DISTRIBUTED SYSTEMS

UNIT I

1. Define distributed systems?
2. Give examples of distributed systems.
3. Write the following
(i)HTTP (ii) HTML (iii) URL
4. What are the uses of web services?
5. Define heterogeneity.
6. What are the characteristics of heterogeneity?
7. What is the purpose of heterogeneity mobile code?
8. Why we need openness?
9. How we provide security?
10. Define scalability.
11. What are the types of transparencies?
12. Define transparencies.
13. Define System model.
14. What is the architectural model?
15. What is the fundamental model?
16. What are the difficult for treat and distributed system?
17. Define Middleware.
18. What are the different types of model?
19. Which type of network can be used by distributed system?
20. What are the different types of network?
21. Define latency.
22. What is the difference between networking and internetworking?
23. What is meant by networking?
24. What is meant by internetworking?
25. What are the different types of switching are used in computer networking?
26. Define protocol.
27. What is the function of router?
28. What is meant by internet protocol?
29. Define domain name.
30. Define mobile IP.

PART-B

1. a. Explain the Differences between intranet and internet
b. Write in detail about www
2. Explain the various challenges of distributed systems
3. Write in detail about the characteristics of inter process communication
4. a. Explain in detail about marshalling
b. Explain about the networking principles.
5. Describe in detail about client - server communication.
6. Write in detail about group communication.
7. Explain in detail about the various system models
8. a. Describe details about architectural model?
b. Describe details about functional model?
9. a. Explain the various types of networks?
b. What are the networking issues for distributed System?
10.Explain abut the internet protocols?

UNIT II

1. What is meant by interprocess Communication?
2. What is the difference between RMI and RPC?
3. Define Datagram.

4. What is the use of UDP?
5. What are the methods provides by datagram socket?
6. What are the characteristic of network hidden by stream abstraction?
7. What is the use of remote object references?
8. What is meant by client server communication?
9. What is meant by group communication?
10. What is the use of RMI registry?
11. What is meant by distributed garbage collection?
12. Explain the use of Reflection in RMI?
13. Define Name spaces.

. **PART-B**
1. a. Explain the Communication between distributed objects
b. Explain in detail about Events and Notifications
2. Explain in detail about Remote Procedure call with a case study
3. Describe java RMI
4. Explain about the group communication
5. Describe about the client server communication
6. a. Explain characteristics of interprocess communication.
b. Explain UDP datagram communication
7. Explain the various type communications.

UNIT-III
1.What are core OS Components?
2. What is meant by cluster?
3. Define Thread.
4. What is meant by address space?
5. What is meant by invocation performance?
6. Difference between monolithic and micro kernels
7. What is meant by cryptography?
8. What is the use of cryptography?
9. What is meant by distributed file system?
10. What are the different types of distributed file system available?
11. Define metadata.

PART-B
1. Explain Processes and threads
2. Explain Communication and invocation
3. Describe Operating system architecture
4. Explain the different types of cryptographic algorithm
5. Explain Global States and distributed debugging
6. Explain the algorithms for mutual exclusion
 7. a. Discuss about threads in distributed systems
b. Discuss about the distributed file system.
8. Explain about the file server architecture.
9. Explain about the Andrew file system.

UNIT-IV
1. What is the Name Spaces?
2. What is the domain name system?
3. Define directory services
4. What is the Berkeley algorithm?
5. Define global State.
6. What is the election algorithm?

PART - B
1. Explain in detail about Name services
2. Discuss in detail about domain name services.
3. Explain the case study of Global name services.
4. Explain the case study of X.500 directory services.
5. Explain about the Events and process state.
6. Explain about the Logical time and logical clocks.
7. Write the short notes Distributed mutual exclusion and elections.

UNIT-V
1. Define transaction
2 Define ACID properties.
3 Define Concurrency control.
4 What is meant by nested transactions?
5 Define strict two phase locking.
6 Define deadlock.
7 Difference between validation phase and update phase
8 Define time stamp ordering.
9 Define two-phase commit protocol.
10. Define Edge chasing.

PART - B
1. Explain in detail about concurrency control in transaction.
2 Discuss in detail about deadlock and locking schemes in concurrency control
3 a. Explain optimistic concurrency control
b. Explain in detail about comparison of methods of concurrency control
4 Explain Time stamp ordering in detail
5 Explain the concurrency control in distributed transactions
6 Explain about distributed deadlocks
7 Describe in detail about distributed deadlocks