

Model Question Paper-I/II with effect from 2022-23 (CBCS Scheme)

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First/Second Semester B.E. Degree Examination
PRINCIPLES OF PROGRAMMING USING C

TIME: 03 Hours**Max. Marks: 100**

- Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.
 02. Use C code snippet to illustrate a specific code design or a purpose

Module -1			*Bloom's Taxonomy Level	Marks
Q.01	a	Explain the structure of C program in detail. Write a sample program to demonstrate the components in the structure of C program		L2
	b	Demonstrate formatted output of integer in C with suitable example	L3	6
	c	Discuss different types of error occur in program	L2	6
OR				
Q.02	a	Explain the various rules for forming identifiers names. Give examples for valid and invalid identifiers for the same.	L2	8
	b	Mention various output devices and explain hardcopy devices	L1	6
	c	Discuss the variants of microcomputer that are widely used today	L2	6
Module-2				
Q. 03	a	Demonstrate the functioning of Bitwise operator in C	L3	6
	b	Write a C program to find roots of quadratic equation	L3	8
	c	Distinguish between the break and continue statement	L4	6
OR				
Q.04	a	Illustrate Nested loops in C with suitable example	L3	6
	b	Write a C program to print whether a given number is palindrome or not	L3	7
	c	Explain switch statement with syntax. Write a C program to simulate calculator	L3	7
Module-3				
Q. 05	a	Write a C program to implement Bubble sort technique(ascending order)	L3	8
	b	Illustrate the concept of recursive function with example	L3	6
	c	Discuss various scope of variables	L2	6
OR				
Q. 06	a	Differentiate between call by value and call by reference. Using suitable example	L4	8
	b	Write a C program to transpose a MxN matrix	L3	8
	c	Discuss the various storage classes	L2	4
Module-4				
Q. 07	a	Mention various operations that can be performed on string using built-in functions. Explain any two function	L2	8
	b	Develop a program using pointer to compute the sum, mean and standard	L4	8

		deviation of all element stored in array of N real number		
	c	Explain how strings are represented in main memory	L2	4
		OR		
Q. 08	a	Write a program to compare two strings without using built-in function	L3	8
	b	What is pointer? Discuss pointer arithmetic with suitable C code	L2	6
	c	Explain gets() and puts() function with example	L2	6
		Module-5		
Q. 09	a	Explain various modes in which file can be opened for processing	L2	7
	b	Implement structure to read, write and compute average marks of the students. List the students scoring above and below the average marks for a class of n students	L3	8
	c	What are enumeration variable? How are they declared	L1	5
		OR		
Q. 10	a	Write a short note on functions used to Read data from a file Write data to a file	L2	8
	b	Differentiate structures and unions with syntax and example	L4	6
	c	How to detect END-OF-FILE	L2	6

Table showing the Bloom's Taxonomy level, course outcome and program outcomes

Questions	Bloom's Taxonomy	Course Outcome	Program Outcomes
Q. 1	a	L2	CO1,PO1,PO2
	b	L3	CO2,PO1,PO2
	c	L2	CO2,PO1,PO2
Q.2	a	L2	CO2,PO1,PO2
	b	L1	CO1,PO1
	c	L2	CO1,PO1
Q.3	a	L3	CO2,PO1,PO2
	b	L3	CO2,CO5,PO1,PO2,PO3
	c	L4	CO2,PO1,PO2
Q.4	a	L3	CO2,PO1,PO2
	b	L3	CO2,CO5,PO1,PO2,PO3
	c	L3	CO2,CO5,PO1,PO2
Q.5	a	L3	CO3,PO1,PO2,PO3
	b	L3	CO3,CO5,PO1,PO2,PO3
	c	L2	CO2,PO1,PO2
Q.6	a	L4	CO4,PO1,PO2,PO3
	b	L3	CO3,PO1,PO2,PO3
	c	L2	CO2,PO1,PO2
Q.7	a	L2	CO5,PO1,PO2,PO3
	b	L4	CO4,PO1,PO2,PO3
	c	L2	CO2,PO1
Q.8	a	L3	CO5,PO1,PO2,PO3
	b	L2	CO4,PO1,PO2
	c	L2	CO2,PO1

Q.9	a	L2	CO5	PO1,PO2
	b	L3	CO4,CO5	PO1,PO2,PO3
	c	L1	CO4	PO1
Q.10	a	L2	CO2,CO5	PO1,PO2
	b	L4	CO4	PO1,PO2
	c	L2	CO2	PO1