



R18 Regulation

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

Subject code: 2P5FB

B.Tech V Semester Regular Examinations, February 2021

Computer Networks
(Information Technology)

Maximum Marks: 70

Date: 19.02.2021 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 the difference between half duplex, full duplex transmission modes?
- 2 What is meant by peer to peer network?
- 3 Define vulnerable time.
- 4 Define piggy backing.
- 5 What is the main difference between unicast and multicast?
- 6 What are the five categories of connecting devices?
- 7 What is minimum and maximum size of TCP header?
- 8 Discuss various Application Layer Protocols.
- 9 Compare Blue Tooth and Zig bee.
- 10 What is the significance of Firewall?

Part-B

Answer All the following questions.

(10M X 5=50Marks)

- 11 Illustrate neat diagram of ISO/OSI model and explain its difference from TCP/IP Model. (10M)

OR

- 12 Compare and contrast a circuit switched network and a packet switched network. (10M)

- 13 What are the three multiple access protocols and explain briefly about them with examples. (10M)

OR

- 14 Explain the following ARQ techniques in detail (5M + 5M)
i) Stop and wait ARQ ii) go-back-N ARQ.

- 15 Define address space and explain the differences between Internet Protocols IPv4 and IPv6. (10M)

OR

- 16 Name the three transition strategies and explain the differences between them. (10M)
- 17 Compare UDP and TCP in brief and Illustrate the TCP connections. (10M)
- OR
- 18 Write a short notes on
(a) DNS (b) Electronic mail. (5M +5M)
- 19 a) Define Simple Network Management Protocol (SNMP) and how it works? (5M)
b) What are the other two protocols used by SNMP? (5M)
- OR
- 20 Define IP security (IPsec) and explain operation modes, and other protocols used in the IPsec. (10M)