

Code No: 155AB

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, September - 2021

ADVANCED OPERATING SYSTEMS

(Common to CSE, IT)

Time: 3 Hours

Max. Marks: 75

**Answer any five questions
All questions carry equal marks**

- 1.a) Discuss various issues in distributed operating system.
b) Explain in brief about communication primitives. [7+8]
2. Explain the following.
a) Vector clocks.
b) Termination detection. [8+7]
- 3.a) Explain Raymond's heuristic algorithm.
b) Explain Lamport's algorithm. [8+7]
- 4.a) Distinguish between token and non-token based algorithms.
b) Discuss in brief about the classification of mutual exclusion algorithms. [7+8]
- 5.a) Explain in brief control organizations for distributed deadlock detection.
b) Discuss the issues in deadlock detection and resolution. [8+7]
6. Explain in brief hierarchical deadlock detection algorithms. [15]
- 7.a) Discuss the features of distributed file systems.
b) Discuss about operating design issues. [8+7]
- 8.a) Explain the components of load distributed algorithm.
b) Discuss the requirements for load distributing. [8+7]

---ooOoo---