

Roll No.

97665

**B.C.A. 2nd Semester
Examination-May, 2015
C Programming**

Time & hour Paper-BCA-106

Time : 3 hours

Max. Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Attempt **five** questions. Q. 1 is **compulsory**. Select **one** question from each unit.

Section-A

1. (a) What are keywords ? How many keywords are there in C language?

- (b) What is data type?

- (c) Differentiate between local and global variable.
- (d) What is function prototype?
- (e) What are nested loops?
- (f) Why is switch statement required?
- (g) What is the difference between string constant and string variable?
- (h) What is array of string?

Section-B

Unit-I

2. (a) Where was C originally developed and by whom? Explain the structure of C Program.
- (b) (i) Differentiate between printf and scanf.
- (ii) What is meant by variable? In what ways variable differ from constant?

3. What is meant by hierarchy of operators? Provide a brief outline of all operators supported by C language along with their hierarchy within expressions with suitable examples.

Unit-II

4. (a) Write a program to determine whether a number is prime or not?
- (b) Differentiate:
- (i) While and do-while loop
 - (ii) Break and continue
5. (a) Explain Nested IF statement and ELSE IF ladder with example.
- (b) WAP in C language to find the smallest of three given numbers.

Unit-III

6. (a) What is the use of Recursion. WAP for finding the factorial of a given number.

- (b) Differentiate between Call by value and Call by reference with example.
7. (a) Differentiate getch(), getche(), gets() and getchar with example.
- (b) Explain various string manipulation function with example.

Unit-IV

8. (a) Differentiate auto, extern, static and register storage class.
- (b) What do you mean by Pointer. Explain various operations on pointer by using suitable example.
9. (a) WAP to find the addition of two matrices of order $m \times n$.
- (b) What is array? How can entire array be passed to a function ? Explain.