

## **UNIT-I**

### **Chapter 1 Characterization of D.S.**

- 1) Define Distributed System & discuss its characteristics. Give examples for Distributed Systems.
- 2) List the challenges in distributed systems. Explain in detail any two of them.

### **Chapter -2 SYSTEM MODELS**

- 3) Define Architecture Model. Mention its goal & explain the following with an example.  
i) Mobile Code ii) Mobile Agent    iii) Proxy Server & Cache    iv) Peer-Peer network
- 4) **Scenario** Karnataka Bank uses KBL Mobile APP for its customer to make their day to day transactions hassle free. Customer can login into their account by using password or finger print authentication. Customer can do various types of transactions in online mode like pay their credit card due amount etc... Analyze the above scenario by using Failure Model and also identify the various classes of failures the customer can face during transactions.
- 5) Summarize the following design requirements for Distributed Architectures;  
i) Performance Issues ii) Quality of Service

## **UNIT-II**

### **Chapter 4 : IPC**

1. Explain the characteristics of IPC.
2. Compare & Contrast between Synchronous & Asynchronous communication in the context of IPC.
3. Consider any Multimedia Application, Analyze the failure model of Request/Reply protocol in client-server Communication using UDP and also explain all the solutions.
4. Develop the block diagram for client server model by using UDP & also write syntax for three java methods used in client server model.
5. Define Marshalling. Construct a marshalled form that represents a Organization with instance variable values :{ 'KLSGIT','BELGAUM', 1979, 590008} by using CORBA-CDR & Java Serialization.