Bachelor of Computer Applications 2nd Semester
1046
COMPUTER PROGRAMMING AND PROBLEM SOLVING THROUGH C
Paper : BCA–204

Time Allowed : Three Hours] **[Maximum Marks : 90**

Note : Attempt **one** question each from Section and compulsory Question No. **9**. All questions carry equal marks. Non-programmable calculator is allowed.

SECTION–A

1. (a) What do you mean by Algorithm ? Write an algorithm to find largest of three numbers. 9

   (b) Briefly, explain the steps in development of a Program. 9

2. (a) What is C ? Discuss various input and output functions in C. 9

   (b) With help of a diagram, explain the structure of a C Program. 9

SECTION–B

3. (a) What is Operator ? Explain various bitwise operators available in C. 9

   (b) What do you mean by Storage class ? Describe various types of storage classes in C. 9

4. (a) What is a Function ? Draw the difference between call by value and call by reference. 9

(b) Defines loop. Explain various types of loops available in C. 9

SECTION–C

5. (a) Explain the use of array of structure in C with a program. 9

(b) What do you mean by Array ? Write a program in C to find product of two matrices. 9

6. (a) How can you represent one and two dimensional arrays in memory? 9

(b) Write a Program in C for Linear Search. 9

SECTION–D

7. What is File ? Elaborate various file operations in C with suitable examples. 18

8. (a) What do you mean by Pointer ? How can you declare and initialize pointer in C ? 9

(b) What is string ? Discuss various string handling functions available in C. 9

(Compulsory Question)

9. Write short notes on the following with help of example/diagram if needed :

    (a)   Union   2

    (b)   Flow Chart   2

    (c)   Debugging   2

    (d)   Logical Operators   2

    (e)   Recursion   2

    (f)   Switch Statement   2

    (g)   Symbolic Constant   2

    (h)   Nested IF   2

    (i)   Address Operator.   2