# B.Tech (Fourth Semester Computer Science and Engineering (C.B.C.S))
## End Semester Examination Summer – 2023
### Course Name: Computer Network

Course Code: **BCS2406**

Time: 3 Hours]

ADS/ EVK5634J/3107

[Max.Marks: 60

**Instructions to Candidates:**
1. *All questions carry marks as indicated.*
2. *All the sub- questions (a, b, c, d, and e) of Que.1 in Section A are compulsory.*
3. *Solve any two sub-questions in Que. 2 to Que.6 in Section B.*
4. *Assume suitable data wherever necessary.*
5. *Use of non-programmable calculator is permitted.*

## Section – A

**Que.1**

| | | |
|---|---|---|
| **a)** | Enlist applications of Networks. | 2 (CO1) |
| **b)** | Define the term data link layer. | 2 (CO2) |
| **c)** | List the responsibilities of network layer. | 2 (CO3) |
| **d)** | Short Notes on Slotted aloha. | 2 (CO4) |
| **e)** | Distinguish between Email and Web mail. | 2 (CO5) |

## Section – B

**Que.2**

| | | |
|---|---|---|
| **a)** | Describe the terms simplex, half duplex, full duplex. | 5 (CO1) |
| **b)** | Illustrate guided transmission media. | 5 (CO1) |
| **c)** | Explain star, bus, ring, hybrid topology in computer network. | 5 (CO1) |

**Que.3**

| | | |
|---|---|---|
| **a)** | Explain types of errors.<br>i) Single bit.<br>ii) Burst error.<br>iii) Multibit error. | 5 (CO2) |
| **b)** | Explain sliding window protocol. | 5 (CO2) |
| **c)** | Explain the term bit stuffing and byte stuffing with suitable diagram. | 5 (CO2) |

**Que.4**

| | | |
|---|---|---|
| **a)** | Explain the terms Unicast, Multicaste, Broadcast. | 5 (CO3) |
| **b)** | Differentiate between static and dynamic routing. | 5 (CO3) |
| **c)** | With example explain D'Jiktras algorithm to find out shortest path. | 5 (CO3) |

**Que.5**

| | | |
|---|---|---|
| **a)** | Explain token ring and token bus concept. | 5 (CO4) |
| **b)** | Explain reservation-controlled access protocol. | 5 (CO4) |
| **c)** | Explain the term TCP and UDP. | 5 (CO4) |

**Que.6**

    **a)** Describe concept of Email and state its types.            5 (CO5)

    **b)** Illustrate the mechanism of FTP with neat diagram.         5 (CO5)

    **c)** Explain Aspects of network security.               5 (CO5)

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