



R18 Regulation

Subject Code: 206DD

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, February 2024

COMPUTER NETWORKS

(ECE)

Maximum Marks: 70

Date: 24.02.2024 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) | | CO | Bloom Tx |
|--|--|-----|----------|
| 1 | What are the advantages and draw backs of mesh topology? | CO1 | L1 |
| 2 | What are the Modes of Optical Fiber? | CO1 | L1 |
| 3 | Define single-bit error and burst error? | CO2 | L1 |
| 4 | Explain the term Flow control | CO2 | L1 |
| 5 | What is the difference between port number and IP address? | CO3 | L1 |
| 6 | Discuss in brief about DHCP | CO3 | L1 |
| 7 | What are the responsibilities of Transport Layer? | CO4 | L1 |
| 8 | Draw TCP and UDP header format. | CO4 | L1 |
| 9 | Compare HTTP and FTP | CO5 | L2 |
| 10 | What is the significance of DNS? | CO5 | L1 |

Part-B

| Answer All the following questions. (10M X 5=50Marks) | | | |
|---|---|-----|----|
| 11 | Illustrate neat diagram of ISO/OSI model and explain. [10] | CO1 | L2 |
| | OR | | |
| 12 | A) Explain Circuit switching in detail with diagram. [5] B) Explain the differences between switching methods. [5] | CO1 | L5 |
| 13 | Discuss protocols of data link layer. [10] | CO2 | L5 |
| | OR | | |
| 14 | Explain the CRC error detection technique using generator polynomial x^4+x^3+1 and data 11100011 [10] | CO2 | L5 |
| 15 | Draw and explain each field in the IPV4 datagram format. [10] | CO3 | L5 |
| | OR | | |
| 16 | How ICMP and IGMP differ from each other? In which layer do these protocols works. [10] | CO3 | L4 |
| 17 | Discuss different factors affecting congestion control algorithms. [10] | CO4 | L5 |
| | OR | | |
| 18 | Explain Transmission Control protocol in brief. [10] | CO4 | L5 |

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|----|--|-----|----|
| 19 | What is DNS? Differentiate between recursive and iterative queries. Explain the formats of the query and response messages used in DNS. [10] | CO5 | L4 |
| | OR | | |
| 20 | Describe various parts of E-Mail address and show the process of sending and receiving e-mails. [10] | CO5 | L4 |