



R18 Regulation

Subject code: 2P5EB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech V Semester Supplementary Examinations, January 2023

COMPUTER NETWORKS

(Computer Science and Engineering)

Maximum Marks: 70

09-01-2023

Duration: 3 hours

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 What are the two interfaces provided by protocols?
- 2 State the purpose of layering in networks?
- 3 Mention the types of error correcting methods.
- 4 What is the purpose of hamming code?
- 5 What are the functions of mac?
- 6 What do you mean by ARP
- 7 Define congestion
- 8 List the flag used in TCP header.
- 9 What is SMTP
- 10 What is the domain name system responsible for?

Part-B

Answer All the following questions.

(10M X 5=50Marks)

- 11 Illustrate TCP/IP reference model with a neat diagram. [10]

OR

- 12 What are the different types of error detection methods? Explain the CRC error detection technique using generator polynomial x^4+x^3+1 and data 11100011. [10]

- 13 Write in detail about error detection & correction techniques. [10]

OR

- 14 What is the need of Framing? Explain character stuffing and bit stuffing for framing. [10]

- 15 Explain: a) ICMP b) IGMP [5+5]

OR

- 16 a) Elucidate Distance Vector Routing Algorithm with example.

- b) Describe the problem and solutions associated with distance vector routing. [5+5]

17 Explain about data traffic in detail. [10]

OR

18 a) Explain the general principles of congestion control.
b) Describe congestion control in datagram subnets. [5+5]

19 What is electronic mail? Explain about the protocols associated with the electronic mail system.
[10]

OR

20 a) Explain Real-time transport protocol.
b) When user clicks a hyperlink, what are the steps that occur between the user's click and the page being displayed? [5+5]