R19

Code No: **R194112D**

Set No. 1

IV B.Tech I Semester Advance Supplementary Examinations, March – 2023 DISTRIBUTED SYSTEMS

(Information Technology)

Time: 3 hours Max. Marks: 75 Answer any FIVE Questions ONE Question from Each unit All Questions Carry Equal Marks UNIT I Explain Message-passing system with example. 1 [7] What is parallel system? Explain them [8] b) What is synchronous mode communication? Explain them 2 [7] a) b) List out communication networks and disuses it. [8] **UNIT II** Write short note on the web service architectural patterns. 3 [7] a) Explain asynchronous distribute system with diagram [8] b) Disuses real-time ordering of events with diagram 4 a) [7] Explain security model with example. b) [8] **UNIT III** 5 Explain Lamport's algorithm a) [7] b) What do you mean by Deadlock? Write the necessary conditions for [8] the occurrence of deadlock in distributed system? (OR) Differentiate resource deadlock and communication deadlock. 6 [7] a) Explain the assumption model for deadlock detection. [8] b) **UNIT IV** Difference between blocking checkpoint and non-blocking checkpoint 7 a) [7] Explain coordinate check pointing with the help of diagram b) [8] 8 Difference between deterministic and non-deterministic events a) [7] Write an algorithm for asynchronous checkpoint b) [8] **UNIT V** 9 Explain Tapestry routing algorithm a) [7] b) Difference between Structured versus unstructured peer-to-peer systems [8] Disuses Strategies for effective search in peer-to-peer 10 a) [7] What is data indexing? Explain them. b) [8]