Code No: 158AU

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech IV Year II Semester Examinations, September - 2022
DISTRIBUTED SYSTEMS
(Common to CSE, IT)

Time: 3 Hours   **Max.Marks:75**

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

1.a) Explain the trends in distributed systems.
  b) Explain the architectural model of distributed system.   [7+8]

2.a) Elaborate the issues for Design of distributed systems.
  b) What are the characteristics of interprocess communication?   [7+8]

3.a) Explain the functions provided by operating system.
  b) Explain Invocations between address spaces.   [7+8]

4.   With a neat diagram, explain file service architecture.   [15]

5.a)
  b) Explain in detail about Routing Overlays.   [8+7]

6.a) Explain the Cristian's method for synchronizing clocks.
  b) Explain distributed mutual exclusion.   [8+7]

7.a) What is a lock? Explain the locking rules for nested transactions.
  b) Describe the operations for two-phase commit protocol.   [8+7]

8.a) Explain the architectural model for the management of replicated data.
  b) Discuss whether message passing or DSM is preferable for fault-tolerant applications.
                                                                                [7+8]

---oo0oo---