B.C.A. SEM–I (CBCS 2018 Course) : SUMMER - 2019

SUBJECT: C PROGRAMMING-I

Day: Monday | Time: 02.00 PM TO 05.00 PM

Date: 22/04/2019 | **S-2019-2050** | Max. Marks: 60

N.B.:

1) Q 4 from Section I is COMPULSORY.
2) Answer ANY TWO questions from Q 1, 2, 3 in Section I.
3) Answer ANY TWO questions from Q 5, 6, 7 in Section II.
4) All question CARRY EQUAL marks.
5) Answers to Both the sections to be written in SAME answer books.
6) Draw a labeled diagram WHEREVER necessary.

SECTION - I

Q.1) Answer the following: (6 Marks X 2 = 12)

a) Explain following input and output functions with suitable example:
   1) printf() 2) scanf()

b) Describe following jump statements with its usage:
   1) break 2) continue 3) goto

Q.2) Answer the following: (6 Marks X 2 = 12)

a) Elaborate the concept of recursion with suitable example.

b) Define an array? Briefly explain how to pass an array to function.

Q.3) Explain the following: (6 Marks X 2 = 12)

a) What is a structure? How does a structure differ from an Union?

b) Briefly explain concept of pointer with its advantages.

Q.4) Write short notes on the following: Attempt ANY THREE (4 Marks X 3 = 12)

a) Relational operators in C
b) Selection statements
c) Actual and Formal parameters
d) Declaration and initialization of 2D arrays
e) Dynamic memory allocation
f) Pointers as function arguments

SECTION - II

Q.5) Answer the following: (12 Marks X 1 = 12)

Write a C program to display mark-sheet of student using structure.

Q.6) Answer the following: (6 Marks X 2 = 12)

a) Write a C program to print table of an integer number using function.

b) Write a program in C to print lower triangular matrix.

Q.7) Explain the following: (6 Marks X 2 = 12)

a) Write a C program to input an alphabet and check whether it is vowel or consonant using switch case.

b) Write a C program using pointers to compute the sum of all elements stored in an array.

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