BCA 1st Semester Examination
Jan. 2014
Subject – fundamental of Computer & Prog. Using C
Subject Code: CAL-101

Time Allowed: 03 hours. Maximum Marks: 100

Before answering the question paper the candidate should ensure that they have been supplied the correct question paper. Complaints in this regard, if any, shall not be entertained after the examination.

Note: Question No. 1 is Compulsory and attempts any two questions from each section. All questions carry equal marks.

SECTION-A

1. Write a short note on the following: [5 x 4 = 20]
   a) Different types of computers
   b) High level and low level languages
   c) Variable vs. Constant
   d) While vs. Do-While loop

2. Define computer. Draw a block diagram of a computer system. Explain the various components of computer system. [20]

3. a). Discuss the various symbols used in flow chart. Draw a flow chart to find the whether the number entered is prime or not. [10]
   b) Explain the following terms:
      (i) Assembler
      (ii) Compiler
      (iii) Interpreter
      (iv) Linker

4. a). Explain the different generations of computer in details. [10]
   b). Define operating system. What are the various features of operating system? Discuss the various roles performed by operating system. [10]

SECTION-B

5. a). Define array and structure. How both are different from each other? Write statements for declaration of both in C. [10]
   (b) What are the different conditional statements in C? Write the syntax for each of these statements. [10]

6. a) Explain in details the different types of operators used in C with their precedence. [10]
   b) Write a program in C to check whether the given number is palindrome or not. [10]

7. a). Define recursion. Write a program in C to find factorial of a given number using recursion. [10]
   b). Discuss the various decision control statements used in C in details. [10]