BCA 1st Semester Examination
June-2014
Computer fundamental & programming in ‘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: Attempt five questions in total. Question No.1 is compulsory and remaining four questions from Section A and B (Two questions from each section).

Q.1 (a) Define bit, nibble, byte and word.
(b) Differentiate between assembler and compiler.
(c) What do you mean by software? Explain it.
(d) What are features of second generation computer?

SECTION-A

Q.2. (a) Discuss the evolution of computers with salient features.
(b) What is memory? Explain primary and secondary memory.

Q.3(a) What is flow chart? Explain the various symbol used in flow chart. Draw a flow chart to calculate simple interest.
(b) What is an operating system? Discuss the various task performed by operating system.

Q.4 (a) Explain the working of system and application software.
(b) Convert the following:
   (i) \((567)_{10}\) into equivalent binary number
   (ii) \((111001010)_{2}\) into equivalent decimal number
   (iii) \((5467)_{10}\) into octal no
   (iv) \((1111100000011010)_{2}\) into Hexadecimal
   (v) \((12.5)_{10}\) into binary

SECTION-B

Q.5 (a) What are the various data types used in C language? Explain them.
(b) Write a program in C language to calculate the Gross salary of employee.

Q.6 (a) What are the various types of operators? Explain the assignment and logical operators.
(b) Write a program in C language to print \([1+3+5+...+99]\) i.e. the sum of odd Numbers up to 99.

Q.7 (a) Write notes on nested if-else-if operation.
(b) Explain case-switch statement with the help of suitable example.