



Academic year 2022-2023 (Even Sem)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING			
Date	11-07-2023	Maximum Marks	50
Course Code	22CS23	Duration	90 Minutes
Sem	II Semester		
PRINCIPLES OF PROGRAMMING USING C CIE-1			

Sl. No.	PART-B	M	BT	CO
1	(a) If John can drink one barrel of water in 6 days, and Mary can drink one barrel of water in 12 days, how long would it take them to drink one barrel of water together?	04	L3	CO2
	(b) Write an Algorithm and a Flowchart to Swap Two Numbers without using temporary variable.	06	L2	CO1
2	(a) Write a C Program using switch to Simulate the Calculator using Arithmetic operators (+, -, *, /, %) declaring the appropriate type of variables required for the evaluation.	06	L3	CO3
	(b) Discuss the process of compiling and running a C program with neat diagram.	04	L1	CO1
3	(a) Write a C program to enter the temperature T and print the following message according to the given temperature by using the else if ladder statement. T<=0 "It is very cold" 0<T<=15 "It is cold" 15<T<=30 "It is warm" T>30 "It is hot"	05	L3	CO3
	(b) Write a C program to display the number in reverse order. Ex: Input: Number is 1234, Output: Number in reverse order is 4321	05	L3	CO3
4	(a) Explain the working of break and continue statements by writing a C program.	04	L2	CO2
	(b) Give the priority and associativity of the operators and also show the step-wise evaluation of the expression. $a + 2 > b \parallel !c \&\& a == d \parallel a - 2 <= e$ where $a=11$ , $b=6$ , $c=0$ , $d=7$ and $e=5$	06	L2	CO2
5	(a) Find the value of $a >> 3$ and $a << 3$ , when $a=7$ .	04	L2	CO2
	(b) Demonstrate diagrammatically and justify conversion of types in a mixed expression given below: char c; int j; float f; double d,r; $r = (c*j)+(f/j)-(f+d);$	06	L3	CO2