

K-24/2110

7615/N

Total No. of sheet used : 01                      Total No. of Questions: 09  
Subject : Programming Fundamentals using C  
Class : B.C.A. (Semester I)  
Paper : BCA-114  
Title of Paper : Programming Fundamentals using C  
Time Allowed : 3 Hours  
Maximum Marks: 75                                      Min. Pass Marks : 35%

**Note:** Candidates are required to attempt two questions each from sections A and B of the question paper and the entire section C.

**SECTION A**

- Q1. Discuss in detail the various phases of programming process. 15  
Q2. What are the various types of operators available in C? Discuss in detail with suitable examples. 15  
Q3. Elaborate various iterative constructs supported by C language with the help of suitable examples. 15  
Q4. Define functions. What are the advantages of using functions? What are the various methods of parameter passing to function? Explain. 15

**SECTION B**

- Q5. What is meant by lifetime and scope of variables and explain the various types of storage classes. 15  
Q6. What do you mean by string processing? List various string processing inbuilt functions available in C language? Give the syntax and purpose of any three. 15  
Q7. What do you mean structures? How structures are declared and initialized? Explain with example. How structures are different from unions? 15  
Q8. What is the difference between text and binary files? What are the I/O functions available in C for binary files? 15

**SECTION C**

- Q9. a) Differentiate between break and continue statement. 03  
b) Differentiate between user defined words and reserve words. 03  
c) What is recursion? 03  
d) How to declare and initialize a 2-D array? 03  
e) What are the advantages of pointer data type? 03