

B.I.T. Mesra – Doohar Campus

QUIZ – I, CS 241, Design and Analysis of Algorithms

Max Marks: 10

Duration: 45 Minutes

Class: B.Tech. IV

Branch: CSE

Note:

- Attempt all questions.
 - Give necessary examples and draw the necessary diagrams.
3. Write the algorithm / programme of insertion sort. Find the best case and worst case order of insertion sort. (5marks)
 4. Find the order of following recurrences:
 - c) $T(n) = 2 * T(n/2) + C * n$ (Use Master's Theorem)
 - d) $T(n) = 3 * T(n/4) + C * n^2$ (Use Recursion Tree Method)

***** Date of Exam: 05.02.2025 *****