

KINGS COLLEGE OF ENGINEERING (AUTONOMOUS)
CONTINUOUS ASSESSMENT TEST -I (SEP 2024)
CS3353- C PROGRAMMING AND DATA STRUCTURES
(Regulation-2021)

Class / Sem: II Year-Common to ECE & EEE/ 03

Date / Session: 13.09.2024/AN

Maximum : 50 Marks

Time : 02.45 P.M. TO 04.15 P.M

Answer All Questions

PART-A(5×2=10 Marks)

Q.No.	Questions	BT Level	CO
1.	Define Enumerated data type.	Remember BT-L1	CO1
2.	Differentiate between prefix and postfix increment operator.	Understand BT-L2	CO1
3.	What is the output of the program? <pre>#include<stdio.h> #define m 5 + 5 const int n = 5 + 5 void main () { int a = 0, b = 0; a = m * m; b = n * n; printf("%d %d\n", a,b); }</pre>	Apply BT-L3	CO1
4.	Differentiate Structure and Union.	Understand BT-L2	CO2
5.	What would be the output obtained out of the program mentioned below? <pre>#include <stdio.h> enum cellphone{Samsung=1, Motorola, Apple, RealMe, Oppo, Vivo, Nokia}; int main() { enum cellphone c; c=RealMe; printf("The value of c is %d",c); return 0; }</pre>	Apply BT-L3	CO2

PART-B(2×13=26 Marks)

6.a.	Explain briefly about different data types used in 'C'. (13)	Understand BT-L2	CO1
(OR)			
b.	What is an array? List the various types of arrays. Elaborate on two dimensional array with an example. (13)	Understand BT-L2	CO1

7.a.(i)	Create a structure named "Employee" to store employee details such as employee ID, name, and salary. Write a C program to input data for three employees and display their information. (6)	Apply BT-L3	CO2
(ii)	Create a union called "Student" with members name, age, and total marks. Write a C program to input data for two students, display their information and find the average of total marks. (7)	Apply BT-L3	CO2
(OR)			
b.(i)	Write a C program to input and print array elements using pointer. (6)	Apply BT-L3	CO2
(ii)	Write a program in C to find the maximum number between two numbers using a pointer. (7)	Apply BT-L3	CO2

PART-C (1×14=14 Marks)

8.a.	Write a C program to read the roll no, name and marks of five subjects and calculate the total, percentage and division using if, if-else, nested if, if-else-if ladder. (14)	Apply BT-L3	CO1
(OR)			
b.	Explain in detail about functions. Write a C program to find factorial of any numbers using recursion. (14)	Apply BT-L3	CO1

Blooms Taxonomy	Level-1 Remember	Level-2 Understand	Level-3 Apply	Level-4 Analyze	Level-5 Evaluate	Level-6 Create
Part-A	1	2,4	3,5			
Part-B		6.(a)(b)	7.(a)(b)			
Part-C			8.(a)(b)			
Total	2+4+13		4+13+14			
Distribution	38%		62%			

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21/9/24
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