Lesson Plan

Session 2023-24

Subject Basic IT Tools (B23-SEC-103)

Class BA 1st Sem

Semester Odd

Name: Mrs. Pooja Rani

Sr. No	Period	Topics
1.	July, 2023	Introduction, overview
2.	August , 2023	Computer and latest IT gadgets, history of computer & its application, Basics of H/W and S/W Application S/W, system S/W, utility S/W, CPU, input device, output devices. Class Test
3.	September ,2023	Computer Memory & Storage, Mobile App, Function of OS, Os for Desktop & Laptop, Mobile Phone & Tablets, Taskbar, user interface, icons & shortcuts, Running an application, Control Panel setting. Class Test Assignment 1.
4.	October , 2023	Computer Networks, LAN, MAN, WAN, Network topology, Internet & its Application, Web Browser, Search Engine. Assignment 2.
5.	November , 2023	Email & A/C create, setting(sending, replaying, for was attach file, E-mail signature), social networking: face book, twitter, LinkedIn, Instagram, Whatsapp, introduction to Digital Locker. Class Test

Lesson Plan

Session 2023-24

Subject Basic IT Tools (B23-SEC-103)

Class B.Com 1st Sem

Semester Odd

Name: Mrs. Pooja Rani

Sr. No	Period	Topics	
1.	July	Introduction, overview	
2.	August , 2023	Computer and latest IT gadgets, history of computer & its application, Basics of H/W and S/W Application S/W, system S/W, utility S/W, CPU, input device, output devices. Class Test	
3.	September ,2023	Computer Memory & Storage, Mobile App, Function of OS, Os for Desktop & Laptop, Mobile Phone & Tablets, Taskbar, user interface, icons & shortcuts, Running an application, Control Panel setting. Class Test Assignment 1.	
4.	October, 2023	Computer Networks, LAN, MAN, WAN, Network topology, Internet & its Application, Web Browser, Search Engine. Assignment 2.	
5.	November, 2023	Email & A/C create, setting(sending, replaying, for was attach file, E-mail signature), social networking: face book, twitter, LinkedIn, Instagram, Whatsapp, introduction to Digital Locker. Class Test	

Lesson Plan

Session 2023-24

Subject Basic IT Tools (B23-SEC-103)

Class B.Sc 1st Sem

Semester Odd

Name: Mrs. Pooja Rani

Sr. No	Period	Topics
1.	July,2023	Introduction to Syllabus, overview.
1.	August, 2023	Computer and latest IT gadgets, history of computer & its application, Basics of H/W and S/W Application S/W, system S/W, utility S/W, CPU, input device, output devices. Class Test
2.	September,2023	Computer Memory & Storage, Mobile App, Function of OS, Os for Desktop & Laptop, Mobile Phone & Tablets, Taskbar, user interface, icons & shortcuts, Running an application, Control Panel setting. Class Test Assignment 1.
3.	October, 2023	Computer Networks, LAN, MAN, WAN, Network topology, Internet & its Application, Web Browser, Search Engine. Assignment 2.
4.	November, 2023	Email & A/C create, setting(sending, replaying, for was attach file, E-mail signature), social networking: face book, twitter, LinkedIn, Instagram, Whatsapp, introduction to Digital Locker. Class Test

Lesson Plan

Session 2023-24

Subject Cloud Computing Skills (B23-SEC-201)

Class B.A 2nd Sem

Semester Even

Name: Mrs. Sapna Sharma

Sr. No	Period	Topics
1.	January , 2024	Unit 1:-Basic concepts of cloud computingComputer Network Basics, Concepts of DistributedSystems, Concept of Cloud Computing andits Necessity. Cloud Service Providers in use and theirSignificance.Class Test
2.	February ,2024	Unit 2 :-Cloud Infrastructure Cloud Pros and Cons. Cloud Delivery Models, Cloud Deployment Models. Class Test Assignment 1.
3.	March, 2024	Unit 3:- Cloud Storage ManagementConcept of Virtualization and load balancing. Overviewon Virtualization used for EnterpriseSolutions. Key Challenges in Managing Information.Identifying the problem of scale andManagement in big Data.Assignment 2.Practical
4.	April, 2024	Unit 4 :- Building Cloud Networks Designing and Implementing a Data Center-Based Cloud Installing Open Source Cloud service . Amazon Web services (AWS) ,Google Cloud Platform. Practical Class Test

Lesson Plan

Session 2023-24

Subject Cloud Computing Skills (B23-SEC-201)

Class B.Com 2nd Sem

Semester Even

Name: Mrs. Sapna Sharma

Sr. No	Period	Topics
1.	January , 2024	Unit 1:-Basic concepts of cloud computing Computer Network Basics, Concepts of Distributed Systems, Concept of Cloud Computing and its Necessity. Cloud Service Providers in use and their Significance. Class Test
2.	February ,2024	Unit 2 :-Cloud Infrastructure Cloud Pros and Cons. Cloud Delivery Models, Cloud Deployment Models. Class Test Assignment 1.
3.	March, 2024	 Unit 3:- Cloud Storage Management Concept of Virtualization and load balancing. Overview on Virtualization used for Enterprise Solutions. Key Challenges in Managing Information. Identifying the problem of scale and Management in big Data. Assignment 2. Practical
4.	April, 2024	Unit 4 :- Building Cloud Networks Designing and Implementing a Data Center-Based Cloud Installing Open Source Cloud service . Amazon Web services (AWS) ,Google Cloud Platform. Practical Class Test

Lesson Plan

Session 2023-24

Subject Cloud Computing Skills (B23-SEC-201)

Class B.Sc 2nd Sem

Semester Even

Name: Mrs. Sapna Sharma

Sr. No	Period	Topics
1.	January , 2024	Unit 1:-Basic concepts of cloud computingComputer Network Basics, Concepts of DistributedSystems, Concept of Cloud Computing andits Necessity. Cloud Service Providers in use and theirSignificance.Class Test
2.	February ,2024	Unit 2 :-Cloud Infrastructure Cloud Pros and Cons. Cloud Delivery Models, Cloud Deployment Models. Class Test Assignment 1.
3.	March, 2024	Unit 3:- Cloud Storage ManagementConcept of Virtualization and load balancing. Overviewon Virtualization used for EnterpriseSolutions. Key Challenges in Managing Information.Identifying the problem of scale andManagement in big Data.Assignment 2.Practical
4.	April, 2024	Unit 4 :- Building Cloud Networks Designing and Implementing a Data Center-Based Cloud Installing Open Source Cloud service . Amazon Web services (AWS) ,Google Cloud Platform. Practical Class Test

Lesson Plan

Session: 2023-24

Subject : Computer Organization & Networking Fundamentals (CS-DE-11)

S NO	Period	Topics to be Covered	Academic Activity to be
			Organized
1	September	Unit:1 Fundamentals of computer,Block digram of digital computer, classification, h/w, s/w, I/O device, storage device – hard disk, pen drive, optical device.	Introduction of Syllabus
2	October	Information representation, number system, conversation, integer representation, sign, magnitude, 1 st complement, 2 nd complement, BSD code, floating point, Binary Arithmetic: addition, subtraction, multiplication, division.	Class Assignment 1. and discussion on assignment , class presentation
3	November	Unit: 2 Boolean Function : Boolean algebra, Truth tables, Logic gates, Canonical representation of Boolean function, simplification of Boolean expression, K-Map, Quine McCluskey procedure.	
4	December	Combinational circuit : Half adder, Full adder, half subtractor, full subtractor, parallel binary adder, BCD adder, decoder, encoder,	Class Tests

		multiplexer, demultiplexer.	
		24 th to 31 december in KUK	
		university Holiday.	
5.	January	Unit: 3 Sequential circuit,	
5.	January	Flip-Flop, synchronous &	
		asynchronous,flip-flop, D-	
		type & T-type, JK flip- flop,	
		Characteristics, excitation	
		tables of flip-flop.	
6.	February	Registers: shift register,	Class Assignment 2. And
		Counter: synchronous &	discussion on assignment , class
		asynchronous binary	presentation
		counters, modulo-N	
		counter.	
7.	March	Unit:4 Introduction to	
		computerN/W, types,	
		topologies, transmission	
		media, wired & wireless.	
		Network H/W components,	
		connector, transceivers,	
		media, converters,	
		repeaters, bridge, switch,	
		routers, gateways.	
8.	April	Internet: Intranet, IP	
		addresses, DNS, Internet	
		service, FTP ,Remote Login,	
		TELENT, WWW & HTTP,	
		Web Browsers, Modems,	
		DSL , ISP.	
9.	May	Revision & Class Test.	

Lesson Plan

Session: 2023-24

Subject : Operating System (CS-DE-15)

S NO	Period	Topics to be Covered	Academic Activity to be
			Organized
1.	September	Unit : 1 operating system function, characteristics, historical evolution of operating system, real time system Distributed system, o/s services, system call, system program.	Introduction Syllabus
2.	October	CPU Scheduling: Process Concepts, Process Scheduling, Scheduling criteria, Scheduling Algorithms.	Class Assignment 1. and discussion on assignment , class presentation
3.	November	Unit : 2 Deadlock, characterization, Prevention and avoidance, detection recovery.	
4.	December	Storage management: methods, single, multiple contiguous allocation, Paging, Segmentation, virtual memory, demand paging, page replacement, Thrashing.	
5.	January	Unit: 3 File system, File access and allocation methods, Directory system, structured organization. H/W management, disk scheduling polices.	
6.	February	Protection: goals of protection, principles,	Class Assignment 2. And discussion on assignment , class

		domain, access matrix, its implementation, revocation of access rights.	presentation
7.	March	Unit: 4 Windows, features, version, its use, My computer, Recycle Bin, Desktop, Icons, window explorer, dialog box, toolbar, working with file and folder. Copy. Delete, Move, control Panel.	
8.	April	Linux: Linux architecture, features of Linux, simple Commands in Linux.	
9	Мау	Revision & Practical	

Lesson Plan

Session: 2023-24

Subject : Problem Solving Through in "C" (CS-DE-12)

S NO	Period	Topics to be Covered	Academic Activity to be
1.	September	Unit 1	Organized Introduction Syllabus
1.	September	Programming fundamentals: Introduction to compiler, assembler and interpreter, concept of Problem solving, problem definition, program design ,debugging.	
2.	October	Type of error in programming , documentation. Flowcharting , decision table ,algorithms, structured programming concepts, programming methodologies top down and bottom up programming.	Class Assignment 1. and discussion on assignment , class presentation
3.	November	Unit 2 Overview of C,history of C, importance of C structure of a C program. element of C: C character set, identifier and keywords ,data type ,constants and variable.	
4.	December	Operators: arithmetic, relational ,logical bitwise ,unary, assignment and conditional operator and their hierarchy and associativity. Input /output unformatted and formatted	

		input/ output function in C.	
5.	January	Unit 3 Control statement: sequencing, selection: if and switch statement repetition : for ,while and do while loop, break, continue goto. functions : definition ,prototype, passing parameters, function calls, library functions ,recursion.	
6.	February	Storage classes in C: auto, extern, register and static storage class, their scope, storage and lifetime. Array : definition, type ,initialization, processing an array ,passing array to functions, dynamic arrays	Class Assignment 2. And discussion on assignment , class presentation
7.	March	Unit4 Strings: string handling reading and writing string ,string function, dynamic string. pointers : declaration, operation on pointers, pointer and array dynamic memory allocation.	
8.	April	Pointer and function, pointer and string . Structure and union :definition, processing , structure and pointers,passing structure to functions ,union.	
9	May	Revision & Practical	

Lesson Plan

Session: 2023-24

Subject : Data Base Management System (CS-DE-14)

S NO	Period	Topics to be Covered	Academic Activity to be
5.10	i chidu		Organized
1.	September	Data information and knowledge - limitations of manual data processing- advantage of database basic DBMS terminology - role of DBA , data manager, file manager and disc manager- three level	Introduction Syllabus
2.	October	Architecture of DBMS- physical and logical data independence , database language and interfaces, DBMS function and component modules.	Class Assignment 1. and discussion on assignment , class presentation
3.	November	Unit 2 Entity relationship model - concept, relationships, constraints , key- primary ,secondary , composite and foreign key etc .ER diagrams, mapping ER diagram to relational tables.	
4.	December	Case studies: inventory system, payroll system, reservation system, online book store etc. introduction to data models, comparison between hierarchical,network and relational models.	
5.	January	Unit3 Relational algebra -query	

		language, basics set operations, special relations operations introduction to SQL: DDL, DML and DCL commands ,view and queries inSQL.	
6.	February	Specifying constraints and indexes in SQL . functional dependencies ,normalization -normal forms based on primary key(1 NF and 2NF 3 NF and BCNF)	Class Assignment 2. And discussion on assignment , class presentation
7.	March	Unit 4 MS Access : part of an access window , toolbars and their icons creating a new database, creating a database through table wizard.	
8.	April	Creating a new table,relationships ,creating table through design view ,relationship, query ,form ,reports, import /export table etc.	
9	May	Revision & Practical	

Lesson Plan

Session: 2023-24

Subject : Data Structure (CS-DE-13)

S NO	Period	Topics to be Covered	Academic Activity to be
			Organized
1.	September	Unit 1 Introduction to data structure: elementary data organization, Data Structure operations, algorithm complexity and time space trade off, classification of data structure.	Introduction Syllabus
2.	October	String processing: storing string ,string operation, pattern matching algorithms. array: linear array, operations on array, multidimensional array, storage of array, matrices ,sparse matrices. Assignment 1	Class Assignment 1. and discussion on assignment , class presentation
3.	November	Unit 2 Linked list representation of linked list in memory, traversal ,searching, insertion ,deletion, sorted linked list header list ,two - way list.	
4.	December	Stack , queue ,linked and array representation of stack, queue and Dequeue, priority queue ,operations on stack and queues.	
5.	January	Unit 3	

		Application of stacks: recursion, polish notation ,quicksort. Tree: binary tree , representation of binary tree in memory , threaded binary tree.	
6.	February	Balanced tree, different tree traversal algorithms, binary search tree : searching, insertion and deletion in binary search tree, heap sort.	Class Assignment 2. And discussion on assignment , class presentation
7.	March	Unit 4 Representation of graph and application : adjacency Matrix , path Matrix, warshall's algorithm ,linked representation of graph.	
8.	April	Traversing a graph ,sorting and searching :radix sort, merge sort, linear search ,binary search, insertion sort, selection sort, bubble sort.	
9.	May	Revision & Practical	