CBCS SCHEME

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BPOPS103/203

First/Second Semester B.E./B.Tech. Degree Supplementary Examination, June/July 2024
Principles of Programming Using C

Time: 3 hrs.   Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

			M	L	C
Module – 1					
Q.1	a.	Discuss the structure of 'C' program with an example.	8	L2	CO1
	b.	What are Variables? Write the rules to declare a variable.	6	L2	CO2
	c.	What are escape sequences? Mention the escape sequences of 'C' language with their meaning.	6	L2	CO2
OR					
Q.2	a.	Explain any two output devices in detail.	6	L2	CO1
	b.	With an example, explain Input – Output statements in 'C'.	6	L2	CO2
	c.	Discuss the classification of Computers.	8	L2	CO1
Module – 2					
Q.3	a.	List all decision control statements in 'C'. Explain else – if ladder and nested if with its syntax and example.	8	L2	CO2
	b.	Write a 'C' program to simulate a calculator using switch statement.	6	L3	CO2
	c.	Explain break and continue statement with example.	6	L3	CO2
OR					
Q.4	a.	Explain the for Loop with its syntax. Write a 'C' program to find whether a given number is prime or not.	8	L3	CO2
	b.	Differentiate while and do – while loops with example.	6	L3	CO2
	c.	What are nested loops? Give example. Write a 'C' program to display the pattern shown below. 1 2 2 3 3 3 4 4 4 4 5 5 5 5 5	6	L3	CO2
Module – 3					
Q.5	a.	Define Function. Write the syntax of a function. Explain the categories of function with examples.	10	L2	CO2

	b.	Briefly explain the storage classes supported by 'C' language.	10	L2	CO2
OR					
Q.6	a.	Differentiate pass by value end pass by address parameter passing techniques.	5	L3	CO3
	b.	How 2 – dimensional arrays are declared and initialized? Write a 'C' program to find the transpose of a matrix.	7	L4	CO3
	c.	Define Recursion. Mention the properties of Recursion function. Write a 'C' program to find GCD of 2 numbers using recursive function.	8	L4	CO3
Module – 4					
Q.7	a.	What are Strings? Explain the 'C' function used to read and write characters.	6	L2	CO3
	b.	Write a program to find length of given string without using built in function.	6	L3	CO2
	c.	What is a Pointer? How pointer are declared and initialized? Mention the various operations that are carried out on pointers.	8	L4	CO4
OR					
Q.8	a.	Write a program to copy and concatenate from one string to another.	8	L3	CO5
	b.	Explain any 6 string manipulation functions.	6	L3	CO4
	c.	Write a 'C' program to find sum, mean, standard deviation of all elements in an array using pointers.	6	L5	CO5
Module – 5					
Q.9	a.	What is Union? Give its syntax. Differentiate unions and structures.	8	L2	CO4
	b.	Explain with an example array of structures and arrays within structure.	6	L2	CO4
	c.	Write a note on Structures and Functions.	6	L3	CO4
OR					
Q.10	a.	What is a File? Explain different modes of File with example.	8	L2	CO5
	b.	Write a note on Enumerated Data type.	6	L2	CO4
	c.	Write a 'C' program to copy the contents from one file to another.	6	L4	CO5

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