I Semester B.C.A. Degree Examination, November/December 2014
(Y2K8 Scheme) (F + R)
COMPUTER SCIENCE
BCA 105 : Programming Concepts Using C
(70 – 2011-12 and Onwards)
(60 – Prior to 2011-12)

Time : 3 Hours
Max. Marks : 70/60

Instructions : 1) Answer all questions.
2) Section – D is applicable to students who have taken admission in 2011-12 and onwards only.

SECTION – A

I. Answer any ten questions. Each question carries one mark. (10×1=10)
1) What is structured programming ?
2) What are global variables ?
3) What is reserved word ?
4) What is the difference between '/' and '%' ?
5) What do you mean by type conversion ?
6) What is format specifiers ?
7) What is the output of the following code ?
   int i = 1;
   while (i <= 32)
   {
     printf("%d", i);
     i = i * 2;
   }
8) How an array can be initialized ?
9) Define a string.
10) How to initialize a structure ?
11) What is meant by recursion ?
12) Define pointer. Give an example.

P.T.O.
SECTION – B

II. Answer any five questions. Each question carries three marks. (5x3=15)

13) What is a flow chart? Explain all flow chart symbols.
14) Explain conditional operator with example.
15) Explain the use of break and continue statement with example.
16) Write a program to find factorial of number using for loop.
17) Give the format specifiers for printf() for different datatypes.
18) Explain different operations on string.
19) What are formal and actual parameters?
20) Write a program to find the length of a string using library functions.

SECTION – C

III. Answer any five questions. Each question carries seven marks. (5x7=35)

21) Write a program to generate and print first ‘N’ Fibonacci numbers.
22) Explain the different bitwise operators available in C with example.
23) Differentiate between while and do-while loops. Illustrate with example.
24) Write a C program to search an element using linear search.
25) Explain the four storage classes available in C.
26) Write a C program to compute the sum of even numbers and sum of odd numbers using function.
27) How can a structure be declared with in another structure? Explain with an example.
28) Write a C program to reverse the string using pointers.

SECTION – D
(Only for 2011-12 and Onwards)

IV. Answer any one question. Each question carries ten marks. (1x10=10)

29) Discuss the different categories of user-defined functions. Illustrate with example.
30) Write a C program to find addition and substraction of two given matrices.