Yashoda Shiskshan Prsarak Mandal's
Yashoda Technical Campus
Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC
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Faculty of Engineering

Department of Basic Sciences and Humanities

Teaching, Learning & Assessment Tool Plan for Lecture

Name of Faculty: Mrs. Mandhare R.M. **Subject:** Programming for Problem Solving

Semester: ODD **Academic Year:** 2024-25 **Class**: FY (Div-C) **Planned Duration:** 23/09/2024 to 11/01/2025

Course outcome: After successfully completing the course students will be able to-

CO 1. Gain a broad perspective about the uses of computers in engineering industry and C Programming.
CO 2. Understand the use of Types, operators and expressions in programming.
CO 3. Apply the knowledge of flow statements and functions for control based computational algorithms.
CO 4. Understand the concepts of arrays ad pointers in C.
CO 5. Apply the knowledge of structure in OS file management.

Sr. No.	Content	Duration	Planned Date	Conduction Date	COs to fulfill	Teaching model	Teaching activity	Teaching material	References	Student activity	Student Learning material	Assessment tool
01	**Module - 1 Fundamental of the Computer and Computing Concepts** Generation of computers, Classification of computers	1Hr			CO1	Smart Board-Videos, Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
02	Basic Anatomy of Computer System, Input Devices,	1Hr			CO1	Smart Board-Videos, Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test

03	Processor, Output Devices, Memory Management	1Hr			CO1	Smart Board-Videos, Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
04	Types of Computer Software, Overview of Operating system	1Hr			CO1	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
05	Editing, Compiling, Error Checking, executing, testing and debugging of programs.	1Hr			CO1	Smart Board-Laptop ,Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
06	IDE commands. Eclipse for C Program development, basic of Flowcharts and Algorithms.	1Hr			CO1	Smart Board-Laptop, Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
07	**Module - 2 Types, Operators and Expressions:** C Tokens, Data types, sizes, initialization and declarations	1Hr			CO2	Ppt,Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test

08	arithmetic operators, relational and logical operators	1Hr			CO2	Smart Board-Laptop ,Chalk & Talk	Explain / Execute program	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
09	increment and decrement operators, bitwise operators.	1Hr			CO2	Chalk & Talk	Explain & Solve	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
10	assignment operators and expressions, conditional expressions	1Hr			CO2	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
11	precedence and order of evaluation, type conversions.	1Hr			CO2	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
12	**Module - 3** Control Flow **Statements and Blocks:** If-else, if-else ladder,	1Hr			CO3	Smart Board-Laptop ,Chalk & Talk	Explain / Execute program	Notes/E-material	R1,R2	Learn, Understand , apply	Reference Books / Question Bank	Assignment/Class Test
13	nested if-else, switch-case, Loops: while	1Hr			CO3	Chalk & Talk	Explain / Execute program	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test

14	for, do-while, break, continue, goto and Labels.	1Hr			CO3	Smart Board-Laptop ,Chalk & Talk	Explain / Execute program	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test
15	**Functions and Program Structure:** Basic of functions, In build functions	1Hr			CO3	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test
16	user defined functions, function returning various data types	1Hr			CO3	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test
17	external variables scope rules.	1Hr			CO3	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test
18	**Module- 4 Arrays and Pointers in C** Initializing	1Hr			CO4	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books /	Assignment/Class Test
	arrays, initializing character arrays										Question Bank	
19	multidimensional arrays	1Hr			CO4	Smart Board-Laptop ,Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test

20	Pointer: Definition and uses of pointers	1Hr			CO4	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
21	Pointers to integers, characters	1Hr			CO4	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
22	Pointers to floats, arrays.	1Hr			CO4	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
23	More programs on Pointers	1Hr			CO4	Smart Board-Laptop ,Chalk & Talk	Explain / Execute program	Notes/E-material	R1,R2	Learn, Understand	Reference Books / Question Bank	Assignment/Class Test
24	**Module** — 5 **Structures in C and File Management** Basics of structures, structures and functions arrays of structures	1Hr			CO5	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test
25	Pointers in structures.	1Hr			CO5	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books /	Assignment/Class Test

											Question Bank	

26	More programs on structures	1Hr			CO5	Smart Board-Laptop ,Chalk & Talk	Explain / Execute program	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test
27	Introduction to File Management: Defining and Opening File	1Hr			CO5	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test
28	Closing File, Input/output Operations on File.	1Hr			CO5	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test
29	More Programs on file Management	1Hr			CO5	Chalk & Talk	Explain / Execute program	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test
30	Revision	1Hr			CO5	Chalk & Talk	Explain	Notes/E-material	R1,R2	Learn, Understand ,apply	Reference Books / Question Bank	Assignment/Class Test

Reference Books

R1. Yashwant Kanitkar, Let Us C, PHI
R2: Balguruswamy, Programming in C, PHI.

Name and Signature: Faculty Academic Coordinator HOD
Role: (Prepared By) (Reviewed by) (Approved by)

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Date: _____ _____