S.D.E.

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

SUBJECT : C PROGRAMMING - II

Day : Saturday
Date : 04/05/2019

Time : 10.00 AM TO 1.00 PM
Max. Marks : 70

S-2019-4949

N.B.:

1) Solve **ANY FOUR** from Section – **I** and **ANY TWO** from Section – **II**.
2) Figures to the right indicate **FULL** marks.
3) Both the section should be written in SAME answer book.

SECTION - I

Q.1 What are stacks? How stacks are represented in memory? Write procedure for PUSH and POP operations. **(10)**

Q.2 What is binary tree? Discuss the binary tree traversal techniques with suitable example. **(10)**

Q.3 Differentiate between primitive and non-primitive data types. **(10)**

Q.4 Explain the following. **(10)**

a) Circular Linked List
b) Doubly Linked List

Q.5 What is hashing? Discuss any two hash functions. **(10)**

Q.6 What are the various methods of searching? Discuss and differentiate between them. **(10)**

SECTION - II

Q.7 Write an algorithm for merge sort. Sort the following numbers using merge sort. **(15)**

9 25 1 35 98 78 30 28 68

Q.8 What is file? Explain file opening modes. Write a programme to copy contents of source file into destination file. **(15)**

Q.9 What is an array? What are different types of arrays? Why it is necessary to give the size of an array in an array declaration? **(15)**

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