



**Semester End Examination - January 2022**

**Course Code : CSE 601 Course Name : High Performance Networking**

**School of Engineering & Information Technology**

**Programme: M.Tech (CSE)**

**Time: 3 hrs**

**Semester: III**

**Max. Marks:100**

**PART – A (10 questions X 2 marks = 20 Marks)**

**Answer ALL the Questions**

1. Attempts all parts. All parts carry equal marks. Write answer of each part in short.
  - a. When queue will be formed in a network? [2]
  - b. What are the Considerations for Traffic Management in Congested Network? [2]
  - c. What is the difference between Hub, Switch, and Router? [2]
  - d. What is DNS? [2]
  - e. What is a Proxy Server and how do they protect the computer network? [2]
  - f. What is a VPN? [2]
  - g. What is the difference between Firewall and Antivirus? [2]
  - h. Why is layered architecture of network preferred? [2]
  - i. Discuss about any two methods of framing. [2]
  - j. Mention the advantages of fiber optics [2]

**PART – B (4 questions X 5 marks = 20 Marks)**

**(Answer all questions)**

2. With related diagram, explain 'Media Access Control' sub-layer. What do the MAC standards specify? [5]
3. Specify the generic applications of IP protocols [5]
4. What are the Attributes of global network? [5]
5. Compare TCP and IP services. [5]

**PART – C (3questions X 10 marks = 30 Marks)**

**Answer Three out of Four Questions**

6. What do you mean by multicast IP? Discuss about providing reliability in multicasting. [10]
7. Distinguish between FTP and TFTP. [10]
- 8.(a) Describe elaborately ADSL modem technology [10]  
(b) Enumerate SONET layers and briefly describe their functions with a neat diagram.
9. Which are the two sub layers of ATM Adaptation Layer (AAL)? Describe their responsibilities with the help of a diagram. [10]

**PART – D (2questions X 15 marks = 30 Marks)**

**Answer Two out of Three Questions**

10. Explain: i) Label switching ii) Queuing algorithms. [15]
11. Explain the Quality of Service (QoS) parameters of ATM. [15]
12. Write notes on any two: [15]  
i) VOIP ii) RSVP iii) Mobile adhoc networks iv) Bluetooth