



R18 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

Subject code: 2P5EB

B.Tech V Semester Supplementary Examinations, June 2022
COMPUTER NETWORKS
(Computer Science and Engineering)

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 What is Intranet?
- 2 What is switching?
- 3 Explain about framing?
- 4 Expand CSMA and CSMA/CD?
- 5 What is Virtual circuit ?
- 6 How to route the packets in Datagram subnets?
- 7 What are the problems with congestion?
- 8 Draw the structure of UDP Header format
- 9 What is the significance of DNS?
- 10 What is URL?

Part-B

Answer All the following questions.

(10M X 5=50Marks)

- 11 a) Explain different Networks WAN, LAN, MAN
b) With neat sketch explain Twisted pair cables, connectors of twisted pair cables with neat graph explain the performance of Twisted pair cables. [5+5]
OR
- 12 a) Explain the functions of various layers in TCP/IP reference model?
b) Explain ATM? [5+5]
- 13 a) What is the need of Flow control? Explain the common approaches for flow control in data link layer
b) Explain Collision-Free Protocols. [5+5]
OR
- 14 a) Explain CRC with example?
b) Explain the working of Multiple Access Protocols. [5+5]
- 15 a) Difference between Virtual circuit and Datagram subnets?
b) Explain the Hierarchical routing protocol with an example. [5+5]
OR
- 16 a) Explain Distance vector Routing?
b) With an example explain the shortest path routing algorithms used in computer networks. [5+5]
- 17 a) What are the general principles of congestion control? Explain.

- b) Explain about UDP protocol? [5+5]
- OR
- 18 a) How is the Connection - Oriented Services implemented? Explain.
b) Explain about TCP protocol? [5+5]
- 19 a) What is the role of S/MIME
b) Write a short note on e-mail. [5+5]
- OR
- 20 a) Differentiate static, dynamic and active documents used in World Wide Web.
b) Discuss the role played by the message transfer agent. [5+5]