#### UNIT-II

## **Chapter 4: IPC**

- 1. Explain the characteristics of IPC.
- 2. Compare & Contrast between Synchronous & Asynchronous communication in the context of IPC.
- 3. Discuss issues relating to datagram communication.
- 4. Explain Characteristics and issues related to stream communication.
- 5. Define marshalling and unmarshalling.
- 6. Define Marshalling. Construct a marshalled form that represents a Organization with instance variable values :{ 'KLSGIT', 'BELGAUM', 1979, 590008} by using CORBA-CDR & Java Serialization.

#### **UNIT II**

### **Chapter 5: Distributed objects and Remote invocation**

- 1. Explain communication between distributed objects by means of RMI.
- 2. Explain remote and local invocation with the neat diagrams.
- 3. Discuss RMI invocation semantics and tabulate failure handling mechanism for each.
- 4. Define RPC and With neat diagram explain its implementation

# UNIT III DFS

- 2. Discuss model architecture of distributed file system and its components.
- 3. With a neat diagram explain the components of file service architecture in brief w. r.t. following; i) Flat File Service ii) Directory Service lii) Client Module
- 4. List out file system modules.
- 5. Sketch the file attributes and record structure.
- 6. List out the transparencies in file system.
- 7. List the directory service operation.
- 8. Describe the characteristics of file system
- 10. Discuss the distributed file system design requirements.

### **SECURITY**

- 1. Write the steps of RSA Algorithm. Illustrate with an example given P=3 & Q=11.
- 2. Analyze the following uses of Cryptography with suitable scenarios.
  - i) Secrecy and integrity ii) Authentication
- 3. Discuss asymmetric (public/private key pair-based) cryptography technique and how it can be used in supporting security in distributed systems.