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2017 (2nd Semester)

BACHELOR OF COMPUTER APPLICATIONS

Paper No.: BCA-203 P

(Data Structure using C)

(Practical)

Full Marks: 75

Time: 3 hours

The figures in the margin indicate full marks for the questions

Answer *any* **two** questions from Section—A and *any* **one** question from Section—B

SECTION—A

(Marks: 30)

- **1.** Write a C program code for sorting from a list of numbers using selection sort.
- **2.** Write the C program code for stack using array and perform the following operations: 15
 - (a) Push an item into a stack
 - (b) Pop an item from a stack

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(c) Display the contents of a stack

3. Write a C program code to search any given number in an array using binary search.

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SECTION—B

(*Marks*: 20)

- **4.** Write a C program code for singly linked list and perform the following operations: 20
 - (a) Create nodes of a list
 - (b) Insert a node at intermediate position
 - (c) Delete a node at intermediate position
 - (d) Display the contents of a list
- **5.** Write a C program code for binary tree and perform the following operations: 20
 - (a) In-order traversal
 - (b) Pre-order traversal
 - (c) Post-order traversal

SECTION—C

(*Marks* : 25)

- **6.** Viva voce. 15
- **7.** Record book.
