



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

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. (10x1=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. (5×3=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 within 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. (1×10=10)

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