PVP 20

Code: 20ES1401

II B.Tech - II Semester – Regular / Supplementary Examinations
MAY - 2023

PROGRAMMING WITH C
(ELECTRICAL & ELECTRONICS ENGINEERING)

Duration: 3 hours Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.
2. All parts of Question must be answered in one place.
BL – Blooms Level CO – Course Outcome

			BL	CO	Max. Marks
		UNIT-I			
1	a)	Explain about different data types used in C. Interpret type conversion with example.	L2	CO1	7 M
	b)	Develop a program to calculate the roots of quadratic equation.	L2	CO1	7 M
		OR			
2	a)	Interpret the rules for evaluation of an expression with example.	L2	CO1	7 M
	b)	Construct a 'C'program to find the largest of 3 numbers using if else structure.	L2	CO2	7 M
		UNIT-II			
3	a)	Explain the three control loops with syntax, description and example.	L2	CO2	7 M
	b)	Construct a C Program to generate the series $1+X+X^2+X^3+X^4+\ldots\ldots+X^8$	L3	CO2	7 M

		OR			
4	a)	Construct a program to perform matrix multiplication.	L3	CO2	7 M
	b)	Define a String. Explain various string handling functions with their syntax. Give proper example.	L2	CO2	7 M
		UNIT-III			
5	a)	Define Scope of a variable. Explain various storage classes with a suitable example for each of them.	L2	CO3	7 M
	b)	Construct a C program to find the factorial of a given number using recursion.	L3	CO4	7 M
		OR			
6	a)	Construct a C program to calculate GCD of two numbers using functions.	L3	CO4	7 M
	b)	Explain about call by value and call by reference with example.	L2	CO3	7 M
		UNIT-IV			
7	a)	Explain Static and Dynamic Memory Allocation. List dynamic memory allocation functions in 'C', explain with proper examples.	L2	CO3	7 M
	b)	Construct a C Program to find the sum of two numbers using pointers by passing parameters to user defined function.	L3	CO3	7 M
		OR			

8	a)	Interpret the use of pointers in C. Write a program using pointers to determine the length of a character string.	L2	CO3	7 M
	b)	Prepare a macro that gives maximum of three values.	L3	CO3	7 M
		UNIT-V			
9	a)	Construct an array of structure called "student" with the data members: name, roll-no, class, grade and percentage marks. Read n records and print the details of the student given a particular roll-no as the key.	L3	CO3	7 M
	b)	Explain passing of structure as argument to functions with example.	L2	CO3	7 M
		OR			
10	a)	Construct a C program to copy the content from one file to another file.	L3	CO3	7 M
	b)	Interpret the functions used for accessing files randomly. Explain with examples.	L3	CO3	7 M