DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Regular Summer Examination – 2023

Course: B. Tech.   **Branch : Civil/Chemical/Petrochemical/Mechanical**   **Semester :II**

Subject Code & Name: Computer Programming in C [BTES204]

Max Marks: 60   **Date:**   **Duration: 3 Hr.**

Instructions to the Students:
1. *All the questions are compulsory.*
2. *The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in ( ) in front of the question.*
3. *Use of non-programmable scientific calculators is allowed.*
4. *Assume suitable data wherever necessary and mention it clearly.*

	(Level / CO) Marks

Q. 1 Solve Any Two of the following.   **[12]**

A) Write note on Program Process Development.

B) Write an algorithm and draw a flowchart for a program to print sum and average of 'n' natural numbers.

C) Write a short note on the Tokens in C Language.

Q.2 Solve Any Two of the following.   **[12]**

A) Write a program to find the maximum number from 3 numbers enter by user.

B) Explain any three types of operators along with it's precedence and associativity.

C) Write a program to create simple calculator to perform addition, subtraction, division, and multiplication operations.

Q. 3 Solve Any Two of the following.   **[12]**

A) Write a program to print area of square using function.

B) Write a program to print factorial of a given number using while and also, write the program using do….while loop.

C) Differentiate between while and do…...while loop.

Q.4 Solve Any Two of the following.   **[12]**

A) Write a program to perform and to print the addition and subtraction of the two Matrices.

B) Write a program to perform the following operations on the string (With and without using library function):

1. find length of string   2. copy   3. concatenation   4. reverse.

C) Write syntax of following Concepts of C:
1. Array   2. Switch   3. Function

Q. 5   **Solve Any Two of the following.**   **[12]**

A) Write a program in C to create a structure of student with fields such as Student Name, Roll Number and Marks of two subjects as its members. Calculate average of two subjects. Read the details of 'n' students from user and then display the data in this format.
Roll No.   Name   Sub1   Sub2   Total   Average

B) Write a program in C to create a structure having named as Books consists of title, author, subject, book_id as its members. Read the details of five books from user and then display the data entered by the user on Screen (Use array of structure).

C) Define structure with suitable example. What is difference between structure and Union?

*** End ***