

LESSON PLAN:		
Discipline: Automation & Robotics	Semester: 3rd	Name of the Teaching Faculty: Mrs. Supriya Mishra
Subject: Computer Programming & Networking	No. Of classes allotted per week : 4 periods per week (Mon, Sat– 1 period each & Fri – 2 periods)	Semester: From Date: 01-07-2024 To 08-11-2024
WEEK	CLASS DAY	THEORY /PRACTICAL TOPICS
1st	01-07-2024	Introductory Class & Interaction with new batch
	05-07-2024	Introduction to Computers,Recap of Concepts studied in FY
	06-07-2024	Syllabus Discussion
2nd	08-07-2024	1. INTRODUCTION TO OBJECT ORIENTED PROGRAMMING 1.1. Basic Concepts of Object Oriented Programming
	12-07-2024	1.2. Structure of a C++ program 1.3. Tokens and Control Structures
	13-07-2024	1.4. Functions in C++ (Prototyping , Call by Reference)
3rd	15-07-2024	1.5. Specifying a Class and defining member functions
	19-07-2024	1.6. Making an outside function inline 1.7. Nesting of member functions
	20-07-2024	1.8. Private member functions
4th	22-07-2024	1.9. Arrays within a class.
	26-07-2024	1.10. Memory allocation for objects 1.11. Static data members and Static Member Functions
	27-07-2024	1.12. Arrays of objects.
5th	29-07-2024	1.13. Objects as function arguments.
	02-08-2024	1.14. Friend functions and Retuning objects.
	03-08-2024	Recap & Discussion of Important Questions of Chapter 1
6th	05-08-2024	2. CONSTRUCTORS AND DESTRUCTORS 2.1. Introduction to constructors.
	09-08-2024	2.2. Parameterized constructors. 2.3. Multiple constructors in a class.
	10-08-2024	2.4. Dynamic constructors.
7th	12-08-2024	2.5. Destructors. Recap & Discussion of Important Questions of Chapter 2
	16-08-2024	3. OPERATOR OVERLOADING AND TYPE CONVERSIONS 3.1. Define operator overloading. 3.2. Overloading unary and binary operators. 3.3. Manipulation of strings using operators.
	17-08-2024	3.4. Rules for overloading operators.
8th	23-08-2024	3.5. Type conversions. 3.6. Function overloading.
	24-08-2024	Recap & Discussion of Important Questions of Chapter 3
9th	30-08-2024	4. INHERITANCE

		4.1. Defining derived classes. 4.2. Single inheritance. 4.3. Multiple inheritances. 4.4. Hierarchical inheritance. 4.5. Hybrid inheritance. 4.6. Virtual base class.
	31-08-2024	4.7. Abstract classes 4.8. Constructors in derived classes.
10th	02-09-2024	4.9. Nesting of classes.
	06-09-2024	Recap & Discussion of Important Questions of Chapter 4 5. BASICS OF COMPUTER NETWORKS AND PROTOCOLS 5.1. Topologies, BUS, RING, STAR 5.2. Transmission media - Guided Transmission, Wireless Transmission
11th	09-09-2024	Internal Assessment (To be decided by Institution)
	13-09-2024	5.3. Introduction to OSI Reference Model: Physical, Session, Presentation, Application Recap & Discussion of Important Questions of Chapter 5 6. RELIABLE DATA TRANSMISSION 6.1. Modes of Data Communication: Half Duplex, Full Duplex 6.2 Use of networking devices like Repeaters, Bridges, Routers, Gateways and their benefits
	14-09-2024	5.4. Protocol Suite: TCP/IP.
12th	20-09-2024	6.3 Analog and digital transmission. 6.4 Data Transfer rate, Channel capacity. 6.5 Asynchronous & Synchronous Transmission.
	21-09-2024	6.6. Different methods of Error Detection – Part 1
13th	23-09-2024	6.6. Different methods of Error Detection – Part 2
	27-09-2024	6.7. Error Correction using Hamming codes 6.8. Flow Control
	28-09-2024	6.9. Multiplexing: FDM & TDM
14th	30-09-2024	6.10. Packet Switching Networks
	04-10-2024	6.11. Introduction to Routing, Routing in Packet switching Networks
	05-10-2024	Recap & Discussion of Important Questions of Chapter 6
15th	07-10-2024	Puja Holiday
16th	14-10-2024	7. INTRODUCTION TO DATABASE PROGRAMMING.
	18-10-2024	7.1. Introduction to Database management system.
	19-10-2024	7.2. Entity relationship model and Attributes - Part 1
17th	21-10-2024	7.2. Entity relationship model and Attributes - Part 2
	25-10-2024	7.3. Introduction to DDL, DQL, DML, DCL and TCL Commands 7.3.1 SQL queries to create new table and alter the structure of existing table. 7.3.2 SQL queries to insert, retrieve, update and delete data

	26-10-2024	7.3.3 SQL queries to define access privileges to and control transactions on a database.
18th	28-10-2024	Recap & Discussion of Important Questions of Chapter 7
	01-11-2024	Discussion of Important Questions of Chapters 1,2,3,4
	02-11-2024	Discussion of Important Questions of Chapters 5,6
19th	04-11-2024	Discussion of Important Questions of Chapter 7
	08-11-2024	Discussion of Important Questions Last Date for submission of Notes by students