BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)
B.C.A. Sem-II : WINTER : 2021
SUBJECT: C PROGRAMMING-II

Day : Wednesday
Date : 19-01-2022 **W-18761-2021**
Time : 02:00 PM-05:00 PM
Max. Marks: 60

N.B.:

1) Q 4 from Section I is COMPULSORY.
2) Answer ANY TWO questions from Q 1, 2, 3 in Section I.
3) Answer ANY TWO questions from Q 5, 6, 7 in Section II.
4) All question CARRY EQUAL marks.
5) Answers to Both the sections to be written in SAME answer book.
6) Draw a labeled diagram WHEREVER necessary.

SECTION - I

Q.1) Answer the following: (6 Marks X 2 = 12)

a) How a two dimensional array is represented in memory?
b) What is circular linked list? Explain with example.

Q.2) Answer the following: (6 Marks X 2 = 12)

a) What is Stacks? Explain stacks operations in details.
b) Why file handling is important? Explain following functions with example.
i) rewind() ii) fseek() iii) ftell() iv) fputs()

Q.3) Explain the following: (6 Marks X 2 = 12)

a) Explain traversal technique of binary tree.
b) Develop an algorithm for binary search.

Q.4) Write short notes on the following: Attempt ANY THREE (4 Marks X 3 = 12)

a) Array of Pointers
b) Dynamic memory management.
c) Push operation on stack
d) File pointer
e) Objectives of Data Structure

SECTION - II

Q.5) Answer the following: (6 Marks X 2 = 12)

a) Write a program to delete an element of array at position of user choice.
b) Write a program to delete an element from singly linked list.

Q.6) Answer the following: (6 Marks X 2 = 12)

a) Write a C program to implement a stack using Linked list.
b) Write a program to count the number of vowels and consonants in a file and replace all the occurrence of 'a' to 'A' and write it into a separate file.

Q.7) Explain the following: (6 Marks X 2 = 12)

a) Write a C program to implement binary tree.
b) Write a program to sort 20,35,40,100,3,10,15 using bubble sort.

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