

CDOE
BACHELOR OF COMPUTER APPLICATIONS (CBCS-2019 COURSE)
B.C.A. SEM - II : WINTER :- 2021
SUBJECT: C PROGRAMMING-II

Day : Wednesday
Date 9/2/2022

W-21859-2021

Time : 10:00 AM-01:00 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) Discuss the implementations of an ADT.
- b) Explain doubly linked list with advantage and disadvantage of it.

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

- a) What is stack? Explain it with example.
- b) What are the basic file operations in c programming? Explain with example.

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

- a) Define a binary tree. What do you mean by tree traversal?
- b) Compare the advantage and disadvantage of bubble and selection sort.

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

- a) Hash table
- b) Reverse-Order Traversal of doubly linked list
- c) Push operation on stack
- d) Sequential file organization
- e) Depth-First search technique

SECTION - II

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

- a) Write a program to search an element in array.
- b) Write a program to add new node to the ascending order linked list.

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

- a) Write a 'C' program to implement a queue using arrays.
- b) Write a program to reverse the contents of a file and print it.

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

- a) Write an algorithm to delete node from binary tree.
- b) Write C program to perform Binary search using recursion.
