**20IT5301-Computer Networks**

**Possible Questions**

**Unit-1**

1. Uses of Computer Networks
2. Classification of networks according to transmission technology and scale
3. Connection-Oriented Versus Connectionless Service
4. OSI REFERENCE MODEL
5. The TCP/ I P Reference Model
6. Design Issues for the Layers
7. Packet switching and Circuit switching

**Unit-2**

1. Principles of Network Applications
2. The Web and HTTP
3. FTP
4. SMTP
5. DNS
6. Connectionless Transport: UDP
7. Connection-Oriented Transport: TCP
8. TCP Congestion Control

**Unit-3**

1. Virtual Circuit and Datagram Networks
2. IPv4 & IPv6 Datagram Format
3. IP Addressing and Subnetting
4. Network Address Translation (NAT)
5. Routing Algorithms (Link state and distance vector)
6. Error Detection and Correction Techniques
7. MAC Addressing
8. Ethernet Format and technologies

**Unit-4**

1. Wireless Links and Network Characteristics
2. CDMA
3. The 802.11 Wireless LANs Architecture
4. Mobile IP
5. Principles of Cryptography(Symmetric key and public key cryptography)
6. DES , AES algorithm
7. RSA algorithm
8. Define firewall? Explain the types of firewall