

TEACHING PLAN 2021-2022 (EVEN SEMESTER)

(Apr 2022 to July 2022)

Name:- Mrs. Ranjita Joon

Department: Computer Science

Class:- M.Sc (CS)-2nd sem Subject:- Computer Networks(16MCS22C4)

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
April	Introduction to Computer Network: Types of Networks, Network Topologies,	OSI and TCP/IP Reference Models; Comparison of Models.	Digital Vs. Analog communication; Parallel and Serial Communication; Synchronous, Asynchronous and Isochronous Communication;	Data Communications Concepts: Communication modes: simplex, half duplex, full duplex; Multiplexing	; Transmission media: Wired- Twisted pair, Coaxial cable, Optical Fiber, Wireless transmission: Terrestrial, Microwave, Satellite, Infra red. UNIT TEST
May	Communication Switching Techniques: Circuit Switching, Message Switching, Packet Switching.	Data Link Layer Fundamentals: Framing, Basics of Error Detection, Forward Error Correction, Cyclic Redundancy	Check codes for Error Detection, Flow Control, Media Access Protocols: ALOHA,	Carrier Sense Multiple Access (CSMA), CSMA with Collision Detection (CSMA/CD), Token Ring, Token Bus. ASSIGNMENT	High-Speed LAN: Standard Ethernet, Fast Ethernet, Gigabit Ethernet,
June	10G; Wireless LANs: IEEE 802.11, Bluetooth. Network Layer: IP Addressing and Routing, IPv4 (Header Format and Services), ARP	ICMP (Error Reporting and Query message); IPv6 (Header Format and Addressing). Transport Layer: Process-to-Process Delivery: UDP,	TCP; Connection Management by TCP; Basics of Congestion Control.	Application Layer: Domain Name System (DNS); SMTP; HTTP; WWW.	Network Security: Security Requirements and attacks; Cryptography: Symmetric Key (DES, AES),
July	Public Key Cryptography (RSA); Firewall.				

Teacher's Signature

TEACHING PLAN 2021-22 (EVEN SEMESTER)

(Apr 2022 to July 2022)

Name :- Ms Ranjita Joon
(16MCS22C2)

Department:-Computer Science

Class:- M.Sc(CS) 2nd sem

Subject:- Object Oriented Programming using C++

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
April	Procedural Language Object Oriented Approach Objects & Classes Encapsulation Data Abstraction Revision	Doubts and Discussion Inheritance Polymorphism Dynamic Binding, Message Passing Revision Test	Structure of C++ Program , Data types Variables Static Variables Operators in C++ Revision	Arrays Strings, Structure Revision	Functions, Recursion Control Statements Test of topics covered
May	Classes and Objects Memory Allocation for objects, memory layout of objects	Private, Public member functions Protected member functions Static members Explain with examples Doubts and Discussion	Constructor, Features Types of constructor Dynamic constructor Parameterized constructor Destructor	Doubts and Discussion Dynamic memory allocation New, delete Object creation at run time. This pointer Doubts and discussion	Derived class and Base class, Different types of Inheritance Overriding member function Public and private inheritance Ambiguity in multiple inheritance Doubts and Discussion
June	Virtual Inheritance Abstract class Introduction to Polymorphism Revision Test	Operator overloading Overloading Unary operator Overloading Binary Operators Function overloading Revision	Virtual function Friend function Static function Doubts and Discussion Test on topics covered	Throwing Catching Re-throwing an exception Specifying exceptions Exceptions when handling exceptions Exceptions when handling exceptions Resource capture and release Revision	Introduction to Templates Class Templates Function Templates Overloading of template function, namespaces Introduction to STL, Benefits of STL: Containers, adapters

July	Benefits of STL: iterators, vectors, lists Doubts and Discussion				
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2022 to JULY 2022)

Name :-Sonika Department:- Computer Science Class:- M.Sc(CS)- 2nd Sem Sub:- Software Engineering

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Software crisis, Software engineering Approach and Challenges,	Software development process models with comparison: Waterfall, Prototype, Time boxing and Spiral Models, RAD Model and Automation through software environments	Quality Standards like ISO 9001, SEI-CMM, Structured Analysis, Behavioral & non-behavioral requirements, Software requirement specification: components & characteristics,	Function point metric, Cost estimation, static, Single & multivariate models, COCOMO Model, Putnam Resource Allocation Model,	Risk management, project scheduling, personnel planning, team structure, Software configuration management
MAY	quality assurance, project monitoring, Empirical, Fundamentals, problem partitioning & abstraction, design methodology,	Function Oriented Design, Cohesion, Coupling & their classification, User Interface Design, Detailed design,	Choosing Programming Language, Characteristics of Program, Avoiding Dead Codes	Program Metrics: Size Estimation; Complexity metric (McCabe's Cyclomatic Complexity), Halsted Theory, Function Point Analysis.	Impracticality of Testing all Data and Paths, Levels of testing, Functional vs. Structural testing, Static and Dynamic Testing Tools,
JUNE	Regression testing, Mutation Testing, Stress Testing; Validation Vs. verification.	Source Code Translation, Program Restructuring, Data Re-Engineering, Reverse Engineering.	Maintaining Product Integrity, Change Management, Version Control, Configuration accounting,	Reviews, Walkthrough, Inspection, Configuration Audits	Reliability Models (JM, GO, MUSA Markov), Limitations of Reliability Models.

JULY	Revision and Doubts.				
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2022 to JULY 2022)

Name :-SONIKA Department:- Computer Science Class:- MA 2ND Sem Sub:- COMPUTER FUNDAMENTALS

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Overview of Data Processing, History of Computing, Computer Generations , Characteristics of Computer.	Anatomy of Computer Classification of Computers Number Systems and Codes, Introduction, Number Systems. Types of inter-conversion of Number Systems	ASCII and EBCDIC codes. Devices: Concept of Input/output. Types of Input Devices, Test on Topics completed.	Output Devices – Printers, Plotters and Monitors. Classification of Computers and Input Output Devices, Memory and Storage Devices:	Characteristics of memory systems, memory hierarchy, Types of Memory – RAM, ROM, etc Magnetic Disks, Magnetic Tapes,

MAY	<p>Optical Disks; Concept of Cache Memory and Virtual Memory , Software , Operating System Concepts: introduction. Software Types, Language translators, System Utility Software, Test on Topics Completed</p>	<p>Application Software,OS - Characteristics, functions, and its classification. Presentation on Test on Topics covered.</p>	<p>User Interfaces – CUI and GUIs, DOS and Windows operating systems. Assignment Topic: Types of Memory and Operating System, Using Word Processing:</p>	<p>Opening and Closing of documents, Text creation and Manipulation, Handling Multiple Documents, Printing of word document.,. Test on Topics Completed</p>	<p>Moving Around in a Document, Formatting of text, Table handling, Spell check, language setting and thesaurus. Test on Topics Completed</p>
JUNE	<p>Using Spreadsheet tool: Basics of Spreadsheet; Editing of Spread Sheet, Page setups, header and footer, printing of Spreadsheet Basics of Manipulation of cells, Formulas and Functions, Assignment Topic: Basics of Spreadsheet; Formulas and Functions</p>	<p>Data Communication, Transmission Modes, Basics of Computer networks, Types of computer network, Network Topologies. Applications of Computer Networks, Concept of Internet, Application of Internet, WWW,</p>	<p>Web Browsing software, Surfing the Internet, Social Concern: Positive and Negative. Impacts of Computer Technology, Computer Crimes,. Test on Topics Completed. Assignment Topic: Types of computer network, Web-sites and URLs, Search Engine,</p>	<p>PowerPoint, Preparation and Presentation of Slides, Slide Show, Formatting and Clip Arts, Taking printouts of presentation / handouts. Using Electronic mails, Instant Messaging Presentation on Topics covered.</p>	<p>Computer Virus, Types of viruses, its Characteristics, antivirus software , Positive and Negative Impacts of Computer Technology, Computer Crimes,</p>
JULY	<p>Computer Applications. Revision, Doubt Session</p>				

TEACHING PLAN 2021-22 (EVEN SEMESTER)

Name :-DR.RAJNI SHARMA Department:- COMPUTER SCIENCE Class:- MA(Psy)-I Sub:- COMPUTER FUNDAMENTALS

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
MONTH 1				Overview of Data Processing, History of Computing, Computer Generations	Characteristics of Computer, Anatomy of Computer Classification of Computers .
MONTH 2	Introduction, Number Systems. Types of inter-conversion of Number Systems	ASCII and EBCDIC codes. Input and Output Devices: Concept of Input/output. Types of Input Devices, Output Devices – Printers, Plotters and Monitors.	Memory and Storage Devices: Characteristics of Memory systems, Memory hierarchy, Types of Memory – RAM, ROM, etc	Magnetic Disks, Magnetic Tapes, Optical Disks; Concept of Cache Memory and Virtual Memory , Software	Operating System Concepts: introduction. Software Types, Language translators, System Utility Software, TEST
MONTH 3	Application Software, OS - Characteristics, Functions, and its Classification. Interfaces – CUI and GUIs, DOS and Windows operating systems.	Using Word Processing: Opening and Closing of documents, Text creation and Manipulation,	Moving Around in a Document, Formatting of text, Table handling, Spell check, language setting and thesaurus. Handling Multiple Documents, Printing of word document. Manipulation of cells, Formulas and Functions	Using Spreadsheet tool: Basics of Spreadsheet; Editing of Spread Sheet, Page setups, header and footer, printing of Spreadsheet Basics of PowerPoint, Preparation and Presentation of Slides,	Slide Show, Formatting and Clip Arts, Taking printouts of presentation / handouts. Presentation on Topics covered. TEST
MONTH 4	Data Communication, Transmission Modes, Basics of Computer networks, Types of computer network, Network Topologies. Applications of Computer Networks.	Concept of Internet, Application of Internet, WWW, Web-sites and URLs, Search Engine, Using Electronic mails, Instant Messaging	Web Browsing software, Surfing the Internet, Social Concern: Positive and Negative. Impacts of Computer Technology, Computer Crimes,.	Computer Virus, Types of viruses, its Characteristics, antivirus software , Positive and Negative Impacts of Computer Technology, Computer Crimes, Computer Applications.	Revision, Doubt Session

Teacher Signature

TEACHING PLAN 2021-22 (EVEN SEMESTER)

Name :-DR.RAJNI SHARMA Department:- COMPUTER SCIENCE Class:- M.Sc(CS)-II Sub:- INTERNET AND WEB DESIGNING

MONTH	1st Week	2nd Week	3rd Week	4th Week	5th Week
MONTH 1				Internet, Evolution of Internet, Types of Computer Network: LAN, WAN, MAN, Internet Protocol, Internet Services,	WWW, Working of Intranet, Introduction to Intranet, DNS working, Configuring Internet Connection, Internet Connection Concepts, Connecting LAN to Internet.
MONTH 2	Client-Server environment: Single User, Multi User, Server, Workstation, Computer Network; Network Topologies; Network Protocols, E-Mail Concepts.	Configuring E-Mail Program, Sending and Receiving Files through E-Mail, Fighting Spam, Sorting Mail,	E-Mail mailing lists and avoiding E-Mail viruses. Popular web servers, Web Browsers; Basic features of browsers: Bookmarks, Cookies	Progress indicators, customization of browsers, browsing tricks Next generation web browsing, Search Engines	Hypertext Transfer Protocol (HTTP), URL. Internet Tools: Online Chatting, Messaging, and Conferencing Concepts. Usenet newsgroup concepts: Reading usenet newsgroups. TEST
MONTH 3	Instant messaging, Web-Based chat rooms and discussion boards. Streamlining Browsing	Keeping track of Favorite Web Sites, Web Security, Privacy, and Site-Blocking Understanding HTML, XHTML Syntax and Semantic	HTML Elements: Paragraph, Lists, Tables Images, Frames, Forms Linking to other Web Pages: External and Internal linking, E-mail Links	Working with Background colors and Images. Marquee; Text Alignment and Text Formatting , Advanced Layout with Tables	Publishing HTML Pages. HTML, XHTML Syntax and Semantics. TEST
MONTH 4	Cascading Style Sheets: Introduction, Inline, Internal, External CSS, Linking CSS to Web Page. Introduction to JavaScript, Basic Syntax, Variables and Data types	Statements, Operators, Literals, Functions, Objects, Arrays, XML: Relation between XML and HTML,	Goals of XML, Structure and Syntax of XML. Well Formed XML, DTD and its Structure	Tree Structures in data organization, Searching with XPath	Goals of XML, Structure and Syntax of XML Revision, Doubt Session

Teacher
Signature

TEACHING PLAN 2021-22 (EVEN SEMESTER)

Name :-Dr. Ruchika Arora

Department:-Computer Department

Class:- M.Sc (Comp. Sc) 2 year

Sub:-Java Programming

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
MONTH-1				JAVA History, Java features, Java and Internet,Java and World wide Web,Java program structure, Java tokens Java Virtual machine Data types Operators and expressions Decision making and Branching Decision making and Branching	Looping classes and methods, Looping classes and methods Inheritance: using existing class Class inheritance, Choosing Base class Access Attributes Types of Inheritance Types of Inheritance
MONTH-2	Abstract class , Final modifier Doubts and discussion Test on topics covered Polymorphism Types of Polymorphism Types of polymorphism	Packages: understanding packages Defining a package Adding classes from a package to your program Understanding CLASSPATH Revision	Doubts and Discussion Access protection in packages Concept of interface Revision	Exception Handling Types of exceptions Types of exceptions Dealing with exceptions	Dealing with exceptions Exception Objects Doubts and Discussion Test
MONTH-3	Understanding Threads The Main thread Creating a thread Creating Multiple threads Revision	Thread Priorities Synchronization Deadlocks Inter-thread communication Revision Doubts and Discussion	I/O Basic, Byte and character structures I/O classes, Reading console	Applet basics, Applet Architecture, Applet Life Cycle,Revision Simple Applet Display Methods	Request Repainting Using the status window The HTML APPLET tag, Passing parameters to Applets Revision

MONTH-4	Working with AWT controls, AWT Classes Window fundamentals Working with frames Creating a frame window in an Applet Revision	Displaying information within a window Working with graphics Working with color Setting the paint mode Test	Working with fonts Exploring with Text and Graphics Layout managers and Menus Revision	Graphics Layout managers and Menus	Doubts, Revision Test
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

Name :-DR. RUCHIKA ARORA

Department:-COMPUTER SCIENCE

Class:- BCA 4 SEM

Sub:- WEB DESIGNING

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
MONTH-1				Introduction to Internet and World Wide Web; Evolution and History of World Wide Web; Web Servers; Hypertext Transfer Protocol	Overview of TCP/IP and its services; URLs; Searching and Web-Casting Techniques; Search Engines and Search Tools;
MONTH-2	Web Publishing: Hosting your Site Creating a Website and the Markup Languages (HTML, DHTML)	Internet Service Provider; Web terminologies,	Phases of Planning and designing your Web Site; Steps for developing your Site;	Choosing the contents; Home Page; Domain Names, Front page views, Adding pictures, Links,	Backgrounds, Relating Front Page to DHTML.

MONTH-3	Introduction to HTML; Hypertext and HTML;	HTML Document Features; HTML command Tags;	Creating Links; Headers; Text styles; Text Structuring; Text colors and Background; Formatting text; Page layouts	Images; Ordered and Unordered lists; Inserting Graphics; Table Creation and Layouts	Frame Creation and Layouts; Working with Forms and Menus; Working with Radio Buttons; Check Boxes; Text Boxes
MONTH-4	Dynamic HTML, Features of DHTML REVISION	CSSP(cascading style sheet positioning) Revision , Test	JSSS(JavaScript assisted style sheet)	Layers of netscape, The ID attributes ,DHTML events	DOUBTS , REVISION

TEACHING PLAN 2021 -22 (EVEN SEMESTER)

Name :-DR. KALPANA GUPTA

Department:-COMPUTER SCIENCE

Class:- BCA I SEM

Sub:- 'C' PROGRAMMING

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
Month 1	Overview of C: History of C, Importance of C	Elements of C: C character set, identifiers and keywords, Data types, Constants and Variables, Assignment statement, Symbolic constant	Program, printf(), scanf() Functions	Operators : Arithmetic, relational, logical, bitwise, unary, assignment, shorthand assignment operators, conditional operators and increment and decrement operators	Expression: Arithmetic expressions, evaluation of arithmetic expression, type casting and conversion, operator hierarchy & associativity.
Month 2	Decision making & branching: Decision making with IF statement(include examples)	IF-ELSE statement, Nested IF statement, ELSE-IF ladder(include examples)	switch statement, goto statement. For loops(include examples)	while, and do-while loop (include examples)	jumps in loops, break, continue statement, Nested loops.
Month 3	Functions: Standard Mathematical functions, Input/output: Unformatted & formatted I/O function in C	Input functions viz. getch(), getche(), getchar(), gets(),	output functions viz., putchar(), puts()	string manipulation functions and its example.	User defined functions: Introduction/Definition, prototype, Local and global variables, passing parameters, recursion.
Month 4	Arrays: Definition, types, initialization, processing an array, passing arrays to functions	Array of Strings. String constant and variables, Declaration and initialization of string	Input/output of string data, Introduction to pointers. Algorithm development	Storage classes in C: auto, extern, register and static storage class, their scope, storage, & lifetime.	Flowcharting and Development of efficient program in C. Revision, Doubt Session

TEACHING PLAN 2021 -22 (EVEN SEMESTER)

Name :-DR. KALPANA GUPTA

Department:-COMPUTER SCIENCE

Class:- bba 1st

Sub:-Computer Applications in Management

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
Month 1	Introduction to Computers – History, basic anatomy	operating system memory	input/output devices	types of computers, classification of computers	hardware and software. Networking : Introduction, Need, Advantage and disadvantages
Month 2	Network Devices, Topology and network connection	Types of Network wireless networking	Virus And Firewall	Introduction to information technologies, www, search engines, web browsers, ,	Internet Applications in business, chatting and e-mailing
Month 3	computer applications, advantages and limitations, use in offices, education, institutions, healthcare.	IP addressing, web hosting and web publishing	Data, information and Information systems, Component and capabilities of Information system	Types of information system. Management information system, Transaction Processing System	Office Automation System, Decision support System expert systems, executive information systems
Month 4	Multimedia , Hardware and Software requirement of Multimedia	Components, Advantage and Disadvantages of multimedia	applications in business Multimedia applications in marketing	Multimedia applications in advertising	web applications of multimedia

TEACHING PLAN 2021-22 (EVEN SEMESTER)

(April 2022 to July 2022)

Name :-Anu Khanna Department:- Computer Science

Class:- BSC Cs 3rd YEAR

Sub:- Software Eng.,Visual Basic

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
April	Introduction: Software Crisis, Software Processes & Characteristics, Visual & non-visual programming, Procedural, Object-oriented and eventdriven programming languages, The VB environment: Menu bar, Toolbar, Project explorer, Toolbox, Properties window,	Software life cycle models, Waterfall, Prototype, Evolutionary and Spiral Models. Form designer, Form layout, Immediate window.	Software Requirements Analysis & Specifications: Requirement Engineering, Requirement Elicitation Techniques like FAST, QFD, requirements analysis using DFD Visual Development and Event Driven programming.	Data dictionaries & ER Diagrams, Requirements documentation, Nature of SRS, Characteristics & organization of SRS.	TEST AND REVISION
May	Software Project Management Concepts: The Management spectrum, The People The Problem, The Process, The Project. Variables: Declaring variables, Types of variables, Converting variables types, User-defined data types	Software Project Planning: Size Estimation like lines of Code & Function Count, Forcing variable declaration, Scope & lifetime of variables. Constants: Named & intrinsic. Operators: Arithmetic	Cost Estimation Models, COCOMO, Risk Management. Relational & Logical operators. I/O in VB: Various controls for I/O in VB, Message box, Input Box	TEST AND REVISION	PRESENTATION ON Cost Estimation Models.
June	Software Design: Cohesion & Coupling, Classification of Cohesiveness & Coupling, Programming with VB: Procedures: General & event procedures, Subroutines, Functions, Calling procedures, Arguments-	Software Design: Cohesion & Coupling, Classification of Cohesiveness & Coupling,	Function Oriented Design, Object Oriented Design, Software Metrics: Software measurements: What & Why, Token Count, Halstead Software Science Measures. passing mechanisms, Optional arguments,	Design Metrics, Data Structure Metrics Software Implementation: Relationship between design and implementation, Implementation issues and programming support environment, Coding the procedural design, Good coding style.	Test and revision.

			Named arguments, Functions returning custom data types		
July	Software Testing: Testing Process, Design of Test Cases, Types of Testing, Functional Testing, Structural Testing, Adding multiple forms in VB, Hiding & showing forms, Load & unload statements, creating menu, submenu, p	Test Activities, Unit Testing, Integration Testing and System Testing. Activate & deactivate events, Form-load event, menu designing in VB Simple programs in VB.	Debugging Activities. Software Maintenance: Management of Maintenance, Maintenance Process	Reverse Engineering, Software Re-engineering, Configuration Management, Documentation.	REVISION AND DOUBT SESION.

Teacher Signature

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
April	Tree: Header nodes, Threads, Binary search trees, Searching, Insertion and deletion in a Binary search tree,	Insertion and deletion in a Binary search tree,	AVL search trees, Insertion and deletion in AVL search tree, m-way search tree	Insertion and deletion in an m-way search tree, B-trees,.	Insertion and deletion in a B-tree, B+tree, Huffman's algorithm,
May	Graphs: Warshall's algorithm for shortest path, ,	Dijkstra algorithm for shortest path,	Operations on graphs	Topological sorting	Traversal of graph,
June	Sorting: Internal & external sorting,-	Radix sort, Quick sort,	Heap sort, Merge sort, Tournament sort, Searching: Liner search, binary search,custom data types	, merging, Comparison of various sorting and searching algorithms on the basis of their complexity	Test and revision.
July	Files: Physical storage devices and their characteristics, Attributes of a file viz fields, records, Fixed and variable length records, Primiry and secondary keys, Classification of files, File operations,	Comparison of various types of files, File organization: Serial,	Sequential, Indexed-sequential, Random-access/Direct, Multilist, Inverted, file organization. Hashing: Introduction, Hashing functions and Collision resolution methods .	Dout Session	REVISION AND Tets.

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Fundamental of computers: Model of a digital computer, Functioning of a digital computer;	Types of a digital computer; Advantages of computers, Difference between digital computer and analog computer	Difference between digital computer and analog computer ,Applications of computers: Computers in Commerce.	Applications of computers :Marketing, Education and Management.	TEST AND REVISION
MAY	Introduction to Windows: Components of a Application Window	Types of Windows, Windows as an Operating System, Windows explorer, Using Paintbrush, Control Panel, Installing a printer	User interfaces- CUI and GUI; Concept of a Desktop and Taskbar, My Computer, Recycle Bin	My Documents and Internet Explorer icons.	TEST AND ASSIGNMENT
JUNE	MS-Excel: Applications of a Spreadsheet;	HOLI VACATIONS	Advantages of an Spreadsheet; Features of Excel; Rows, Columns, Cell, Menus	Creating worksheet, Formatting, Printing, establishing worksheet links,	Table creating and printing graphs, Macros, Using Built-in-functions..
JULY	System testing: Introduction, Objectives of testing, Test plan, testing techniques/Types of	system tests, Quality ce goals in system life cycle, implementation, Process	implementation, System evaluation, System maintenance and its typ	Classification of forms, requirements of form design. Types of forms, Layout considerations, Form control.	REVISION AND DOUBT SESSION

PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2021 to JULY 2022)

Name :-SUMAN MALIK

Department:- Computer Science

Class:- BCA IST

Sub:- SSAD

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Introduction to system, Definition and characteristics of a system, Elements of system, Types of system.	initial investigation: Introduction, Bases for planning in system analysis, Sources of project requests.	System development life cycle, Role of system analyst, Analyst/user interface, System planning.	Initial investigation, Fact finding, Information gathering, information gathering tools, Fact analysis,	TEST AND REVISION
MAY	Structured analysis, Tools of structured analysis: DFD, Data dictionary, Flow charts, Gantt charts, decision tree, decision table, structured English.	Introduction, Objective, Types, Steps in feasibility analysis, Feasibility report, Oral presentation	Cost and benefit analysis: Identification of costs and benefits, classification of costs and benefits, Methods of	decision table, structured English, Pros and cons of each tool, Feasibility study:	TEST AND ASSIGNMENT
JUNE	System Design: System design objective, Logical and physical design, Design Methodologies, structured design.	HOLI VACATIONS	form design: Input design, Objectives of input design, Output design, Objectives of output design, Form design.	TEST AND PRESENTATION ON DESIGN METHODOLOGIES •	Form-Driven methodology(IP O charts), structured walkthrough.

JULY	System testing: Introduction, Objectives of testing, Test plan, testing techniques/Types of	system tests, Quality assurance goals in system life cycle, System implementation, Process	implementation, System evaluation, System maintenance and its typ	Classification of forms, requirements of form design. Types of forms, Layout considerations, Form control.	REVISION AND DOUBT SESSION
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PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2021 to JULY 2022)

Name :-SUMAN MALIK

Department:- Computer Science

Class:- BCOM(P)

Sub:- Basics of Computer-II

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Fundamental of computers: Model of a digital computer, Functioning of a digital computer;	Types of a digital computer; Advantages of computers, Difference between digital computer and analog computer	Difference between digital computer and analog computer ,Applications of computers: Computers in Commerce.	Applications of computers :Marketing, Education and Management.	TEST AND REVISION
MAY	Introduction to Windows: Components of a Application Window	Types of Windows, Windows as an Operating System, Windows explorer, Using Paintbrush, Control Panel, Installing a printer	User interfaces- CUI and GUI; Concept of a Desktop and Taskbar, My Computer, Recycle Bin	My Documents and Internet Explorer icons.	TEST AND ASSIGNMENT
JUNE	MS-Excel: Applications of a Spreadsheet;	HOLI VACATIONS	Advantages of an Spreadsheet; Features of Excel; Rows, Columns, Cell, Menus	Creating worksheet, Formatting, Printing, establishing worksheet links,	Table creating and printing graphs, Macros, Using Built-in-functions..

JULY	System testing: Introduction, Objectives of testing, Test plan, testing techniques/Types of	system tests, Quality assurance goals in system life cycle, System implementation, Process	implementation, System evaluation, System maintenance and its typ	Classification of forms, requirements of form design. Types of forms, Layout considerations, Form control.	REVISION AND DOUBT SESSION
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TEACHING PLAN 2019-20 (EVEN SEMESTER)

(APRIL 2021-JULY2022)

Name :-SUMAN MALIK Department:-COMPUTER SCIENCE Class:- MA-I(HINDI)

Sub:- COMPUTER FUNDAMENTALS

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Overview of Data Processing, History of Computing, Computer Generations	Characteristics of Computer, Anatomy of Computer Classification of Computers Number Systems and Codes	Introduction, Number Systems. Types of inter-conversion of Number Systems ASCII and EBCDIC codes.	Input and Output Devices: Concept of Input/output. Types of Input Devices, Test on Topics completed.	Output Devices – Printers, Plotters and Monitors. Assignment Topic: Classification of Computers and Input Output Devices
MAY	Memory and Storage Devices: Characteristics of memory systems	memory hierarchy, Types of Memory – RAM, ROM, etc Magnetic Disks, Magnetic Tapes, Optical Disks; Concept of Cache Memory and Virtual Memory , Software	Operating System Concepts: introduction. Software Types, Language translators, System Utility Software, Test on Topics Completed	Application Software,OS - Characteristics, functions, and its classification. Presentation on Topics covered.	User Interfaces – CUI and GUIs, DOS and Windows operating systems. Assignment Topic: Types of Memory and Operating System
JUNE	Using Word Processing: Opening and Closing of documents, Text creation and Manipulation, Test on Topics Completed	Holi Vacations	Moving Around in a Document, Formatting of text, Table handling, Spell check, language setting and thesaurus. Handling Multiple Documents, Printing of word document. Manipulation of cells, Formulas and Functions,. Test on Topics Completed	Using Spreadsheet tool: Basics of Spreadsheet; Editing of Spread Sheet, Page setups, header and footer, printing of Spreadsheet Basics of PowerPoint, Preparation and Presentation of Slides,	Slide Show, Formatting and Clip Arts, Taking printouts of presentation / handouts. Presentation on Topics covered. Assignment Topic: Basics of Spreadsheet; Formulas and Functions

<p style="text-align: center;">JULY</p>	<p>Data Communication, Transmission Modes, Basics of Computer networks, Types of computer network, Network Topologies. Applications of Computer Networks.</p>	<p>Concept of Internet, Application of Internet, WWW, Web-sites and URLs, Search Engine, Using Electronic mails, Instant Messaging</p>	<p>Web Browsing software, Surfing the Internet, Social Concern: Positive and Negative. Impacts of Computer Technology, Computer Crimes,. Test on Topics Completed. Assignment Topic: Types of computer network</p>	<p>Computer Virus, Types of viruses, its Characteristics, antivirus software , Positive and Negative Impacts of Computer Technology, Computer Crimes,</p>	<p>Computer Applications. Revision, Doubt Session</p>
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2021 to JULY 2022)

Name :-SUMAN MALIK

Department:- Computer Science

Class:- BA Eco Hons.2ND YEAR Year

Sub:- COMPUTER APPLICATION IN ECONOMIC ANALYSIS

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Opening, saving and printing documents files, Editing and formatting of documents, inserting page Numbers and footnotes.	Table: Auto Format and Properties.	Introduction to MS Power Point, Preparation of presentations in Power point using design template and Text structure layouts.	Inserting graphs and Diagrams in MS-WORD.	TEST AND REVISION
MAY	Introduction to Microsoft Excel: Creation of worksheets; Data entry, Formatting.	Sorting and Validation; Importing and Exporting of Data Files	Uses of mathematical, financial and statistical function and what if analysis.	Data Analysis: Correlation, Simple and Multiple Regression, One way ANOVA, Creation of diagrams and graphs.	TEST AND ASSIGNMENT
JUNE	Networking of Computer: Intranet and Internet, LAN and WAN.	HOLI VACATIONS	Internet Explorer, Search engines, Emails.	TEST AND PRESENTATION ON LAN, MAN & WAN.	Computer, document and Internet Security, Antivirus-scanning and updates.

JULY	Introduction to SPSS: Creation of data files, assigning names and labels to variables.	Sort Cases, Import/Export of Files, Computing Variable.	Data Analysis: Descriptive statistics, Comparing means.	Simple Correlation Analysis, ANOVA, Simple Regression Analysis, Preparation of Graphs and Diagrams.	REVISION AND DOUBT SESSION
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PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2021 to JULY 2022)

Name :-RADHA Department:-Computer Science Class:-BCOM(P) Sub:-Basics of Computer-II

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Fundamental of computers: Model of a digital computer, Functioning of a digital computer;	Types of a digital computer; Advantages of computers, Difference between digital computer and analog computer	Difference between digital computer and analog computer ,Applications of computers: Computers in Commerce.	Applications of computers :Marketing, Education and Management.	TEST AND REVISION
MAY	Introduction to Windows: Components of a Application Window	Types of Windows, Windows as an Operating System, Windows explorer, Using Paintbrush, Control Panel, Installing a printer	User interfaces- CUI and GUI; Concept of a Desktop and Taskbar, My Computer, Recycle Bin	My Documents and Internet Explorer icons.	TEST AND ASSIGNMENT
JUNE	MS-Excel: Applications of a Spreadsheet;	HOLI VACATIONS	Advantages of an Spreadsheet; Features of Excel; Rows, Columns, Cell, Menus	Creating worksheet, Formatting, Printing, establishing worksheet links,	Table creating and printing graphs, Macros, Using Built-in-functions..

JULY	System testing: Introduction, Objectives of testing, Test plan, testing techniques/Types of	system tests, assurance goals in life cycle, implementation,	implementation, System evaluation, System maintenance and its typ	Classification of forms, requirements of form design. Types of forms, Layout consideration s, Form control.	REVISION AND DOUBT SESSION
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PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2021 to JULY 2022)

Name :-RADHA Department:-Computer Science

Class:-BBA 2ND YEAR

Sub:-DBMS

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Introduction to data base management system – Data versus information,	record, file; data dictionary, database administrator.	functions and responsibilities; file-oriented system versus database system.	file-oriented system versus database system.	TEST AND REVISION
MAY	Database system architecture – Introduction, schemas, sub schemas	data base architecture.	Data mapping, data models, TYPES OF DATABASE SYSTEM.	TEST AND REVISION	PRESENTATIO N ON DATA MODELS.

JUNE	Data base security – Threats and security issues,	HOLI VACATIONS	firewalls and database recovery. distributed data base.	techniques of data base security.	Test and revision.
JULY	Data warehousing and data mining – Emerging data.	internet, database, digital libraries,	multimedia data base, mobile data base, spatial data base.	Threats and security issues, types of database systems.	REVISION AND DOUBT SESION.

PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2021 to JULY 2022)

Name :-RADHA Department:-Computer Science Class:-BSC 2ND YEAR Sub:- 4.1&4.2: DS with C++ & OS

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Data-Structure operations, Algorithm, Complexity, Data structure and its essence, Introduction to Arrays, Operating system functions and	Array operations, Multi-dimensional arrays, sequential allocation, historical evolution of operating	address calculations, sparse arrays, Stacks- Introduction to Stacks Real time, Multiprogramming, Multiprocessing	primitive operations on stacks, representation of stacks as an array. Batch processing, Methodologi	Stack-applications system calls, system programs Assignment & UT 1

	characteristics	systems, types of Operating System		es for implementation of O/S	
MAY	Introduction to queues Process concepts	Operations on queue, circular queue, priority queue, Applications of Queue. Operations on processes, Process states and Process Control Block.	Linked List-introduction and basic operations, Header nodes. CPU Scheduling, Levels of Scheduling	Doubly linked list, circular linked List, Scheduling algorithms, Multiple processor scheduling	Applications of linked list, Representation of linked list as an array, stacks and queues, Deadlock characterization, Deadlock prevention and avoidance
JUNE	Tree structures, Basic terminology, binary trees and binary search trees, implementing binary trees, Tree traversal algorithms Concurrent Processes, Critical section problem, Semaphores, Classical process co-ordination	HOLI VACATIONS	Threaded trees, trees in search algorithms, AVL Trees, Polish notation. Inter-process Communications. Storage Management, memory management of single-user	Expression trees, applications of binary trees. multi-user operating system, partitioning, swapping	paging and segmentation, Thrashing

	problems and their solutions				
JULY	Graph data structure and their applications. Graph traversals, shortest paths, spanning trees and related algorithms	Internal and external sorting. Various sorting algorithms, Time and Space complexity of algorithms. File management, File Systems	Functions of the system, File access methods, allocation methods. Applications of Sorting Contiguous, allocation, linked, indexed allocation.	Directory Systems . Searching in computer science. Structured Organizations, directory and file protection mechanisms	Revision test

TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2022 to JULY 2022)

Name :-Richa Bansal

Department:- Computer Science

Class:- BCA 3rd

Sub:- Artificial Intelligence

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Overview of A.I	Problems, problem space and search:	Problems, problem space and search:	Heuristic search techniques :	Heuristic search techniques :
MAY	Knowledge Representation	Knowledge Representation	Using Predicate Logic :	Using Predicate Logic	Using Predicate Logic :
JUNE	Natural language processing	Natural language processing	Natural language processing	Learning	Learning

JULY	Expert System: Introduction	Representing using domain specific knowledge,	Representing using domain specific knowledge,	Expert system shells	Expert system shells
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2022 to JULY 2022)

Name :-RICHAN BANSAL

Department:- Computer Science

Class:- BCA II Sub:- OOPS

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Object Oriented Programming Concepts : Procedural Language and Object Oriented approach, and	Characteristics of OOP, user defined types, polymorphism	Getting started with C++: syntax, data types, variables	., string, function, namespace and exception, operators	encapsulation, flow control, recursion, array and pointer, structure .

MAY	Abstracting Mechanism: classes, private and public,	Constructor and Destructor , member function	; Memory Management: new, delete, object copying,	static members, references copy constructor,	, assignment operator, this input/output
JUNE	Inheritance and Derived Class and Base Class , Abstract Class	Polymorphism:	Different types of Inheritance,	Overriding member function	Ambiguity in Multiple inheritance , Virtual function, Friend function, Static function
JULY	Exception Handling: Exception and derived class, function exception declarationTemplate classes	unexpected exception, exception when handling exception,	, resource capture and release. Template and Standard Template Library:	declaration, template functions, namespace,	, string, iterators, hashes, iostreams and other types.

TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2022 to JULY 2022)

Name :-RICHA BANSAL

Department:-COMPUTER SCIENCE

Class:- M.Sc(CS)-II

Sub:- DATA WAREHOUSE AND DATA MINING

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Overview of data Warehouse, Need & Definition Of Data Warehouse, Goals of data Warehouse, Review of Topic Done	Challenges faced during Warehouse,Data Warehouse Construction,,Advantages of Data Warehouse, Types of Data Warehouse, , Test	Data Mart, Virtual Warehouse, Enterprise Warehouse Components of Warehouse: Fact data, Dimension data, Fact Table,Dimension Table,Revision	Designing Fact TablesPhases: Extract, Transform and load process,Warehouse Schema for multidimensional data	Star Schema, Snowflake Schema,Galaxy Schema Doubt Class Assignment : Types of Schemas
MAY	Data warehouse and OLAP technology, Difference between OLTP and OLAP	Strengths of OLAP, Applications of OLAP , Multidimensional data models: Data Cubes, Review of Topic Done	Data Cuboids, Lattice, OLAP operations, Advantages, Types: Roll up, Drill down,Pivot, Slice , Dice operations, ,Test	Applications, OLAP Server: Need, Types: ROLAP , MOLAP,HOLAP , Features, Data warehouse	Implementation, Introduction to Efficient Computation of data cubes Assignment: Difference between OLTP and OLAP,Strengths of OLAP
JUNE	Data preprocessing: NeedIntegral steps of preprocessing, Data integration, Data transformation, Data reduction, Discretization, Test	Concept Hierarchy Generation,Data mining primitives, Types of Data Mining Systems, Data generalization,	Single dimensional Boolean association rules from Transactional Database Systems	Multi level association rules, Multidimensional association rules from relational DBS	Multidimensional association rules from relational DWS Assignment: Types of Data Mining Systems, Datageneralization

JULY	Basic Classification. Prediction Model, Difference , Classification Algorithms, Presentation on Topics Covered	Classification Algorithms: Decision tree induction,Back propagation,Prediction Algorithms,Regression approach, Test	Linear & Non Linear regression, Cluster analysisPurpose, Types:Partitioning and Hierarchical methods, Assignment: Difference between Classification &Prediction	Density based methods, Applications of Data Mining: Web mining,	Temporal and Spatial data mining. Revision and Doubt Session
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

(April 2022 to July 2022)

Name :-Ritu Sharma Department:- Computer Science

Class:- BBA IIIRD YEAR

Sub:- SAD

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Introduction to analysis and design: - SDLC	Case tools for analyst, role of system analyst, doubt session,revision	ER data models,doubt session	feasibility study – economic, technical, operational	Test,Revision, doubt session
MAY	Design of Application:- DFDs, form design	screen design, report design,doubt session	structure chart, data base definition	equipment specification and selection	personnel estimates
JUNE	Implementation:- data dictionary	I-O , design,doubt session	decision tables decision trees	logical design to physical implementation	Test,Revision, doubt session

JULY	Introduction to distributed data processing and real time system	evaluating distributing system,revision,doubt session	designing distributed data base,	event based real time analysis tools.	State transition diagrams ,Revision and doubt session
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2022 to JULY 2022)

Name :-RITU SHARMA Department:-Computer Science

Class: BCA^{3rd} year

Sub:- 309: Introduction to .NET

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	The Framework of .Net: Building blocks of .Net Platform (the CLR, CTS and CLS)	Features of .Net, Deploying the .Net Runtime, Architecture of .Net platform	Introduction to namespaces & type distinction	.Types & Object in .Net, the evolution of Web development .	Assignment,UT1
MAY	Class Libraries in .Net, Introduction to Assemblies & Manifest in .Net	Metadata & attributes . Introduction to C#: Characteristics of C#,	Characteristics of C#, Data types: Value types, reference types, default value	Constants, variables, scope of variables, boxing and unboxing.	Assignment,UT2

JUNE	Operators and expressions: Arithmetic, relational,	logical, bitwise, special operators,	evolution of expressions, operator precedence & associativity, Control	Constructs in C#: Decision making, loops, Classes & methods: Class, methods, constructors, destructors,	. Overloading of operators & functions. Revision & test
JULY	Inheritance & polymorphism: visibility control, overriding,	Abstract class & methods, sealed classes & methods, interfaces.	Advanced features of C#: Exception handling & error handling,	Automatic memory management, Input and output (Directories, Files, and streams).	Revision & test

TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2022 to JULY 2022)

Name :-RITU SHARMA Department:- Computer Science

Class:- BCA IST YR

Sub:- LOC-II

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Sequential Logic: Characteristics, Flip-Flops, Clocked RS,.	, T type and MasterSlave flip- flops. State table	state diagram and state equations	Flip-flop excitation tables	D type, JK Test,Revision, doubt session

<p>MAY</p>	<p>Sequential Circuits: Designing registers – Serial Input Serial Output (SISO),</p>	<p>Serial Input Parallel Output (SIPO and</p>	<p>shif Data Conversion using Value Of () Methods , String Buffer Class and Methods.t registers. Designing counters – Asynchronous Synchronous Binary Counters,</p>	<p>Modulo-N Counters and Up-Down Counters</p>	<p>TEST AND ASSIGNMENT</p>
<p>JUNE</p>	<p>Memory & I/O Devices: Memory Parameters, , MagnetC</p>	<p>Optical Storage devices</p>	<p>Semiconductor RAM, ROM</p>	<p>, Flash memory, I/O Devices and their controllers.</p>	<p>TEST AND DOUBT SESSION</p>
<p>JULY</p>	<p>Instruction Design & I/O Organization: Machine instruction,.</p>	<p>Instruction cycle, Instruction Format and Addressing Modes</p>	<p>,. I/O Interface, Interrupt structure</p>	<p>Program- controlled, Interrupt- controlled</p>	<p>Instruction set selection, & DMA transfer, I/O Channels, IOP</p>

TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2022 to JULY 2022)

Name :-NIDHI SHARMA

Department:- Computer Science

Class:-BCA 3RD

Sub:- E-Commerce

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Electronic Commerce: Overview of Electronic Commerce, Scope of Electronic Commerce	Traditional Commerce vs. Electronic Commerce, Impact of E-Commerce, Electronic Markets, Internet Commerce	e-commerce in perspective, Application of E Commerce in Direct Marketing and Selling	Obstacles in adopting E-Commerce Applications; Future of ECommerce.	TEST AND ASSIGNMENT
MAY	Value Chains in electronic Commerce, Supply chain, Porter's value chain Model Inter Organizational value chains, Strategic Business unit chains,	Industry value chains. Security Threats to E-commerce: Security Overview, Computer Security Classification, Copyright and Intellectual Property	, security Policy and Integrated Security, Intellectual Property Threats, electronic Commerce Threats, Clients Threats, Communication Channel Threats, server Threats.	TEST AND ASSIGNMENT	
JUNE	Implementing security for E-Commerce: Protecting E-Commerce	Assets, Protecting Intellectual Property, Protecting Client Computers,	Protecting E-commerce Channels, Insuring Transaction Integrity, Protecting the Commerce Server	Electronic Payment System: Electronic Cash, Electronic Wallets, Smart Card, Credit and Change Card.	TEST AND DOUBT SESSION

JULY	Business to Business E-Commerce: Inter-organizational Transitions, Credit Transaction Trade Cycle, a variety of transactions	Electronic Data Interchange (EDI): Introduction to EDI, Benefits of EDI, EDI Technology	EDI standards, EDI Communication, EDI Implementation, EDI agreement, EDI security	Revision of all units	TEST AND DOUBT SESSION
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2022 to JULY 2022)

Name :-NIDHI SHARMA Department:- Computer Science

Class:- BBA IST YR Sub:- Introduction to Computers

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Introduction to Computers – History, basic anatomy,	operating system, memory, input/output devices	PRIMARY MEMORY CACHE MEMORY AND ITS TYPES.	Batch processing and multiprocessing and multi sharing operating system.	Test, Revision, doubt session
MAY	Networking – Advantage, types, devices AND NETWORK TOPOLOGIES.	network connection, wireless networking; virus and	Types of computer network LAN, MAN , WAN.	TEST AND ASSIGNMENT	SHARING OF DATA AMONG DIFFERENT RESOURCES generations of computer and types of computer system.

JUNE	Computer applications using internet, chatting and e-mailing;	wireless networking; virus	computer applications, advantages and limitations, use in offices, education, HEALTHCARE AND MEDICINES.	USES OF INTERNET APPLICATIONS ADVANTAGE AND DISADVANTAGES.	TEST AND PRESENTATION..
JULY	MULTIMEDIA AND ITS REQUIREMENTS.	HARDWARE AND SOFTWARE COMPONENTS OF MULTIMEDIA	WEB APPLICATIONS OF MULTIMEDIA AND ITS ADVANTAGES AND DISADVANTAGES.	PRESENTATION ON MULTIMEDIA.	REVISION AND DOUBT SESSION.

TEACHING PLAN 2021-22 (EVEN SEMESTER)

(APRIL 2022 to JULY 2022)

Name :-NIDHI SHARMA Department:- Computer Science

Class:- bsc cs 1st Sub:- Programming in C AND SAD

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
APRIL	Basic concepts of programming, Introduction to analysis and design: - SDLC	techniques of problem solving, algorithm designing and flowcharting Case tools for analyst, role of system analyst, doubt session,revision	concept of structured programming-Top-Down design, Development of efficient program	Program correctness; Debugging and testing of programs ER data models,doubt session	Algorithm for searching, sorting(Insertion, Exchange)

<p>MAY</p>	<p>Design of Application:- DFDs, form design</p>	<p>Data types: declaration and definition, screen design, report design,doubt session</p>	<p>Operators: Arithmetic, relational, logical, bitwise, unary, assignment and</p>	<p>input/output statements structure chart, data base definition</p>	<p>Arithmetic Expression, Evaluation of Arithmetic Expression, Type-casting and Conversion.</p>
<p>JUNE</p>	<p>Decision making & branching Implementation:- data dictionary</p>	<p>conditional operators and their hierarchy & associativity</p>	<p>Decision making & looping logical design to physical implementation</p>	<p>Jumps in loop, break, continue. personnel estimates, I-O design,doubt session</p>	<p>Functions: Definition, prototype, passing parameters, Recursion. decision tables decision trees</p>
<p>JULY</p>	<p>Pointers Introduction to distributed data processing and real time system</p>	<p>Arrays evaluating distributing system,revision,doubt session</p>	<p>Strings designing distributed data base,</p>	<p>Structures and unions State transition diagrams ,Revision and doubt session</p>	<p>File handling event based real time analysis tools.</p>

TEACHING PLAN 2021-22 (EVEN SEMESTER)

(April 2022 to July 2022)

Name :-Surender Singh

Department:- Computer Science

Class:- BCA IST

Sub:- SAD

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
April	Introduction to system, Definition and characteristics of a system, Elements of system, Types of system.	initial investigation: Introduction, Bases for planning in system analysis, Sources of project requests.	System development life cycle, Role of system analyst, Analyst/user interface, System planning.	Initial investigation, Fact finding, Information gathering, information gathering tools, Fact analysis,	TEST AND REVISION
May	Structured analysis, Tools of structured analysis: DFD, Data dictionary, Flow charts, Gantt charts, decision tree, decision table, structured English.	Introduction, Objective, Types, Steps in feasibility analysis, Feasibility report, Oral presentation	Cost and benefit analysis: Identification of costs and benefits, classification of costs and benefits, Methods of	decision table, structured English, Pros and cons of each tool, Feasibility study:	TEST AND ASSIGNMENT
June	System Design: System design objective, Logical and physical design, Design Methodologies, structured design.	Design Methodologies, structured design. Doubt Session	form design: Input design, Objectives of input design, Output design, Objectives of output design, Form design.	TEST AND PRESENTATION ON DESIGN METHODOLOGIES.	Form-Driven methodology(IPO charts), structured walkthrough.

July	System testing: Introduction, Objectives of testing, Test plan, testing techniques/Types of	system tests, Quality assurance goals in system life cycle, System implementation, Process	implementation, System evaluation, System maintenance and its typ	Classification of forms, requirements of form design. Types of forms, Layout considerations, Form control.	REVISION AND DOUBT SESSION
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

(April 2022 to July 2022)

Name :-Surender Singh

Department:- Computer Science

Class:- Bsc CS1st

Sub:- SAD

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
April	Introduction to analysis and design: - SDLC	Case tools for analyst, role of system analyst, doubt session,revision	ER data models,doubt session	feasibility study – economic, technical, operational	Test,Revision, doubt session
May	Design of Application:- DFDs, form design	screen design, report design,doubt session	structure chart, data base definition	equipment specification and selection	personnel extimates, I-O design,doubt session
June	Implementation:- data dictionary	Decision Tables	Decision Trees	logical design to physical implementation	Test,Revision, doubt session

July	Introduction to distributed data processing and real time system	evaluating distributing system,revision,doubt session	designing distributed data base,	event based real time analysis tools.	State transition diagrams ,Revision and doubt session
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

(April 2022 to July 2022)

Name :-Surender Singh

Department:- Computer Science

Class:- bsc cs 1st Sub:- Programming in C

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
April	Basic concepts of programming	techniques of problem solving, algorithm designing and flowcharting	concept of structured programming-Top-Down design, Development of efficient program	Program correctness; Debugging and testing of programs	Algorithm for searching, sorting(Insertion, Exchange)
May	Overview of C.	Data types: declaration and definition	Operators: Arithmetic, relational, logical, bitwise, unary, assignment and conditional operators and their hierarchy & associativity	input/output statements	Arithmetic Expression, Evaluation of Arithmetic Expression, Type-casting and Conversion.
June	Decision making & branching	Decision making & branching	Decision making & looping	Jumps in loop, break, continue.	Functions: Definition, prototype, passing parameters, Recursion.

July	Pointers	Arrays	Strings	Structures and unions	File handling
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TEACHING PLAN 2021-22 (EVEN SEMESTER)

(April 2022 to July 2022)

Name :-Surrender Singh

Department:- Computer Science

Class:- BCA 2ND YEAR

Sub:- Software Eng.

Month	1st Week	2nd Week	3rd Week	4th Week	5th Week
April	Introduction: Software Crisis, Software Processes & Characteristics,	Software life cycle models, Waterfall, Prototype, Evolutionary and Spiral Models.	Software Requirements Analysis & Specifications: Requirement Engineering, Requirement Elicitation Techniques like FAST, QFD, requirements analysis using DFD	Data dictionaries & ER Diagrams, Requirements documentation, Nature of SRS, Characteristics & organization of SRS.	TEST AND REVISION
May	Software Project Management Concepts: The Management spectrum, The People The Problem, The Process, The Project.	Software Project Planning: Size Estimation like lines of Code & Function Count,	Cost Estimation Models, COCOMO, Risk Management.	TEST AND REVISION	PRESENTATION ON Cost Estimation Models.
June	Software Design: Cohesion & Coupling, Classification of Cohesiveness & Coupling,	Software Design: Cohesion & Coupling, Classification of Cohesiveness & Coupling,	Function Oriented Design, Object Oriented Design, Software Metrics: Software measurements: What & Why, Token Count, Halstead Software Science Measures.	Design Metrics, Data Structure Metrics Software Implementation: Relationship between design and implementation, Implementation issues and programming support environment, Coding the procedural design, Good coding style.	Test and revision.

<p style="text-align: center;">July</p>	<p>Software Testing: Testing Process, Design of Test Cases, Types of Testing, Functional Testing, Structural Testing,</p>	<p>Test Activities, Unit Testing, Integration Testing and System Testing.</p>	<p>Debugging Activities. Software Maintenance: Management of Maintenance, Maintenance Process</p>	<p>Reverse Engineering, Software Re-engineering, Configuration Management, Documentation.</p>	<p style="text-align: center;">REVISION AND DOUBT SESION.</p>
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Teacher Signature