B.Sc. 3rd Semester (Honours) Examination, 2019-20
ELECTRONICS

Course ID : 31713   **Course Code : SH/ELC/303-C-7**

Course Title: C Programming and Data Structures

Time: 1 Hour 15 Minutes   **Full Marks: 25**

The figures in the right hand side margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Answer *any three* of the following questions: 1×3=3

   (a) What do you mean by 'keywords' in C Programme?

   (b) What is 'Token' in C language?

   (c) How many bytes are required to store float type value?

   (d) What will be the output of the following C. Code

       `Printf ("Logical AND is = %d", (5>3&&7>9)).`

   (e) If int a = 2, b = 3, x = 0, find the value of x = (+ + a, b + = a).

   (f) What is Unary Operator?

2. Answer *any three* of the following questions: 2×3=6

   (a) How to initialize 1D and 2D arrays?

   (b) Explain with example + + i and i + +.

   (c) What are 'formal' and 'actual' parameters?

   (d) What is Pointer? How is it initialized?

   (e) What do you mean by Operator? Mention two logical operator.

   (f) What do you mean by formatted output in C language?

3. Answer *any two* of the following questions: 5×2=10

   (a) What is the role of 'Switch' statement in C programming Language? Explain with example.

                                                    2+3=5

   (b) Write a C programme to add two matrices of dimension 3 × 3 and store the result in another matrix.

   (c) What is data type? Explain any four data types used in C language.   2+3=5

   (d) Write a C programme to read character from keyboard and display message whether character is alphabet, digit or special symbol.

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4. Answer *any one* of the following questions: 6×1=6

(a) Write a C program to accept a number from the user and check whether given number is present in the array or not using binary search algorithm.

(b) What do you mean by sorting? Write a C program to sort the n positive integers using Insertion sort algorithm.

(c) Write a C program to create a database of 50 students to store personal details such as Roll Nos, Names, and Marks. Print all the details of student whose name is entered by user.

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