DC important question

Module 1

2 marks:

Define distributed system. List different goals of distributed system?
Explain the significance of Distributive Pervasive system
Describe Access and Relocation Transparency
Describe Distributed information system in short
List three common challenges in distributed system design.
Compare Centralized and Distributed System
List down advantage of Distributed System

5 marks:

Analyze design issues of distributed system
Describe Distributed Computing System and its types
Identify and explain Models of Distributed System
Compare Tightly coupled and Loosely coupled System
Illustrate Middleware and types of services offered by middeware
Evaluate different types of Transparency in Distributed System
Illustrate applicatons of Distributed System

Module 3:

2 marks:

State examples for the following message communication models. 1. Transient Synchronous 2. Persistent Asynchronous
State examples for the following message communication models. 1. Transient Asynchronous 2. Persistent Synchronous
Draw RPC call message format
Identify use of message queue
Define group communcation in distrubuted system
Define Interprocess communication

5 marks:

Analyze different features of good message passing system
Compare and contrast synchronous and asynchronous communication in distributed systems.
Analyze characteristics of Interprocess communication
Illustrate design issues of RPC call
Analyze call semantics of RPC

Analyze call semantics of RMI
Analyze different types of group communication in distributed system

Module 3:

2marks

State Logical clock conditions and implementation rule
Evaluate the logical clock. If sending time is 6 units and receiving time is 10 units, and if sending time is 48 units and receiving time is 40 units, then what would be the modified received time in both cases?
Illustrate what happens in the Ring Election Algorithm when two processes detect a server crash at the same time.
Illustrate the properties of the Qorum set of Meakawa's Algorthim.
Compare the performance parameters of non-token-based Algorthim
Explain diffrence Clock drift and clock screw
Describe advantage of Token Based Alogrthim

5 marks:

Illustrate method for Physical Clock Synchronization for passive mode.
Illustrate method for Physical Clock Synchronization for Active mode.
Illustrate Lamport Distributed algorithm of non-token based distributed mutual exclusion
Illustrate Ring Election Algorthim with sutiable example
Evaluate by considering Send a request at T0 = 5:08:15:100 and receive a response at T1 = 5:08:15:900, both on the client side, and consider the response message at T_Server = 5:09:25:300. Obtain T_Client after the response is received.
Illustrate with example Centralized approach of Mutual Exclusion Algorthim
Illustrate Vector clock in distributing computing with example