## SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
### (AUTONOMOUS)
**MCA I Year II Semester Regular & Supplementary Examinations June/July-2025**
### COMPUTER NETWORKS

**Time: 3 Hours**             **Max. Marks: 60**

(Answer all Five Units **5 x 12 = 60** Marks)

### UNIT-I

| | | | | | |
|---|---|---|---|---|---|
| 1 | | Describe the Transmission Media and their types of Transmission Media. | CO3 | L2 | 12M |
| | | **OR** | | | |
| 2 | a | What is pure ALOHA and slotted ALOHA? | CO1 | L1 | 6M |
| | b | Explain about TDM. | CO2 | L1 | 6M |

### UNIT-II

| | | | | | |
|---|---|---|---|---|---|
| 3 | a | Explain distance vector routing algorithm. | CO2 | L1 | 6M |
| | b | Explain shortest path routing. | CO2 | L1 | 6M |
| | | **OR** | | | |
| 4 | | Show the general principles of various congestion control algorithms. | CO5 | L1 | 12M |

### UNIT-III

| | | | | | |
|---|---|---|---|---|---|
| 5 | a | Explain the detailed about types of Fragmentation. | CO1 | L1 | 6M |
| | b | Discuss about multicasting techniques & protocols. | CO3 | L2 | 6M |
| | | **OR** | | | |
| 6 | | What is ATM? Describe detail about ATM. | CO1 | L1 | 12M |

### UNIT-IV

| | | | | | |
|---|---|---|---|---|---|
| 7 | a | Evaluate functions of transport layer, state transport service primitives. | CO6 | L5 | 6M |
| | b | Discuss various flow control mechanisms in transport layer. | CO3 | L2 | 6M |
| | | **OR** | | | |
| 8 | | How does UDP differ from TCP? List the applications of UDP. | CO1 | L1 | 12M |

### UNIT-V

| | | | | | |
|---|---|---|---|---|---|
| 9 | | Explain briefly about the DNS, MIME. | CO1 | L2 | 12M |
| | | **OR** | | | |
| 10 | | Describe details about Cryptographic algorithms. | CO1 | L2 | 12M |

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