

Roll No. ....

**Y – 3640 (A)**  
**BCA (Fourth Semester) (SPECIAL) EXAMINATION,**  
**August 2021**  
**(SECOND CHANCE)**

Paper – BCA 403

**DATA STRUCTURE USING C++**

*Time : Three Hours*

*Maximum Marks : 80*

*Minimum Pass Marks : 32*

**Note**—Attempt *all* questions.

**Unit-I**

- |    |                                    |   |
|----|------------------------------------|---|
| 1. | Explain any one of the followings— |   |
|    | (a) Stack and its operations.      | 5 |
|    | (b) Recursion.                     | 5 |
|    | (c) Applications of Queue.         | 6 |

**Unit-II**

- |    |                                   |   |
|----|-----------------------------------|---|
| 2. | Explain any one of the following— |   |
|    | (a) Circular linked list.         | 8 |
|    | (b) Polynomial manipulation.      | 8 |

**Unit-III**

- |    |                                    |   |
|----|------------------------------------|---|
| 3. | Explain any one of the followings— |   |
|    | (a) Binary Tree.                   | 5 |
|    | (b) B+ tree                        | 5 |
|    | (c) Application of tree.           | 6 |

**Unit-IV**

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|----|-----------------------------------|---|
| 4. | Explain any one of the following— |   |
|    | (a) Spanning tree.                | 5 |
|    | (b) PERT.                         | 5 |
|    | (c) Breath first search.          | 6 |

**Unit-V**

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|----|--|---|
| 5. | Write short note on any <i>one</i> of the following— |   |
|    | (a) File organization.                               | 5 |
|    | (b) Bubble Sort.                                     | 5 |
|    | (c) Exchange Sort.                                   | 6 |