



B.Tech VII Semester Supplementary Examinations, July 2022
COMPUTER NETWORKS

(ECE)

Maximum Marks: 70

Date:04.07.2022 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 Can you discriminate between bandwidth and latency?
- 2 Classify about types of major classes of guided media.
- 3 Draw the two types of networks of Bluetooth: piconet and scatternet.
- 4 Can you explain the frame format of Ethernet?
- 5 Can you discover the sketch of IPv6 Packet Header?
- 6 Can you summarize the two different classes of routing protocol?
- 7 Measure the performance of TCP State Transition Control.
- 8 Develop the value or importance of Congestion Window.
- 9 How would you discover MIME types and subtypes?
- 10 Can you list the five types of HTTP result codes?

Part-B

Answer All the following questions.

(10M X 5=50Marks)

- 11 Explain OSI architecture with a neat diagram. (10)
OR
- 12 Four channels, two with a bit rate of 200 kbps and two with a bit rate of 150 kbps, are to be multiplexed using multiple-slot TDM with no synchronization bits. Answer the following questions:
 - a. What is the size of a frame in bits?
 - b. What is the frame rate?
 - c. What is the duration of a frame?
 - d. What is the data rate? (10)
- 13
 - a. Define three types of addresses. (5)
 - b. Explain about ARP operation? (5)
OR
- 14 Use IEEE 802.3 and IEEE 802.11 to generalize the differences between wired and wireless LANS. (10)
- 15
 - i. Describe in detail about RIP. (5)
 - ii. Discuss about subnetting. (5)
OR

- 16 i. Point out the function of DVMRP? Narrate in detail.(5)
ii. Describe in detail the operation of OSPF protocol by considering a suitable network.
(5)
- 17 a) Illustrate in detail about UDP header format with neat sketches. (5)
b) Describe in detail about UDP message queue technique with neat sketch. (5)
- OR
- 18 How is congestion controlled? Explain in detail about congestion control mechanisms in the transport layer. (10)
- 19 a) Summarize the request message format of HTTP.(5)
b) Summarize the response message format of HTTP.(5)
- OR
- 20 Describe in detail about the following in Electronic mail.
i. Message format ii. Message transfer iii. Mail reader