

LESSON PLAN

CLASS: - B.Sc. (CS)

SEMESTER: - 6th

Name of Asst/Associate Prof: - **Manoj Kumar**

Subject/Paper: - **Paper-6.2: Software Engineering**

S.No.	Week Days	Syllabus
Unit-1	01/01/2024- 15/01/2024	Software and software engineering: Software characteristics, Software Processes, software crisis.
	16/01/2024- 30/01/2024	Software life cycle models, Waterfall, Prototype, Evolutionary and Spiral Models, software Engineering paradigms, goals and principles of software engineering. Unit test
Unit-2	01/02/2024- 15/02/2024	Software requirement analysis – Structured analysis, object-oriented analysis and data modeling, software requirement specification, validation.
	16/02/2024- 28/02/2024	Software requirements Analysis and Specifications: Requirement engineering, requirements analysis using DFD, Data Dictionaries and E-R Diagram. requirement documentation, nature of SRS, Characteristics and organization of SRS. Unit Test
Unit-3	01/03/2024- 15/03/2024	Software project management: Planning a software project, Software cost estimation, project scheduling, personnel planning, team structure
	16/03/2024- 31/03/2024	Software configuration management, software quality and quality assurance, project monitoring, risk management. Unit Test
Unit-4	01/04/2024- 15/04/2024	Design and implementation of software- Software design fundamentals, software design principles, Cohesion and Coupling, Classification of Cohesion and Coupling. Unit test.
	16/04/2024- 30/04/2024	Function oriented design, object-oriented Design, design verification, monitoring and control. Unit Test. Course Revision and case studies.

HOD

LESSON PLAN

CLASS: - B.Sc. (CS)

SEMESTER: - 6th

Name of Asst/Associate Prof: - **Manoj Kumar**

Subject/Paper: - **Paper-6.1: Visual Basic Programming**

S.No.	Week Days	Syllabus
Unit-1	01/01/2024- 15/01/2024	Introduction to VB: Visual & Non-visual programming, Procedural, Object-oriented and event-driven programming languages, The VB environment. Menu bar, Toolbar, Project explorer, Toolbox.
	16/01/2024- 30/01/2024	Properties window, Form designer, Form layout, Immediate window. Event driven programming.
Unit-2	01/02/2024- 15/02/2024	Basics of Programming: Variables: Declaration, Types of variables, Converting variables types, Userdefined data types, Scope & lifetime of variables. Constants: Named & intrinsic. Operators:
	16/02/2024- 28/02/2024	Arithmetic, Relational & Logical operators. I/O in VB: Various controls for I/O in VB, Message box, Input Box, Print statement.
Unit-3	01/03/2024- 15/03/2024	Programming with VB: Decisions and conditions: If statement, If-then-else, Select-case. Looping statements: Do-loops, For-next, While-wend, Exit statement. Nested control structures. Arrays:
	16/03/2024- 31/03/2024	Declaring and using arrays, one-dimensional and multi-dimensional arrays, Static & dynamic arrays, Arrays of array.
Unit-4	01/04/2024- 15/04/2024	Programming with VB: Procedures: General & event procedures, Subroutines, Functions, Calling procedures, Arguments- passing mechanisms, Optional arguments, Named arguments, Functions returning custom data types.
	16/04/2024- 30/04/2024	Working with forms: Adding multiple forms in VB, Hiding & showing forms, Load & unload statements, Activate & deactivate events, Form-load event, menu designing in VB, Database Programming using DAO & ADO, Simple Active X controls.

HOD

S. Kumar

Manoj Kumar

LESSON PLAN

CLASS - BCA

SEMESTER: 4th

Name of Asst/Associate Prof: - Manoj Kumar

Subject/Paper: - BCA-207 Software Engineering

S No.	Week Days	Syllabus
Unit-1	01/01/2024- 15/01/2024	Software engineering definition and paradigms. A generic view of Software Engineering. Requirements analysis. Statement of system scope, isolation of top level processes and entities and their allocation to physical elements. refinement and review.
	16/01/2024- 30/01/2024	Analyzing a problem, creating a software specification document. review for correctness, Consistency and completeness. Unit Test
Unit-2	01/02/2024- 15/02/2024	Designing software solutions : Refining the software specifications : Application of fundamental Design concept for data. Unit Test
	16/02/2024- 28/02/2024	architectural and procedural designs using software blue print methodology and object oriented design paradigm; Creating a design document Review of conformance to software requirements and quality. Unit Test
Unit-3	01/03/2024- 15/03/2024	Software Implementation : Relationship between design and implementation; Implementation issues and programming support environment; Coding the procedural design; Good coding style, and review of correctness and readability. Case study.
	16/03/2024- 31/03/2024	Software testing : Role of testing and its relationship to quality assurance; Nature and limitation of software testing, Software testing methods. Unit Test
Unit-4	01/04/2024- 15/04/2024	Software maintenance : Maintenance as part of software evaluation, reason for maintenance, types of maintenance (Perfective, adoptive, corrective), designing for maintainability, techniques for maintenance, Configuration management. Case study
	16/04/2024- 30/04/2024	Comprehensive examples using available software platform/case tools. Unit Test and syllabus revision.

MOD



Summary of Lesson Plan

Name of College: GOVT. PG NEHRU COLLEGE, JHAJJAR

ACADEMIC SESSION: 2023-2024

For January 2024– April 2024

S. N.	Name of Assistant/ Associate Professor	SUBJECT/ CLASS/ SEMESTER	TOPIC/ Chapters to be covered
1	Pradeep Jangra	BBA 2nd Sem COMPUTER APPLICATIONS IN MANAGEMENT PAPER CODE: BBAN-204	January 2024 UNIT-I Introduction to Computers – History, basic anatomy, operating system, memory, input/output devices; types of computers, classification of computers; hardware and software. Networking – Advantage, types, devices and network connection, wireless networking; virus and firewalls. Class Test February 2024 UNIT-II Introduction to information technologies; www, search engines, web browsers, IP addressing, web hosting and web publishing, Internet applications in business, chatting and e-mailing; computer applications, advantages and limitations, use in offices, education, institutions, healthcare. Class Test March 2024 UNIT-III Data, information and types; Information systems, types – MIS, TPS, OAS, DSS, expert systems, executive information systems. Class Test April 2024 UNIT-IV Multimedia applications in business; marketing and advertising; web applications of multimedia. Class Test & Course Revision.



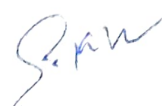
Summary of Lesson Plan

Name of College: GOVT. PG NEHRU COLLEGE, JHAJJAR

ACADEMIC SESSION: 2023-2024

For January 2024– April 2024

S. N.	Name of Assistant/ Associate Professor	SUBJECT/ CLASS/ SEMESTER	TOPIC/ Chapters to be covered
1	Pradep Jangra	BBA 4th Sem DATA BASE MANAGEMENT SYSTEM PAPER CODE: BBAN-405	January 2024 UNIT-I Introduction to data base management system – Data versus information, record, file; data dictionary, database administrator, functions and responsibilities; file-oriented system versus database system. Class Test February 2024 UNIT-II Database system architecture – Introduction, schemas, sub schemas and instances; data base architecture, data independence, mapping, data models, types of database systems. Class Test March 2024 UNIT-III Data base security – Threats and security issues, firewalls and database recovery; techniques of data base security; distributed data base. Class Test April 2024 UNIT-IV Data warehousing and data mining – Emerging data base technologies, internet, database, digital libraries, multimedia data base, mobile data base, spatial data base. Class Test & Course Revision.



Summary of Lesson Plan

Name of College: GOVT. P. G. NEHRU COLLEGE, JHAJJAR

ACADEMIC SESSION: 2022-23 For the month of January 2023 – April 2023

Sr. No.	Name	Subject / Semester	Topic to be covered
1	RAJESH KUMAR	BCA -1sem LOC	<p>January 2023 Sequential Logic: Characteristics, Flip-Flops, Clocked RS, D type, JK, T type and Master-Slave flip-flops. State table, state diagram and state equations. Flip-flop excitation tables</p> <p>February 2023 Sequential Circuits: Designing registers – Serial Input Serial Output (SISO), Serial Input Parallel Output (SIPO), Parallel Input Serial Output (PISO), Parallel Input Parallel Output (PIPO) and shift registers. Designing counters – Asynchronous and Synchronous Binary Counters, Modulo-N Counters and Up-Down Counters.</p> <p>March 2023 Memory & I/O Devices: Memory Parameters, Semiconductor RAM, ROM, Magnetic and Optical Storage devices, Flash memory, I/O Devices and their controllers.</p> <p>April 2023 Instruction Design & I/O Organization: Machine instruction, Instruction set selection, Instruction cycle, Instruction Format and Addressing Modes. I/O Interface, Interrupt structure, Program-controlled, Interrupt controlled & DMA transfer, I/O Channels, IOP.</p>

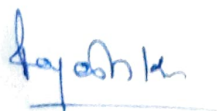


Summary of Lesson Plan

Name of College: GOVT. P. G. NEHRU COLLEGE, JHAJJAR

ACADEMIC SESSION: 2022-23 For the month of January 2023 – April 2023

Sr. No.	Name	Subject / Semester	Topic to be covered
1	RAJESH KUMAR	BCA 4 sem Data structures 2	<p>January 2023</p> <p>Tree: Header nodes, Threads, Binary search trees, Searching, Insertion and deletion in a Binary search tree, AVL search trees, Insertion and deletion in AVL search tree, m-way search tree, Searching, Insertion and deletion in an m-way search tree, B-trees, Searching, Insertion and deletion in a B-tree, B+tree, Huffman's algorithm, General trees.</p> <p>February 2023</p> <p>Graphs: Warshall's algorithm for shortest path, Dijkstra algorithm for shortest path, Operations on graphs, Traversal of graph, Topological sorting.</p> <p>March 2023</p> <p>Sorting: Internal & external sorting, Radix sort, Quick sort, Heap sort, Merge sort, Tournament sort, Searching: Linear search, binary search, merging, Comparison of various sorting and searching algorithms on the basis of their complexity.</p> <p>April 2023</p> <p>Files: Physical storage devices and their characteristics, Attributes of a file viz fields, records, Fixed and variable length records, Primary and secondary keys, Classification of files, File operations, Comparison of various types of files, File organization: Serial, Sequential, Indexed-sequential, Random-access/Direct, Inverted, Multilist file organization. Hashing: Introduction, Hashing functions and Collision resolution methods .</p>



Summary of Lesson Plan

Name of College: GOVT. P. G. NEHRU COLLEGE, JHAJJAR

ACADEMIC SESSION: 2022-23 For the month of January 2023 – April 2023

Sr. No.	Name	Subject/ Semester	Topic to be covered
1	RAJESH KUMAR	BSC CS -04 Sem 4. Data structures with c and Operating system	<p>January 2023</p> <p>Data-Structure: Data-Structure operations, Algorithm, Complexity, Data structure and its essence, Introduction to Arrays, Array operations, Multi-dimensional arrays, sequential allocation, address calculations, sparse arrays, Stacks-Introduction to Stacks, primitive operations on stacks, representation of stacks as an array and stack-applications. Unit-II Queues:- Introduction to queues, operations on queue, circular queue, priority queue, Applications of queue. Linked List-introduction and basic operations, Header nodes, doubly linked list, circular linked list, Applications of linked list, Representation of linked list as an array, stacks and queues</p> <p>February 2023</p> <p>Tree structures: Basic terminology, binary trees and binary search trees, implementing binary trees, Tree traversal algorithms, threaded trees, trees in search algorithms, AVL Trees, Polish notation and expression trees, applications of binary trees. Unit-IV Graph data structure and their applications. Graph traversals, shortest paths, spanning trees and related algorithms. Sorting: Internal and external sorting. Various sorting algorithms, Time and Space complexity of algorithms. Searching techniques. Applications of Sorting and Searching in computer science</p> <p>March 2023</p> <p>Introductory Concepts: Operating system functions and characteristics, historical evolution of operating systems, types of Operating System: Real time, Multiprogramming, Multiprocessing, Batch processing, Methodologies for implementation of O/S service system calls, system programs. UNIT – II Process management: Process concepts, operations on processes, Process states and Process Control Block. CPU Scheduling: Scheduling criteria, Levels of Scheduling, Scheduling algorithms, Multiple processor scheduling. Deadlocks: Deadlock characterization, Deadlock prevention and avoidance</p> <p>April 2023</p> <p>Concurrent Processes: Critical section problem, Semaphores, Classical process co-ordination problems and their solutions, Inter-process Communications. Storage Management: memory management of single-user and multi-user operating system, partitioning, swapping, paging and segmentation, Thrashing. UNIT – IV File management: File Systems: Functions of the system, File access methods, allocation methods: Contiguous, allocation, linked, indexed allocation</p>

Rajesh Kumar

Summary of Lesson Plan

Name of College: GOVT. PG NEHRU COLLEGE, JHAJJAR

ACADEMIC SESSION: 2023-2024

For the month of **January 2024 – April 2024**

S. N.	Name of Assistant/ Associate Professor	SUBJECT/ CLASS/ SEMESTER	TOPIC/ Chapters to be covered
1.	Saurabh Jain	BCA.4th Sem Web Designing (BCA-206)	<p>January: Introduction to Internet and World Wide Web; Evolution and History of World Wide Web; Basic features; Web Browsers; Web Servers; Hypertext Transfer Protocol, Overview of TCP/IP and its services; URL.s; Searching and Web-Casting Techniques; Search Engines and Search Tools;. Assignment 1 and Class Test.</p> <p>February: Web Publishing; Hosting your Site; 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. Creating a Website and the Markup Languages (HTML, DHTML); Assignment 2.</p> <p>March: Web Development: 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 layoutsClass Test.</p> <p>November: 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; DHTML: Dynamic HTML, Features of DHTML, CSSP(cascading style sheet positioning) and JSSS(JavaScript assisted style sheet), Layers of netscape, The ID attributes, DHTML events.. Class Test and Discussion.</p>

Signature

HOD

Summary of Lesson Plan

Name of College: GOVT. PG NEHRU COLLEGE, BHAJJAR

ACADEMIC SESSION: 2023-2024

For the month of **January 2024 – April 2024**

S. N.	Name of Assistant/ Associate Professor	SUBJECT/ CLASS/ SEMESTER	TOPIC/ Chapters to be covered
1.	Saurabh Jain	M.sc CS, 2nd Sem Computer Networks (16MCS22C4)	<p>January: Introduction to Computer Network: Types of Networks, Network Topologies, OSI and TCP/IP Reference Models; Comparison of Models. Data Communications Concepts: Digital Vs. Analog communication; Parallel and Serial Communication; Synchronous, Asynchronous and Isochronous Communication; Communication modes: simplex, half duplex, full duplex; Multiplexing; Transmission media: Wired- Twisted pair, Coaxial cable, Optical Fiber, Wireless transmission: Terrestrial, Microwave, Satellite, Infra red. Assignment 1 and Class Test.</p> <p>February: 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 2.</p> <p>March: High-Speed LAN: Standard Ethernet, Fast Ethernet, Gigabit Ethernet, 10G; Wireless LANs: IEEE 802.11, Bluetooth. Network Layer: IP Addressing and Routing, Network Layer Protocols: IPv4 (Header Format and Services), ARP, ICMP (Error Reporting and Query message); IPv6 (Header Format and Addressing). Test.</p> <p>November: 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), Public Key Cryptography (RSA); Firewall. Class Test and Discussion.</p>

Signature



HOD

LESSON PLAN

Name: Sh. Vikas Subag

Subject/Paper: Software Engineering

Class: MSc CS 1st Year

Semester: 2nd Semester

S.No Unit-1	Week Days 01/01/2024 15/01/2024	Syllabus 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, SP-FCMM
	16/01/2024- 29/01/2024	Requirement Analysis: Structured Analysis, Behavioral & non-behavioral requirements, Software requirement specification, components & characteristics, Function point metric.
Unit-2	30/01/2024- 15/02/2024	Software Project Planning: Cost estimation, static, Single & multivariate models, COCOMO model, Param Resource Allocation Model, Risk management, project scheduling, personnel planning, team structure, Software configuration management, quality assurance, project monitoring, Empirical.
	16/02/2024- 30/02/2024	Software Design: Fundamentals, problem partitioning & abstraction, design methodology, Function Oriented Design, Cohesion, Coupling & their classification, User Interface Design, Detailed design, Information flow metric.
Unit-3	1/03/2024 – 15/03/2024	Software Design: Fundamentals, problem partitioning & abstraction, design methodology, Function Oriented Design, Cohesion, Coupling & their classification, User Interface Design, Detailed design, Information flow metric. Coding: Choosing Programming Language, Characteristics of Program, Avoiding Dead Codes, and Program Metrics; Size Estimation; Complexity metric (McCabe's Cyclometric Complexity), Halstead Theory, Function Point Analysis.
	16/03/2024- 31/03/2024	Software Testing: Impracticality of Testing all Data and Paths, Levels of testing, Functional vs. Structural testing, Static and Dynamic Testing Tools, Regression testing, Mutation Testing, Stress Testing, Validation Vs. verification.
Unit-4	1/04/2024- 15/04/2024	Software Re-Engineering: Source Code Translation, Program Restructuring, Data Re-Engineering, Reverse Engineering.
	16/04/2024- 30/04/2024	Configuration Management: Maintaining Product Integrity, Change Management, Version Control, Configuration accounting: Reviews, Walkthrough, Inspection, and Configuration Audits, Reliability Models (JM, GO, MUSA/Markov), Limitations of Reliability Models.

V.S.G

Name: Sh. Vikas Subag

Class: MSc CS 2nd Year

LESSON PLAN

Subject/Paper: Internet & Web Designing

Semester: 4th Semester

S.No.	Week Days	Syllabus
Unit-1	01/01/2024- 15/01/2024	Introduction: Internet, Evolution of Internet, Types of Computer Network: LAN, WAN, MAN Internet Protocol, Internet Services, WWW, Working of Internet, Introduction to Intranet, DNS working, Configuring Internet Connect ion, Internet Connect ion Concepts, Connecting LAN to Internet; 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.
Unit-2	30/01/2024- 15/02/2024	Searching and Web Casting Technique; 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.
Unit-3	1/03/2024 – 15/03/2024	Internet Tools: Online Chatting, Messaging, and Conferencing Concepts, Usenet newsgroup concepts; Reading usenet newsgroups, Instant messaging, Web-Based chat rooms and discussion boards, Voice and Video conferencing, Streamlining Browsing, Keeping track of Favorite Web Sites, Web Security, Privacy, and Site-Blocking.
Unit-3	1/03/2024 – 15/03/2024	Web Designing using HTML: Understanding HTML, XHTML Syntax and Semantics, HTML Elements; Paragraph, Lists, Tables, Images, Frames, Forms, Linking to other Web Pages; External and Internal linking
Unit-3	16/03/2024- 31/03/2024	E-mail Links; Working with Background colors and Images; Marquee; Text Alignment and Text Formatting, Advanced Layout with Tables; Publishing HTML Pages.
Unit-4	1/04/2024- 15/04/2024	Cascading Style Sheets: Introduction, Inline, Internal, External CSS, Linking CSS to Web Page. Client-Side Programming: Introduction to JavaScript, Basic Syntax, Variables and Data types, Statements, Operators, Literals, Functions, Objects, Arrays.
Unit-4	16/04/2024- 30/04/2024	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.

V. Subag

LESSON PLANCLASS: - BCA 3rd YrSEMESTER: - 6th Sem

Name : - Pardeep Suhag

Subject/Paper: - Object Technologies & Programming using Java

S.No.	Week Days	Syllabus
Unit-1	01/01/2024- 15/01/2024	Object Oriented Methodology-1: Paradigms of Programming Languages, Evolution of OO Methodology, Basic Concepts of OO Approach, Comparison of Object Oriented and Procedure Oriented Approaches, Benefits of OOPs, Introduction to Common OO Language, Applications of OOPs.
	16/01/2024-29/01/2024	Object Oriented Methodology-2: Classes and Objects, Abstraction and Encapsulation, Inheritance, Method Overriding and Polymorphism
Unit-2	30/01/2024-15/02/2024	Java Language Basics: Introduction To Java, Basic Features, Java Virtual Machine Concepts, Primitive Data Type And Variables, Java Operators, Expressions, Statements and Array/Object Oriented Concepts: Class and Objects - Class Fundamentals, Creating objects , Assigning object reference variables; Introducing Methods, Static methods, Constructors, Overloading constructors.
	16/02/2024-30/02/2024	This keyword; Using Objects as Parameters, Argument passing, Returning objects , Method overloading, Garbage Collection, The finalize () Method, Inheritance and Polymorphism: Inheritance Basics, Access Control, Multilevel Inheritance, Method Overriding, Abstract Classes, Polymorphism, Final Keyword.
Unit-3	1/03/2024 – 15/03/2024	Packages : Defining Package, CLASSPATH, Package naming, Accessibility of Packages , using Package Members, Interfaces: Implementing Interfaces, Interface and Abstract Classes, Extends and Implements together
	16/03/2024-31/03/2024	Exceptions Handling : Exception , Handling of Exception, Using try-catch , Catching Multiple Exceptions , Using finally clause , Types of Exceptions , Throwing Exceptions, Writing Exception Subclasses.
Unit-4	1/04/2024-15/04/2024	Multithreading : Introduction , The Main Thread, Java Thread Model, Thread Priorities, Synchronization in Java, Inter thread Communication I/O in Java, I/O Basics, Streams and Stream Classes ,The Predefined Streams, Reading from, and Writing to Console
	16/04/2024-30/04/2024	Reading and Writing Files , The Transient and Volatile Modifiers , Using Instance of Native Methods Strings and Characters : Fundamentals of Characters and Strings, The String Class , String Operations , Data Conversion using Value Of () Methods, String Buffer Class and Methods



LESSON PLAN

CLASS : - B.Sc 1st Yr

SEMESTER:- 2nd Sem

Name : - Pardeep Suhag

Subject/Paper: - Programming in C

S.No	Week Days	Syllabus
Unit-1	01/01/2024 - 15/01/2024	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
Unit-2	16/01/2024-29/01/2024 30/01/2024-15/02/2024	Debugging and testing of programs, Algorithm for searching, sorting(Insertion, Exchange), Merging of Order-List. Overview of C: History of C, Importance of C, Structure of a C Program Elements of C: C character set, identifiers and keywords. Data types: declaration and definition. Operators: Arithmetic, relational, logical, bitwise, unary
Unit-3	16/02/2024-30/02/2024 1/03/2024 - 15/03/2024	Assignment and conditional operators and their hierarchy & associativity, input/output statements, Arithmetic Expression, Evaluation of Arithmetic Expression, Type-casting and Conversion. Decision making & branching: Decision making with if statement, if-else statement, nested if, else-if ladder, switch statement, goto statement
Unit-4	16/03/2024-31/03/2024 1/04/2024-15/04/2024 16/04/2024-30/04/2024	Decision making & looping: for, while, and do-while loop; Jumps in loop, break, continue. Functions: Definition, prototype, passing parameters, Recursion. Pointers: Declaration, operations on pointers, array of pointers, pointers to arrays. Data Structures: Arrays: One Dimensional, Multidimensional Pointers and arrays. Strings: String Constants, Input & Output, String Functions. Structure & Unions. File Handling: Standard I/O text File, Writing to File, Reading a File.

Pardeep

LESSON PLAN

CLASS:- B.Sc 1st Yr

SEMESTER:- 2nd Sem

Name :- Pardeep Suhag

Subject/Paper:- Structured Systems Analysis and Design

S.No Unit 1	Week Days 01/01/2024-15/01/2024	Syllabus Introduction to system, Definition and characteristics of a system, Elements of system, Types of system, System development life cycle, Role of system analyst, Analyst/user interface, System planning and initial investigation: Introduction
	16/01/2024-29/01/2024	Bases for planning in system analysis, Sources of project requests, Initial investigation, Fact finding, Information gathering, information gathering tools
Unit-2	30/01/2024-15/02/2024	Structured analysis, Tools of structured analysis: DFD, Data dictionary, Flow charts, Gantt charts, decision tree, decision table, structured English, Pros and cons of each tool, Feasibility study: Introduction, Objective, Types, Steps in feasibility analysis, Feasibility report
Unit-3	16/02/2024-30/02/2024	Oral presentation, Cost and benefit analysis: Identification of costs and benefits, classification of costs and benefits, Methods of determining costs and benefits, Interpret results of analysis and take final action.
	1/03/2024 – 15/03/2024	System Design: System design objective, Logical and physical design, Design Methodologies, structured design, Form-Driven methodology(IPO charts), structured walkthrough, Input/Output and form design: Input design, Objectives of input design
	16/03/2024-31/03/2024	Output design, Objectives of output design, Form design, Classification of forms, requirements of form design, Types of forms, Layout considerations, Form control.
Unit 4	1/04/2024-15/04/2024	System testing: Introduction, Objectives of testing, Test plan, testing techniques/Types of system tests, Quality assurance goals in system life cycle
	16/04/2024-30/04/2024	System implementation, Process of implementation, System evaluation, System maintenance and its types, System documentation, Forms of documentation.

Pardeep Suhag

LESSON PLAN

CLASS: - BCA 3rd Year

SEMESTER:- 6th Sem

Name : - Dr.Sudhir

Subject/Paper: - E- Commerce

S.No	Week Days	Syllabus
Unit-1	01/01/2024-15/01/2024	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
	16/01/2024-29/01/2024	Application of E-Commerce in Direct Marketing and Selling, Obstacles in adopting E-Commerce Applications; Future of Commerce.
Unit-2	30/01/2024-15/02/2024	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
Unit-3	16/02/2024-30/02/2024	security Policy and Integrated Security, Intellectual Property Threats, electronic Commerce Threats, Clients Threats, Communication Channel Threats, server Threats.
	1/03/2024 – 15/03/2024	Implementing security for E-Commerce: Protecting E-Commerce Assets, Protecting Intellectual Property, Protecting Client Computers, Protecting E-commerce Channels
	16/03/2024-31/03/2024	Insuring Transaction Integrity, Protecting the Commerce Server. Electronic Payment System: Electronic Cash, Electronic Wallets, Smart Card, Credit and Charge Card.
Unit-4	1/04/2024-15/04/2024	Business to Business E-Commerce: Inter-organizational Transactions, Credit Transaction
	16/04/2024-30/04/2024	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.

Sudhir

LESSON PLAN

CLASS: - BCA 3rd Year

SEMESTER:- 6th Sem

Name : - Dr.Sudhir

Subject/Paper: - Artificial Intelligence

S.No.	Week Days	Syllabus
Unit-1	01/01/2024- 15/01/2024	Overview of AI: Introduction to AI, Importance of AI, AI and its related field, AI techniques, Criteria for success. Problems, problem space and search: Defining the problem as a state space search, Production system and its characteristics, Issues in the design of the search problem Heuristic search techniques : Generate and test, hill climbing, best first search technique, problem reduction, constraint satisfaction
Unit-2	30/01/2024-15/02/2024	Knowledge Representation: Definition and importance of knowledge, Knowledge representation, Various approaches used in knowledge representation, Issues in knowledge representation.
Unit-3	16/02/2024-30/02/2024	Using Predicate Logic : Representing Simple Facts in logic, Representing instances and is_a relationship, Computable function and predicate.
Unit-4	1/03/2024 – 15/03/2024	Natural language processing : Introduction syntactic processing, Semantic processing, Discourse and pragmatic processing.
Unit-4	16/03/2024-31/03/2024	Learning: Introduction learning, Rote learning, Learning by taking advice, Learning in problem solving, Learning from example-induction, Explanation based learning
Unit-4	1/04/2024-15/04/2024	Expert System: Introduction, Representing using domain specific knowledge,
Unit-4	16/04/2024-30/04/2024	Expert system shells.

Sudhir

CLASS: - BCA 3rd Year

LESSON PLAN

SEMESTER:- 6th Sem

Name :- Dr.Sudhir

Subject/Paper: - INTRODUCTION TO .NET

S.No.	Week Days	Syllabus
Unit 1	01/01/2024- 15/01/2024	The Framework of .Net. Building blocks of .Net Platform (the CLR, CTS and CLS). Features of .Net, Deploying the .Net Runtime
	16/01/2024- 29/01/2024	Architecture of .Net platform, introduction to namespaces & type distinction. Types & Object in .Net, the evolution of Web development .
Unit 2	30/01/2024-15/02/2024	Class Libraries in .Net, Introduction to Assemblies & Manifest in .Net, Metadata & attributes . Introduction to C#: Characteristics of C#
	16/02/2024-30/02/2024	Data types: Value types, reference types, default value, constants, variables, scope of variables, boxing and unboxing
Unit 3	1/03/2024 – 15/03/2024	Operators and expressions: Arithmetic, relational, logical, bitwise, special operators, evolution of expressions, operator precedence & associativity
	16/03/2024-31/03/2024	Control constructs in C#: Decision making, loops, Classes & methods: Class, methods, constructors, destructors, overloading of operators & functions.
Unit 4	1/04/2024-15/04/2024	Inheritance & polymorphism: visibility control, overriding, abstract class & methods, sealed classes & methods, interfaces
	16/04/2024-30/04/2024	Advanced features of C#: Exception handling & error handling, automatic memory management, input and output (Directories, Files, and streams).

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