R18 Regulation *Subject code: 2P5FB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, June 2022

COMPUTER NETWORKS

(Information Technology)

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 Explain Guided Media and Unguided Media?
2 What is Circuit Switched Networks?
3 What is Giga-Bit Ethernet?
4 Explain the term Flow Control and Error Control?
5 Discuss about Error reporting messages in ICMP?
6 Explain Disjkstra's routing protocol?
7 Elaborate the functioning of DNS in Internet.
8 Explain the importance of Electronic Mail?
9 List few Security services, mechanisms and attacks.
10 What is the functionality of IP Security Header?

Part-B

Answer All the following questions. **(10M X 5=50Marks)**

11 a. Explain TCP/IP model with neat diagram. [5]
b. Write short notes on Virtual Circuit Network. [5]

OR

12 List the Seven layers in OSI model and explain the function of each layer. [10]
13 Explain SONET-SDH and Frame Relay in detail. [10]

OR

14 a. Explain Cyclic Redundancy Check (CRC) with a suitable example. [5]
b. Write short notes on various Error correction methods and CRC generator and checker. [5]
15 Explain in detail about
a. Broadcast Routing Protocols [5] b. Multicast Routing Protocols [5]

OR

16 Explain in detail about Routing and give example for various types of Routing. [10]
17 Explain: a. HTTP b. WWW c. DNS d. SNMP e. FTP [10]

OR

18 Explain the UDP header format and specify any three UDP applications. [10]

19 Distinguish IPV4 and IPV6 addressing mechanisms. [10]

OR

20 Explain in detail about Virtual Private Networks. [10]