning in Least square, Transcendental equations.

CO4 : Describe Integration & Differentiation, Multistep method for differential equations.

Course: Practical**Course outcomes:**

CO1: Conduct practical's based on CPP Programming language.

Paper: IV

Course: Discrete Mathematics - II

Course outcomes:

CO1: Understand and study of set theory.

CO2: Study of different types of functions.

CO3: Understand and study Algebraic structures.

CO4: Understand and study of Graph theory and trees.

Paper: V

Course: Linux Operating System

Course outcomes:

CO1: Work on Linux environment and master the basics of Linux commands.

CO2: Work efficiently on vi editor, manage and print Linux files.

CO3: Administrate users, groups and manage accounts.

CO4: Work with X windows, KDE and GNOME environment.

Course: Practical

Course outcomes:

CO1: Can work with basic Linux commands, filters, creating and managing users and groups, taking backup and restore, communication utilities, shell scripts, GNOME and KDE.

Paper: VI

Course: E-Commerce

Course outcomes:

CO1: Explain introduction to e-Commerce, Trade Cycle, E-Market.

CO2: Understand business strategy in electronic age.

CO3: Understand Business to Business e-Commerce.

CO4: Explain Business to Consumer Electronic Commerce.

Program: BCA Part II (Semester III)

Paper: I

Course: Visual Basic Programming

Course outcomes:

CO1: Describe working with VB Window components, Forms and basic programming fundamentals.

CO2: Describe Array, Procedure, Function and Module.

CO3: Describe menus and Database handling Concepts using DAO.

CO4: Describe how to use ADO data control and Error handling concepts.

Course: Practical

Course outcomes:

CO1: VB Program based on different VB window components like Textbox, Combobox, Checkbox, List box, Images and different database controls.

Paper: II

Course: Database Management System

Course outcomes:

CO1: Understand DBMS Definition, Three level architectures of DBMS, Different types of data models.

CO2: Understand E-R Models.

CO3: Explain Relational Model, Aggregate Functions.

CO4: Understand Functional Dependency, Normalization.

Paper: III

Course: Data Structure

Course outcomes:

CO1: Understand and study the concept of linked list.

CO2: Understand and study the concept of stacks.

CO3: Understand and study the concept of queues, sorting and searching.

CO4: Understand and study the concept of trees and graphs.

Course: Practical

Course outcomes:

CO1: Executions of DS practical's in CPP language.

Paper: IV

Course: Operation Research – I

Course outcomes:

CO1: Describe Introduction to Operation Research, Linear Programming, Mathematical Formulation of the Problem.

CO2: Describe Linear Programming Methods, Duality in Linear Programming.

CO3: Describe Transportation Problem.

CO4: Describe Assignment Problem.

Paper: V

Course: Web Technology - I

Course outcomes:

CO1: Understand concept of HTTP, URL, Search Engines, Search Engines categories.

CO2: Work with different HTML Command Tags.

CO3: Understand the concept of DHTML.

CO4: Describe CSS (Cascading style sheets).

Course: Practical

Course outcomes:

CO1: Practical's executed on Notepad.

Paper: VI

Course: Digital Electronics - I

Course outcomes:

CO1: Number System and Data Representation.

CO2: Data Representation, Binary Arithmetic.

CO3: Logic gates, NOR and NAND gates as a universal gates.

CO4: Boolean Algebra, K-Map for 2,3,4 variables, SOP and POS Logic Expression.

Program: BCA Part II (Semester IV)

Paper: I

Course: Software Engineering - I

Course outcomes:

CO1: Understand concepts of software engineering and generic view of process.

CO2: Work with different process models and understand software requirements.

CO3: Understand requirements engineering process and system model.

CO4: Can design engineering.

Paper: II

Course: SQL and PL/SQL

Course outcomes:

CO1: Explain CODD'S Rules, DDL Statement, DCL and TCL Statements, Joins.

CO2: Understand Practical's based on VIEWS, PL/SQL Programming.

CO3: Understand Practical's based on Exception Handling, Cursors and Procedures.

CO4: Understand Practical's based on Function, Triggers.

Course: Practical**Course outcomes:**

CO1: All SQL queries are executed on ORACLE 9i software.

Paper: III**Course: Theory of Computation****Course outcomes:**

CO1: Describe Finite Automata and Regular Expression.

CO2: Describe Regular Set and Derivation Tree.

CO3: Describe Context Free Grammar and Context Free Languages (CFL's).

CO4: Describe Push Down Automata

Paper: IV**Course: Operation Research - II****Course outcomes:**

CO1: Describe Game Theory, Introduction Decision under Certainty, Decision under Risk, Decision under Uncertainty, Decision Tree.

CO2: Understand Network Scheduling by CPM/PERT, Advantage of Network (PERT/CPM).

CO3: Understand Inventory Control, Inventory Control with Price Breaks.

CO4: Describe Queuing Theory Introduction, Terminologies in Queuing System, Queuing Control.

Course: Practical**Course outcomes:**

CO1: Practical's executed in CPP language.

Paper: V**Course: Web Technology - II****Course outcomes:**

CO1: Understand concept of JSP lifecycles.

CO2: Work with different JSP Exceptions, JSP tags, declaration, object.

CO3: Understand the concept of vb script.

CO4: Describe web services.

Course: Practical**Course outcomes:**

CO1: Practical's executed on Notepad

Paper: VI**Course: Digital Electronics - II****Course outcomes:**

CO1: Combinational / Sequential Circuits Combinational circuits, Multiplexer, Demultiplexer, Decoder, Encoder, Parity detector.

CO2: Sequential Circuits Counters shift registers and their types.

CO3: Architecture of 8086 and Assembly Language Programming Block diagram of 8086, Pin diagram of 8086, Addressing modes,

CO4: Instruction set: Data transfer, Arithmetic, Logical, String manipulations, Control Transfer, Unconditional branch, Conditional branch, Flag, Processor control. Assembler directives and operators, simple assembly programs.

Program: BCA Part III (Semester V)

Paper: I

Course: Computer Graphics - I

Course outcomes:

CO1: Understand of Introduction and Primitives.

CO2: Study of Output primitives.

CO3: Study of 2D Transformations.

CO4: Study of 2-D viewing.

Course: Practical

Course outcomes:

CO1: Practical's executed in CPP language.

Paper: II

Course: Compiler Construction

Course outcomes:

CO1: Understand the compiler and translator and describe the structure of compiler.

CO2: Understand the structure of high level programming language.

CO3: Understand the role of the lexical analyser and their implementation.

CO4: Understand the Parsers, Code optimization and Code generation in details.

Paper: III

Course: VB.Net

Course outcomes:

CO1: Understand the concept of .NET framework.

CO2: Work with abstraction & interfaces on object oriented software design.

CO3: Understand creating a menu.

CO4: Understand delegates in details.

Course: Practical

Course outcomes:

CO1: Practical's executed on Microsoft Visual Studio 2008.

Paper: IV

Course: Software Engineering - II

Course outcomes:

CO1: Create an architectural design.

CO2: Understand different testing strategies.

CO3: Perceive product metrics and metrics for process and products.

CO4: Manage risk and quality.

Paper: V

Course: PHP - I

Course outcomes:

CO1: Describe Introduction to PHP, Basics.

CO2: Understand Functions.

CO3: Understand Arrays.

CO4: Describe reading data in web pages, Handling Buttons.

Course: Practical

Course outcomes:

CO1: PHP-I program based on String, Functions, Arrays executed on WampServer software.

Paper: VI**Course: Data Communication and Network - I****Course outcomes:**

CO1: Understand Data Transmission, Data Encoding.

CO2: Explain Digital Data Communication, Data Link Control, Multiplexing.

CO3: Understand Circuit Switching, Digital switching concept.

CO4: Understand Packet Switching, Traffic control.

Program: BCA Part III (Semester VI)**Paper: I****Course: Computer Graphics - II****Course outcomes:**

CO1: Polygon surfaces, quadric surfaces, spline representation, Curves, surfaces.

CO2: 3-D Geometric transformations. 3-D viewing, Viewing pipeline, projection transforms and clipping.

CO3: Visible surface detection methods, back-face detection.

CO4: Computer animation, Design of animation sequence.

Paper: II**Course: Programming in JAVA****Course outcomes:**

CO1: Describe Variables, Data types and Operators in Java.

CO2: Describe how to create object, array, inheritance and interface in Java.

CO3: Describe how to create Packages, Applet, Threads in Java.

CO4: Describe various components, Graphics control, Layout and Container using awt in Java.

Course: Practical**Course outcomes:**

CO1: Java Program based on application, Applets , Objects , Methods, Inheritance, Loops, Conditions, Threads and various abstract window toolkit (awt) controls.

Paper: III**Course: ASP.Net****Course outcomes:**

CO1: Understand the basic elements used for creating XML file.

CO2: Work on ASP.net environment and to solve application by using ASP controls.

CO3: Understand different validation and rich controls.

CO4: Work confidently with database connectivity by using different database controls.

Course: Practical**Course outcomes:**

CO1: Executed simple programs by using ASP.net controls, validation controls etc. in Microsoft Visual Studio 2008.

Paper: IV**Course: Software Testing****Course outcomes:**

CO1: Understand testing as a process and tester's role in a software development organization.

CO2: Work with different test case design strategies.

CO3: Understand levels of testing.

CO4: Understand test management in detail.

Paper: V

Course: PHP - II

Course outcomes:

CO1: PHP Browser-Handling Power, Using PHP's Server Variables Data Validation.

CO2: Classes and Objects, Accessing Properties and Methods, Declaring a Class, Introspection, Serialization, HTTP Basics.

CO3: Working With Database, Using PHP to Access a Database, Accessing The Database In PHP.

CO4: Setting a Cookie, Working with FTP Shell Commands.

Course: Practical

Course outcomes:

CO1: PHP-II program based on WampServer software.

Paper: VI

Course: Data Communication and Network - II

Course outcomes:

CO1: Understand Communication Architecture and Internetworking.

CO2: Understand Transport Protocols.

CO3: Explain Session Services & Protocols.

CO4: Understand Digital Network, ISDN.

2. Course Outcomes : Post Graduate

Program : M. Sc. (CS) Part I (Semester I)

Paper: I

Course : Discrete Mathematical Structure

Course outcomes:

CO1 : Describe Fundamental set and Mathematical.

CO2 : Explain Permutation and Combination and different algorithms.

CO3 : Overview of Graph Theory.

CO4 : Focus on Semi group and groups with Compute ability.

Paper: II

Course : Programming in Java

Course outcomes:

CO1 : Introduction to Java.

CO2 : Explain Applet and AWT.

CO3 : Describe JDBC and RMI.

CO4 : Focus on Servlet and Java Beans

Course: Practical

Course outcomes:

CO1: Practical's Conducted on Text-pad.

Paper: III

Course : Digital Electronics and Microprocessor

Course outcomes:

CO1: Closely lookin to Number system and data representation.

CO2: Explain Boolean Algebra and Combinational Circuit.

CO3: Describe sequential circuits and counters.

CO4: Overview of 8086 Microprocessor with Assembly language Programming.

Paper: IV

Course : Advanced DBMS and Administration.

Course outcomes:

CO1 : Closely look into Relational Database Design.

CO2 : Explain Transaction Processing & Concurrency Control.

CO3 : Describe Oracle Data base Architecture and Administration with Back up and Recovery strategies.

CO4 : Overview of Oracle Tuning and Trouble shooting.

Course: Practical

Course outcomes:

CO1: Practical's conducted on Oracle 8i.

Program: M. Sc. (CS) Part I (Semester II)

Paper: I

Course : Windows Programming using VC++

Course outcomes:

CO1 : Introduction to VC++.

CO2 : Explain Document View Architecture.

CO3 : Describe ActiveX :COM, Automation and OLE.

CO4 : Overview of Database Management and Programming for Internet.

Course: Practical

Course outcomes:

CO1: Practical's conducted on Visual Studio 6.0.

Paper: II

Course : Theory of Computation and Compiler Construction

Course outcomes:

CO1 : Introduction to Finite Automata and Regular Expression.

CO2 : Describe Push down Automata and Turing Machine.

CO3 : Explain in details about Compilers.

CO4 : Overview of Syntax directed translation and Code Generation.

Paper : III

Course : Computer Architecture and Organization

Course outcomes:

CO1 : Principle of computer design.

CO2 : Describe Control Unit.

CO3 : Explain Memory Subsystem.

CO4 : Overview of Input Output Processing.

Paper: IV

Course: Computer Graphics

Course outcomes:

CO1 : Introduction of computer Graphic sandits applications.

CO2 : Describe Algorithms about computer Graphics.

CO3 : Explain Basic Transformation.

CO4 : Overview of Fractal geometry and concentrate on colormodels.

Course: Practical

Course outcomes:

CO1: Practical's conducted on C++ software.

Program: M. Sc. (CS) Part II (Semester III)**Paper: I****Course: Data Communication and Networks****Course outcomes:**

CO1 : Describe Network structure, architectures and services OS Reference model.

CO2 : Explain Different layers.

CO3 : Overview of Network Security Fundamentals.

CO4 : Focus on Message Authentication , Public key Systems.

Course: Practical**Course outcomes:**

CO1: Practical based on C++ software.

Paper: II**Course: Software Engineering****Course outcomes:**

CO1: Introduction to Software Engineering, A Generic view of process, Models.

CO2: Explain Requirements engineering process , Design Engineering.

CO3: Overview Object-Oriented Design, Testing Strategies.

CO4: Focus on Metrics for Process and Products, Quality Management.

Paper: III**Course: ASP. NET****Course outcomes:**

CO1 : Understand the ASP.net programming model and core server controls.

CO2 : Work with different ASP.net web controls and data controls.

CO3 : Work with different Data Grid, List View etc. controls and Http Application class.

CO4 : Work with State management and security in ASP.net and AJAX Practical based on Microsoft Visual studio 2008.

Paper : IV**Course : Mobile Computing****Course outcomes:**

CO1 : Perceive communication with mobile and its security.

CO2 : Understand wireless MAC and CDM Abases communication.

CO3 : Handle mobile databases.

CO4 : Understand Mobile devices server and management and various mobile OS.

Program: M. Sc. (CS) Part II (Semester IV)**Paper: I****Course: Data Mining****Course outcomes:**

CO1 : Introduction to Data Mining.

CO2 : Overview of Exploring Data and OLAP.

CO3 : Describe Data Mining Classification.

CO4 : Explain Data Mining Cluster Analysis.

Paper: II**Course : Artificial Intelligence & Expert System****Course outcomes:**

CO1:Introduction to AI problems, AI Techniques.

CO2:Understanding Knowledge Representation, Predicate Logic.

CO3: Games playing, Planning.

CO4:Understanding as Constraint satisfaction, Natural Language Processing

Paper:III

Course : Design and Analysis of Algorithm

Course outcomes:

CO1 : Elementary Algorithmics, Analysis of Algorithms.

CO2 : Understanding Greedy Algorithms, Divide and Conquer.

CO3 : Overview of Dynamic Programming, short estpaths.

CO4 :Introduction to Backtracking & Brach Bound, NP Completeness.

Course : Practical

Course outcomes:

CO1: Practical based on C++software.

Paper:IV

Course : Parallel Computing

Course outcomes:

CO1 : Describe parallel computing.

CO2 : Understand principles of parallel algorithms design.

CO3 : Analytical modelling of parallel programs.

CO4 : Work with programming shared address space platforms.