SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY::PUTTUR
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QUESTION BANK(DESCRIPTIVE)

Subject with Code: DISTRIBUTED COMPUTING(16IT618)　　**Course & Branch**:B.Tech-CSIT
Year & Sem: IV B.Tech & II-Sem　　**Regulation:**R16

UNIT–I
CONCEPTS OF DISTRIBUTED SYSTEMS

1.	Define Distributed System. What are the advantages of distributed systems?	[L1][CO1]	[10M]
2.	Explain about Comparison of different Distributed Computing Models?	[L5][C02]	[10M]
3.	Describe Processor-Pool & Workstation Server Models of Distributed Systems?	[L1][CO1]	[10M]
4.	Demonstrate in detail about Software Concepts?	[L3][CO3]	[10M]
5.	Examine various issues related to design Distributed Systems?	[L4][CO4]	[10M]
6.	Write the different Addressing Techniques of Client-Server Model.	[L1][CO1]	[10M]
7.	Write a short notes on: a)World Wide Web 1.0 b) World Wide Web 2.0	[L1][CO1]	[10M]
8.	Discuss in detail about LAN and WAN technologies.?	[L6][CO6]	[10M]
9.	Discuss the architecture of OSI reference model.	[L6][CO6]	[10M]
10.	Explain in detail about ATM protocol reference model and Protocols for Distributed Systems?	[L2][CO2]	[10M]

UNIT–2

<u>INTERPROCESS COMMUNICATION</u>

1.	What is Message Passing? How Message Passing Approach does is differ from Shared memory approach.	[L1][CO1]	[10M]
2.	How Message Format is required in IPC? Explain the components of Message Format with diagram?	[L1][CO1]	[10M]
3.	Demonstrate IPC Synchronization in detail?	[L3][CO3]	[10M]
4.	Explain in detail about Buffering and Multi datagram Messaging?	[L2][CO2]	[10M]
5.	Examine process addressing techniques and failure handling in detail?	[L4][CO4]	[10M]
6.	Discuss in detail Formal Models for message passing systems?	[L6][CO6]	[10M]
7.	Explain in detail Broadcast and converge cast on a spanning tree?	[L2][CO2]	[10M]
8.	Explain Flooding and building a spanning tree in detail?	[L2][CO2]	[10M]
9.	Explain in detail about Constructing a DFS spanning tree with a specified root?	[L2][CO2]	[10M]
10.	Explain Constructing a DFS spanning tree without a specified root in detail?	[L2][CO2]	[10M]

UNIT–3

REMOTE COMMUNICATION AND ELECTION ALGORITHM

1.	Define RPC. Explain about RPC implementation and RPC Communication in detail?	[L1][CO1]	[10M]
2.	Explain in detail about RMI Implementation and Java RMI?	[L2][CO2]	[10M]
3.	Demonstrate Clock synchronization and Logical clocks in detail?	[L3][CO3]	[10M]
4.	Explain in detail about Global State and Mutual Exclusion?	[L2][CO2]	[10M]
5.	Distinguish between Bully algorithm and Ring algorithm?	[L4][CO4]	[10M]
6.	Discuss in detail about Leader election in rings and Anonymous rings?	[L6][CO6]	[10M]
7.	Compare between Asynchronous rings and Synchronous rings?	[L5][CO5]	[10M]
8.	Explain in detail about Election in Wireless Networks?	[L2][CO2]	[10M]
9.	Discuss in detail about Deadlocks in Distributed systems?	[L6][CO6]	[10M]
10.	Explain Deadlocks in Message communication in detail?	[L2][CO2]	[10M]

UNIT–4

DISTRIBUTED SYSTEM MANAGEMENT

1.	Discuss in detail about Resource management?	[L6][CO6]	[10M]
2.	Examine steps in Task management approach in detail?	[L5][CO5]	[10M]
3.	Distinguish between Load balancing approach and Load sharing approach?	[L4][CO4]	[10M]
4.	Explain Load balancing approach in detail?	[L2][CO2]	[10M]
5.	Explain Load sharing approach in detail?	[L2][CO2]	[10M]
6.	Distinguish between Process Management and Process migration?	[L4][CO4]	[10M]
7.	Explain in detail about Process Management?	[L2][CO2]	[10M]
8.	Explain about Process migration in detail?	[L2][CO2]	[10M]
9.	Explain about threads and fault tolerance?	[L2][CO2]	[10M]
10.	Discuss in detail about fault tolerance?	[L6][CO6]	[10M]

UNIT–5

DISTRIBUTED SHARED MEMORY

1.	Define Hardware DSM and explain about Design issues in DSM systems?	[L2][CO2]	[10M]
2.	Demonstrate Implementation issues of Distributed Shared Memory in detail?	[L3][CO3]	[10M]
3.	Examine Heterogeneous and other DSM systems in detail?	[L4][CO4]	[10M]
4.	Discuss in detail about Naming and its Features?	[L6][CO6]	[10M]
5.	Explain in detail about System oriented names?	[L2][CO2]	[10M]
6.	Explain in detail about Object locating mechanisms?	[L2][CO2]	[10M]
7.	Examine Various Issues in designing human oriented names?	[L4][CO4]	[10M]
8.	Discuss in detail about Name caches?	[L6][CO6]	[10M]
9.	Explain in detail about Naming and security?	[L2][CO2]	[10M]
10.	Explain about DNS in detail?	[L2][CO2]	[10M]

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