January 2019

Bachelor of Computer Applications (BCA) Examination

Ist Semester

PROGRAMMING AND PROBLEM SOLVING THROUGH C

[Time 3 Hours]

[Max. Marks : ?]

Note : Attempt any two parts from each question. All questions carry equal marks. Assume suitable data, whenever required.

1. (a) What is Algorithm ? Draw a flowchart to calculate factorial of a given number.
   (b) Compare Compiler and Interpreter.
   (c) Briefly explain classification of Programming Language.

2. (a) Compare :
      (i) Constants and Variable.
      (ii) Keywords and Identifiers.
   (b) Explain various primitive data types of C Language.
   (c) Explain type conversion with suitable example.

3. (a) Write a C program to print even numbers between 20 and 50.
   (b) Write a C program to calculate reverse of given number.
   (c) Explain hierarchy of logical, arithmetic and relational operators.

4. (a) Write a C program to find minimum and maximum element of 1D array.
   (b) Explain memory map of 2D array in C. http://www.davvonline.com
   (c) What is String ? Explain any two standard library string function using suitable programming example.

5. (a) How structure are declared and initialized in C ? Give uses of structure.
   (b) Write a C program to store and display information of ten students with fields as Roll No, Name and Class using array of structure.
   (c) Compare macro and function. Why pragma directives are used ?