Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐   **Total No. of Pages : 02**

Total No. of Questions : 18

B.Tech (CSE)   (Sem.–5)
COMPUTER NETWORKS
Subject Code : CS-303
Paper ID : [A0465]

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

INSTRUCTIONS TO CANDIDATES :
 1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
 2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
 3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Answer briefly :

1. Differentiate serial and parallel transmission.

2. What are transmission impairments?

3. Write the advantages of optical fiber over twisted pair.

4. Discuss digital to analog conversion.

5. Discuss Shannon Capacity.

6. What is the purpose of X.21?

7. What are virtual circuit networks?

8. Define LRC.

9. Explain EIA-530.

10. Discuss QoS in Networks.

SECTION-B

11.   What are the benefits of media computerization?

12.   How the interface between DTE and DCE is possible in digital communication?

13.   Compare and contrast circuit switching and packet switching?

14.   What is multiplexing? Compare TDM with FDM?

15.   How Network Management systems are used in computer networks for troubleshooting?

SECTION-C

16.   Define spread spectrum? What are goals of frequency hoping spread spectrum?

17.   What do you mean by error detection and correction? Discuss cyclic redundancy check?

18.   Explain the protocols used in layers of OSI Model?