UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)
उत्तराखंड मुक्त विश्वविद्यालय, हल्द्वानी (नैनीताल)

BCA 1ˢᵀ YEAR 1ˢᵀ SEMESTER ASSIGNMENT

Last Date of Submission: 15-Jan-2015

Course Title: Introduction to Computer Programming Using C

Course Code: BCA-02

Year: 2014-15

Maximum Marks: 40 Marks

Section 'A' contains 08 short answer type questions of 5 marks each. Learners are required to answers 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

1. Write a C program to print the diagonal elements of a 4*4 matrix.

2. What is a pointer variable. How we can access the elements of a one dimensional array using a pointer variable.

3. Discuss the usability of macro expansions and write a macro in C to calculate the square of a number.

4. Explain the difference between break and continue by writing a C program to print the all prime numbers less than 100.

5. How C handles file related operations, explain with examples.

6. Discuss the difference between while do- while and for loop with the help of suitable examples.

7. Write a C program for a simple calculator (addition, division, multiplication) using switch, case, break statements.

8. Define the following terms with example:
   (**a**) Dynamic memory allocation   (**b**) function prototyping

Section 'B' contains 04 long answer-type questions of 10 marks each. Learners are required to answers 02 questions only.

1. Discuss the different data types available in C. Differentiate between primary and secondary data types in C language using suitable examples.

2. How C language handles the loop control statements. Write a C program to multiply two 3*3 matrices.

3. What do you understand by the term 'storage classes'? Describe the different storage classes and their applications available in C.

4. What do you mean by call by value and call by reference; explain the difference by writing a function in C to swap the two numbers.