Code No:**R1641043** **R16** **Set No. 1**

**IV B.Tech I Semester Supplementary Examinations, February- 2020**

# COMPUTER NETWORKS

**(Common to Electronics & Communication Engineering and Electronics & Instrumentation Engineering)**

**Time: 3 hours** **Max. Marks: 70**

***Question paper consists of Part-A and Part-B***
***Answer ALL sub questions from Part-A***
***Answer any FOUR questions from Part-B***
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## PART–A *(14 Marks)*

| | | | |
|---|---|---|---|
| 1. | a) | What do you mean by Multipoint link? | [2] |
| | b) | Write the Fourier Series Equation. | [2] |
| | c) | List types of Error Correcting Methods. | [2] |
| | d) | What are the 2 main functions of the MAC sublayer? | [3] |
| | e) | What is the significance of Router? | [2] |
| | f) | Why is an application such as POP needed for Electronic Messaging? | [3] |

## PART–B *(4x14 = 56 Marks)*

| | | | |
|---|---|---|---|
| 2. | | Discuss the various topologies of the Network with neat sketch | [14] |
| 3. | a) | With neat sketch explain Twisted pair cables and with neat graph explain the performance of Twisted Pair Cables. | [7] |
| | b) | With an example explain the sliding window Flow Control mechanism. | [7] |
| 4. | a) | What is Framing? Discuss different types of Framing techniques. | [7] |
| | b) | Explain Simplex Stop and Wait Protocol for an Error free channel with suitable example. | [7] |
| 5. | a) | Discuss the 802.11 MAC SubLayer Protocol. | [7] |
| | b) | What is Pure ALOHA and Slotted ALOHA? Mention the advantages of slotted ALOHA. | [7] |
| 6. | a) | Explain various Approaches to Control Congestion. | [7] |
| | b) | Write a note on Traffic Throttling and Load Shedding. | [7] |
| 7. | a) | Discuss about the Header Format of UDP. | [7] |
| | b) | Write about Electronic Mail in detail. | [7] |



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