Mumbai Education Trust's

INSTITUTE OF ENGINEERING, NASHIK.

COMPUTER ENGINEERING DEPARTMENT

Subject : DSA	ASSIGNMENT NO – 05	Unit - V

1. What is **B+ tree**? Give structure of it's internal note.

   What is the difference between B and B+ tree.

2. Write an **algorithm to insert a node in B Tree**

3. Write an **algorithm of B tree deletion.**

4. Explain and **Algorithms B+ tree deletion** with example.

5. What **is trie tree**? Explain insert and search operation on it.

   & Explain with example trie tree. Give advantage and applications of trie tree.

6. Construct a **B-Tree** of order 3 by inserting numbers from 1 to 10.

7. **Construct a B Tree of order 5 with the following data :**

   D H Z K B P Q E A S W T C L N Y M

8. **Construct B-tree of order 4 by inserting the following data one at a time.**

   20, 10, 30, 15, 12, 40, 50

9. **Build B+ tree of order 3 for the following:**

   1, 42, 38, 21, 31, 10, 17, 7, 31, 25, 20, 18

10.   **Construct B tree of order 5 for the following data:**

    78, 21, 14, 11, 97, 85, 74, 63, 45, 42, 57

11.   **Insert the keys to a 5-way B-tree:**

    3, 7, 9, 23, 45, 1, 5, 14, 25, 24, 13, 11, 08, 19, 04, 31, 35, 56

12.   **Insert the following keys to a 5-way B tree**

    A, G, F, B, K , D, H, M, J, E, S, I, R, X, C, L, N, T, U, P

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13.   **What is B+ tree? Construct a B+ tree of order 4 for the following data.**

1, 4, 7, 10, 17, 21, 31, 25, 19, 20, 28, 42

14.   **Construct B+ tree of order 4 for the following data :**

C, N, G, A, H, E, K, Q, M, F, W, L, T, Z, D, P, R, X, Y

15.   **Construct B+ tree of order 3 for the following data**

1, ,4, 28, 21, 31, 10, 17, 7, 31, 15, 20, 18

****************** **Best of Luck** *******************

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