

Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

**BCA (2019 Batch) (Sem.-1)**  
**PROBLEM SOLVING USING C**  
Subject Code : UGCA-1903  
M.Code : 76963

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

**SECTION-A**

**1) Write briefly :**

- a) What are the basic data types associated with C?
- b) Describe the difference between = and == symbols in C.
- c) What is meant by prototype of a function in C?
- d) What is the purpose of break statement and give a suitable example?
- e) What are static variables? Give example.
- f) Differentiate between structure and union?
- g) What is pointer? How the variable can be accessed using pointer?
- h) How are multidimensional arrays defined?
- i) List out various file operations in C.
- j) What is formatted I/O in C?

## SECTION-B

- 2) What is flow chart? List out various symbols of flow chart. Draw the flow chart to find sum of numbers divisible by 7 in the range of 1 to 1000.
- 3) Write a C Program to print Fibonacci series up to n terms using :
  - a) While loop
  - b) For loop
- 4) What is Storage class? Explain various storage classes with suitable example of each.
- 5) Define Structure. How it is different from array? Demonstrate the concept of :
  - a) Structure and pointer
  - b) Passing structure to function, with suitable example of each.
- 6) What are the advantages of using array? How multidimensional array are stored in memory? Explain the concept of passing array to function with suitable example.
- 7) What is recursion? Write a C program to find sum of first n natural numbers using recursion.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**