Exam. Code : 107202
Subject Code : 1943

B.C.A. Semester—II

INTRODUCTION TO PROGRAMMING (C)–II

Paper—I

Time Allowed—3 Hours]   [Maximum Marks—75

Note :— Attempt any **FIVE** questions. All questions carry equal marks. The students can use only non-programmable and non-storage type calculator.

1. What do you mean by string processing ? List various string manipulation inbuilt functions available in C language. Discuss any three with suitable examples.
      15

2. Write a program to read a line of text and print the number of characters and words in the line.   15

3. Elaborate with suitable examples the following storage classes – Automatic, External and Static.   15

4. (a) What are user defined data types ? What data structure is the most commonly used ?   7.5

 (b) What are self referential structures ? Explain giving suitable examples.   7.5

3081(2416)/QFV-49429   1   (Contd.)

5. (a) What is a structure ? How a structure is defined in C ? What are the operations that can be performed on a structure ? 7.5

(b) What is the difference between structure and union ? What are self referential structures ? How pointers to structures are used ? Explain giving a suitable example. 7.5

6. What do you mean by pointer data type ? What are its advantages and disadvantages ? How pointers are declared in C ? Discuss the process of initialization of pointers and accessing the values using pointers in C. 15

7. What is the difference between text and binary files ? What are the I/O functions available in C for binary files ? Explain with examples. 15

8. Write a program in C to read a text file and count the occurrences of any two vowels in succession. 15