Teaching Plan for the Session July - December 2024

Dept. of Computer Science **Course Code: CCF-MCMS CC1**

Computer Fundamentals and Digital Logic

Semester - 1

Month	Week	Scheduled Holidays	Topics
July	1		
	2		Computer Fundamentals
	3	17	Number Systems
	4		Fundamentals of Boolean Expression
August	1		Design of Logic Gates
	2	15	Simplification using Boolean Algebra and K-Maps
	3	19	Adder & Subtractor
	4	26	Data selector/ Multiplexer
September	1		Data Distributor/ Demultiplexer
	2		Chip Selector/Minterm Generator
	3	16 17	Encoders, Decoders
	4		Parity bit, Code Converters and magnitude comparators
October	1	Puja Vacation	
	2		
	3		
	4		
	5		
November	1	4 7 8	Latch& Flip-Flops
	2	15 16	Registers & Counters
	3		Registers & Counters
	4		Registers & Counters
December	1		Integrated Circuits
	2		Doubt Clearance and Quizes
	3	25 - 28	
	4	30 - 31	

Teaching Plan for the Session July - December 2024

Dept. of Computer Science **Course Code: CCF-MCMS CC3**

Data Structure

Semester - 3

Month	Week	Scheduled Holidays	Topics
July	1		
	2		Introduction to Data Structure
	3	17	1-d Arrays
	4		2-d Arrays
August	1		Introduction to Linked Lists
	2	15	Singular and Double Linked List
	3	19	Circular Linked List
	4	26	Array and linked representation of stack
September	1		Prefix, Infix and Postfix expressions
	2		Evaluation of Expressions
	3	16 17	Array and Linked representation of Queue,
	4		Circular Queue, De-queue, Priority Queues
October	1	Puja Vacation	
	2		
	3		
	4		
	5		
November	1	4 7 8	Recurssion Algorithms
	2	15 16	Binary Trees, Binary Search Tree, Threaded Binary Trees
	3		Linear Search and Binary Search Techniques
	4		Different Sorting Techniques
December	1		Hashing Techniques
	2		Doubt Clearance and Quizes
	3	25 - 28	
	4	30 - 31	

Teaching Plan for the Session July - December 2024

Dept. of Computer Science **Course Code: CBCS-DSE-A-1**

Database Management System

Semester - 5

Month	Week	Scheduled Holidays	Topics
July	1		
	2		Advantages of DBMS; Layered Architecture of Database
	3	17	Data Independence; Data Models
	4		Schemas and Instances; Database Languages.
August	1		Entity, Attributes and Relationship;
	2	15	Structural Constraints; Keys;
	3	19	ER Diagram of Some Example Database;
	4	26	Weak and Strong Entity Set; Symbolic Conventions;
September	1		Specialization and Generalization;
	2		Constraints of Specialization and Generalization; Aggregation.
	3	16 17	SQL Practices
	4		SQL Practices
October	1	Puja Vacation	
	2		
	3		
	4		
	5		
November	1	4 7 8	Basic Concepts of Relational Model
	2	15 16	Relational Algebra; Tuple Relational Calculus
	3		Functional Dependencies (FD), Derivation Rules, Closure of FD Set
	4		Membership of a Dependency, Canonical Cover
December	1		Decomposition to 1NF, 2NF, 3NF and BCNF using FD; Lossless Join
	2		Doubt Clearance and Quizes
	3	25 - 28	
	4	30 - 31	