B.C.A. SEM–III (2014 COURSE) CBCS : SUMMER - 2018
SUBJECT: DATA STRUCTURES

Day: **Thursday** Time: **02.00 PM TO 05.00 PM**
Date: **03/05/2018** Max. Marks: 100

S-2018-1704

N.B.:

1) Attempt any **FOUR** questions from Section -I.
2) Attempt any **TWO** questions from Section – II.
3) Figures to the right indicate **FULL** marks.
4) Answers to both the sections should be written in **SAME** answer book.

SECTION-I

Q.1 Explain applications of stack. **(15)**

Q.2 Explain in detail Array implementation of queue. **(15)**

Q.3 Write a program to implement circular queue using Linked List. **(15)**

Q.4 What is binary tree? Explain Binary tree Traversals. **(15)**

Q.5 Explain in detail searching techniques. **(15)**

Q.6 What is Data structure? Explain types of data structures. **(15)**

Q.7 Write short notes on: **(15)**

a) Bubble Sort

b) ADT

c) Non-atomic Data

SECTION-II

Q.8 Write a program to sort 20, 35, 40, 100, 3, 10, 15 using quick sort. **(20)**

Q.9 Write an algorithm and program to find largest element from the array. **(20)**

Q.10 Write program to find specific element from the array using binary search. **(20)**

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