

**M.E.S WADIA COLLEGE OF ENGINEERING, PUNE-411001**

**Department of Computer Engineering**

**Assignment:** – II (2019 PAT)

**A.Y -** (2025-26)

**Semester:** II

**Class:** BE

**Subject:** High Performance Computing (HPC)

**Date:**20/04/2026.

**CO Mapped-** CB19-410.6

**Marks:** 10

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1. What is kubernetes? Explain its feature & applications.
2. Explain BFS for parallel execution & analyze its complexity.
3. Compare an algorithm for sequential and parallel Merge sort. Analyze the complexity for the same.
4. Explain Parallel Depth First Search algorithm in detail.
5. Write short note on
  - a) GPU Applications.
  - b) Parallel merge sort.