

Roll No.: .....

## SGT UNIVERSITY

### END TERM THEORY EXAMINATION JULY-2022

Faculty/College of Study:	Engineering & Technology	Year/Semester:	6 <sup>th</sup> Semester
Program:	B.Tech (CSE) (Gen./Apple/IBM/MLAI)	Duration:	03:00 Hrs.
Course/Subject:	Computer Networks	Maximum Marks:	60
Course/Subject Code:	13020604	Batch:	2019

**Instructions:-**

1. Write Your Roll No. on the QuestionPaper.
2. Candidate should ensure that they have been provided correct question paper. Complaint(s) in this regard, if any should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. All Questions are compulsory. Marks are indicated against eachquestion.
4. Illustrate your answer with diagram wherever required.

### SECTION-A

#### (Very Short Answer Type Questions)

**Note: All Questions are compulsory: -**

**[12X1=12 Marks]**

S. No.	Question	Marks Allotted
1	Define Virtual Terminal.	1
2	What is Intranet?	1
3	Why we need Repeater?	1
4	What is IEEE project 802?	1
5	Differentiate point to point and point to multipoint.	1
6	Define Ethernet.	1
7	What is Peer-to-Peer communication?	1
8	Differentiate source and transmitter.	1
9	What is the purpose of RARP?	1
10	What is address depletion problem? How it is overcome?	1
11	Why data compression is preferred during communication?	1
12	What is Implicit signalling?	1

**SECTION-B**  
**(Short Answer Type Questions)**

**Note: All Questions are compulsory: -**

**[4X2=8 Marks]**

S. No.	Question	Marks Allotted
13	What is Terminal handling?	2
14	Why we use CIDR notation for Addressing? How it is written?	2
15	What is the difference between CSMA/CA and CSMA/CD?	2
16	Discuss cryptography.	2

**SECTION-C**  
**(Descriptive Answer Type Questions)**

**Note: All Questions are compulsory: -**

**[4X4=16 Marks]**

S. No.	Question	Marks Allotted
17	Why congestion occurs in any network? Discuss open loop congestion control techniques.  <b>OR</b> What is Transmission Control Protocol? Describe with header in detail.	4
18	What are various design issues at transport layer? Discuss them in detail.	4
19	Explain the differences between Pure and Slotted ALOHA Systems. Draw diagrams to support your answer.  <b>OR</b> Discuss multiplexing techniques in details with diagrams.	4
20	Discuss the types of guided media in detail with neat and clean diagrams.  <b>OR</b> What is network topology? Give detailing of Bus and Mesh topologies with their advantages and disadvantages.	4

**SECTION-D**

**(Long Answer Type Questions)**

**Note: All Questions are compulsory: -**

**[4X6=24 Marks]**

S. No.	Question	Marks Allotted
21	What is data link controlling? Describe pipelining protocols used for flow and error control in noisy channels. Draw their process to support your answer.	6
22	Discuss design issues at session layer in detail? How to deal with them. <b>OR</b> Discuss various protocols used at application layer for file transfer, access, file management and electronic mail	6
23	Describe ISDN in detail with BRI and PRI services and their channel configurations. <b>OR</b> Why layered structure approach is employed in networking? Give details about the functions of each layer.	6
24	Explain Internet protocol with IPv4 header in detail. <b>OR</b> Describe link state routing protocol in detail showing the process of table formation and updation for any router.	6