

- (vi) Explain overflow and underflow conditions of a stack with examples.
- (vii) Describe the concept of free - storage list.
- (viii) What is the main difference B- tree and B+- tree ?

2 × 8 = 16

### UNIT - I

- 2. (i) Explain Big-Oh notation with the help of example. 8
- (ii) Explain various data structure operation. 8
- 3. (i) Define string and explain the string operation by giving suitable examples. 8
- (ii) What are the characteristics possessed by an algorithm ? 8

### UNIT - II

- 4. (i) Write a program that read two matrices A and B of order m\*n and compute the following  $C = A + B$ . 8
- (ii) Describe a method to convert an infix expression in to a postfix expression with the help of a suitable example. 8
- 5. (i) What is doubly ended queue ? Write a program/algorithm to implement a doubly ended queue (deque). 8

67071- (P-4)(Q-9)(19) (2)

- (ii) Explain the sparse array. How can you store the sparse array in memory ? Explain by giving suitable example. 8

### UNIT - III

- 6. (i) Explain the insertion and deletion operation of B- tree by giving suitable example. 8
- (ii) What is a circular linked list ? What are its advantages over linear linked list ? Write a program/algorithm to insert a node at desired position in a circular linked list. 8
- 7. (i) Define the following terms : 2 × 4
  - (a) Root
  - (b) Leaf nodes
  - (c) Empty tree
  - (d) Sub tree ()
- (ii) Describe binary search trees and its applications. 8

### UNIT - IV

- 8. (i) Define : 8
  - (a) Graph
  - (b) Multigraph
  - (c) Complete graph
  - (d) Connected graph
  - (e) Tree graph

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P. T. O.

Roll No. ....

57536

BBA 4th Semester (N. S.) 2014-17

Examination – May, 2019

HUMAN RIGHTS AND VALUE

Paper : BBAN-406

Time : Three Hours ]

[ Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

**Note :** Section – A is *compulsory*. Attempt *one* question from each unit in Section – B. All questions carry equal marks.

**SECTION – A**

1. Write short notes on the following :

- (a) Human Rights
- (b) Social Rights
- (c) Homeless
- (d) Over population
- (e) Terrorism

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P. T. O.