

B.C.A. SEM-II (CBCS 2018 Course) : SUMMER - 2019

SUBJECT: C PROGRAMMING-II

Day: Monday
Date: 22/04/2019

S-2019-2055

Time: 10.00 AM TO 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 books.
- 6) Draw a labeled diagram WHEREVER necessary.

SECTION - I

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

- a) Explain various operations performed on data structures.
- b) What is circular linked list? How the end-of-list condition will be tested in circular linked list.

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

- a) What is Stacks? Explain stacks operations in details.
- b) What is a file? Explain how the file open and file close functions handled in 'C'.

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

- a) Describe different type of trees.
- b) Develop an algorithm for binary search.

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

- a) Non-atomic data
- b) Advantages of linked list
- c) infix, prefix and postfix notation
- d) Sequential file organization
- e) Differences between tree and graph

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 doubly linked list

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

- a) Write a C program to traverse a stack using Recursion.
- b) Write a program to convert the content of file to lowercase.

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

- a) Write a C program for depth first search of a graph.
- b) Write a program to sort 20, 35, 40, 100, 3, 10, 15 using bubble sort.
