B-Tree is a self-balancing data structure designed to optimize data searching, addition, and deletion with enhanced memory efficiency. The insertion algorithm's time complexity is O(t.logtn), where 't' represents operations per node in main memory. Proposed by McCreight in 1972 and termed Height Balanced m-way Search Tree by Bayer, it's a specialized tree within data structures. In practice, the .dominant time factor is O(logtn), reflecting disk reads and writes