SN - 453

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

LIBRAR 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

! Answer any ten questions. Each question carries one mark.

 $(10 \times 1 = 10)$

- 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.



SECTION-B

II. Answer any five questions. Each question carries three marks.

 $(5\times3=15)$

- 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.

(5×7=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.

 $(1\times10=10)$

- 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.