C-PROGRAMMING AND DATA STRUCTURE – BAP–201

Semester–III

Time Allowed : Three Hours]   [Maximum Marks : 60

Note : Candidates are required to attempt *two* questions each from Sectin A and B. Section C is compulsory. Use of Non-programmable scientific calculator is allowed.

Section : A

1. What are various formatted and unformatted input output functions available in C ? Explain giving examples.   12
2. Write a program to print the palindrome numbers between any two given numbers.   12
3. Elaborate various storage classes supported by C language.   12
4. What do you mean by structure ? How structures are different from Union ? Explain with the help of suitable examples.   12

Section : B

5. What do you mean by Data Structures ? What is the use of data structures ? What are various

6. types of data structures ? Discuss in detail. 12
   Define an Array. What are the advantages and disadvantages of using array ? How an array is 12
   represented in memory ? What do you mean by traversing in an array ?
7. Define a Queue Data Structure. Write an alogrithm to insert and delete an element from a queue. 12
8. What do you mean by Searching ? List various searching techniques. Which searching technique
   you consider is the best and why ? Explain that searching technique you consider the best. 12

Section : C

9. Explain brief notes on the following :
   (a) What do you mean by Keywords ? Name any 10 keywords. 2
   (b) What do you mean by Recursion ? 2
   (c) Differentiate between Break and Continue Statement. 2
   (d) What do you mean by Time Space trade off ? 2
   (e) What do you mean by Traversing an Array ? 2
   (f) Compare Selection Sort and Bubble Sort. 2