R20 Regulation *Subject code: 3O5BB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, April 2026

COMPUTER NETWORKS

(EEE)

Maximum Marks: 70 Date: 27.04.2026 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)		Marks	CO	BTL
1	Define Topology.	2M	1	L1
2	List out the advantages of Star Topology.	2M	1	L1
3	What is flow control and Error control?	2M	2	L1
4	List the differences between Circuit Switching and Packet Switching.	2M	2	L1
5	What is unicast communication?	2M	3	L1
6	Define Broad Casting.	2M	3	L1
7	Compare connectionless service and Connection Oriented service.	2M	4	L1
8	What are the advantages of using UDP over TCP.	2M	4	L1
9	Define www.	2M	5	L1
10	What is Simple mail transfer protocol?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	What is OSI Model? Explain the functions and protocols and services of each layer.	10M	1	L2
	OR			
12	a) Explain about ISDN. b) Write about ATM.	5M 5M	1	L2
13	Explain Error detection and Correction in Data Link Layer with example.	10M	2	L2
	OR			
14	Explain about address MAC in Data Link Layer.	10M	2	L2
15	Explain Distance vector multicast routing protocol (DVMRP) with example.	10M	3	L2
	OR			
16	What is the purpose of CSMA with Collision Detection? Explain it.	10M	3	L2
17	Explain about TCP & UDP Protocol.	10M	4	L2
	OR			
18	What are the general principles of congestion prevention policies and explain it?	10M	4	L2

19	Explain about DNS and its applications.	10M	5	L2
	OR			
20	a) Explain SMTP. b) Explain different types of electronic mails.	5M 5M	5	L2