

Roll No. ....

**97674**

**BCA 2<sup>nd</sup> 4th Semester (Re-Appeal)  
Examination – October, 2020**

**DATA STRUCTURE-II**

Paper : BCA-207

Time : 1.45 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 :** Attempt any **three** questions. All questions carry equal marks.

1. Write short note on the following :
  - (a) B-Tree
  - (b) Graph
  - (c) Binary Search
  - (d) Records
2. Define AVL Search Trees. Also explain the insertion and deletion in AVL Search Tree.
3. Explain the following :
  - (a) Huffman's Algorithm
  - (b) M-way Search Tree

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4. Describe the Dijkstra algorithm for shortest path by using a suitable example.
5. Define Graph. Explain traversal of graph by using a suitable example.
6. Define Sorting and explain the following :
  - (i) Tournament Sort
  - (ii) Quick Sort
7. Explain the following :
  - (i) Linear Search
  - (ii) Merging
8. Describe the following :
  - (i) Classification of files
  - (ii) Fixed and variables length records
9. Define Hashing. Explain the hashing functions and collision resolution methods in detail.  
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