R15

Code No: 824AF

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA IV Semester Examinations, January - 2018
DISTRIBUTED SYSTEMS

Time: 3hrs   Max.Marks:75

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A

                                                                5 × 5 Marks = 25

1.a) Explain about interprocess communication.   [5]
  b) What is thread? Differentiate thread and process.   [5]
  c) Write down the features of squirrel system.   [5]
  d) What are the drawbacks of locking? Explain.   [5]
  e) Discuss about CORBA services.   [5]

PART - B

                                                                5 × 10 Marks = 50

2.a) What is firewall? Explain.
  b) Discuss about RPC in distributed environment.   [5+5]
                              OR
3.   Explain various architectures of distributed system.   [10]

4.a) Write a short notes on operating system features in distributed systems.
  b) Explain about X.500 directory service.   [5+5]
                              OR
5.   Explain the following.
     a) Virtual file system
     b) Client caching.   [5+5]

6.a) Write a short notes on distributed debugging.
  b) Discuss about peer to peer middleware.   [5+5]
                              OR
7.a) Discuss about napster system.
  b) What are the tasks of routing overlays?   [5+5]

8.a) Explain about distributed deadlocks.
  b) Discuss about system model and group communication.   [5+5]
                              OR
9.a) Explain about replication in distributed systems.
  b) Write a short notes on fault tolerant services in distributed systems.   [5+5]

10.a) Write a short notes on digital signatures.
   b) Explain about TLS.   [5+5]
                              OR
11.a) Discuss about distributed shared memory.
   b) Explain in detail about CORBA RMI.   [5+5]

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