

**CMR TECHNICAL CAMPUS  
UGC AUTONOMOUS**

**B. Tech. V Semester Regular End Examinations, Dec-2022**

**Computer Networks**

**Common to CSE, IT, CSM & CSD**

**Time: 3 Hours**

**Max. Marks: 70**

**Note**

- i. This Question paper contains Part- A and Part- B.
- ii. All the Questions in Part A are to be answered compulsorily.
- iii. All Questions from Part B are to be answered with internal choice among them.

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**PART-A**

**10 X 02 = 20 Marks**

		<b>Marks</b>	<b>CO</b>	<b>BL</b>
1.	a	2	CO1	L1
	b	2	CO1	L1
	c	2	CO2	L2
	d	2	CO2	L1
	e	2	CO3	L1
	f	2	CO3	L1
	g	2	CO4	L1
	h	2	CO4	L1
	i	2	CO5	L1
	j	2	CO5	L1

**PART- B**

**5 X 10 = 50 Marks**

		<b>Marks</b>	<b>CO</b>	<b>BL</b>
2.	Explain in detail about TCP/IP Protocol suite with neat diagram.	10	CO1	L2
	OR			
3	a	5	CO1	L3
	b	5	CO1	L2
4	a	5	CO2	L5
	b	5	CO2	L2
	OR			
5	a	5	CO2	L2
	b	5	CO2	L3
6	a	5	CO3	L2
	b	5	CO3	L2

algorithms.

OR

- |    |   |   |    |     |    |
|----|---|---|----|-----|----|
| 7  | a | Describe about open loop in congestion control Algorithm.   | 5  | CO3 |    |
|    | b | Explain Flooding technique.   | 5  | CO3 |    |
| 8  | a | Explain the services provided by transport layer to upper layers.   | 5  | CO4 | L2 |
|    | b | With the help of a diagram explain the IPv4 header format.  | 5  | CO4 | L2 |
| OR |   |   |    |     |    |
| 9  |   | With the help of diagrams, explain the three-way handshake methods of TCP connection establishment and release. | 10 | CO4 | L3 |
| 10 | a | Discuss the working principle behind DNS?   | 5  | CO5 | L2 |
|    | b | Summarize the request message format in HTTP.   | 5  | CO5 | L2 |
| OR |   |   |    |     |    |
| 11 | a | What are the functions of user agent, message transfer agent and message access agent in e-mail system.         | 5  | CO5 | L2 |
|    | b | Explain SNMP Protocol with a neat diagram.  | 5  | CO5 | L2 |

**CO** : Course Outcomes

**BL** : Bloom's Taxonomy Levels  
 L 1: Remembering  
 L 3: Applying  
 L 5: Evaluating

L 2: Understanding  
 L 4: Analysing  
 L 6: Creating

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**CMR TECHNICAL CAMPUS  
UGC AUTONOMOUS**

**B. Tech.V Semester Regular & Supply End Examinations, January-2024**

**Computer Networks**

**Common to AIML, CSG, CSE, IT, CSM & CSD**

**Time: 3 Hours**

**Max. Marks: 70**

**Note**

- i. This Question paper contains Part- A and Part- B.
- ii. All the Questions in Part A are to be answered compulsorily.
- iii. All Questions from Part B are to be answered with internal choice among them.

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**PART-A**

**10 X 02 = 20 Marks**

	<b>Marks</b>	<b>CO</b>	<b>BL</b>
1. a Explain functionalities of Data link layer?	2	CO1	L2
b Define Internet and ARPANET?	2	CO1	L1
c What is Piggy Backing?	2	CO2	L1
d Classify error detection and correction methods?	2	CO2	L4
e What are the advantages of Adaptive Routing Algorithms?	2	CO3	L1
f What is Broadcasting algorithm?	2	CO3	L1
g Explain the functionalities of Transport layer?	2	CO4	L2
h Define Segmentation?	2	CO4	L1
i List any two services of Application Layer?	2	CO5	L1
j Illustrate HTTP	2	CO5	L2

**PART- B**

**5 X 10 = 50 Marks**

	<b>Marks</b>	<b>CO</b>	<b>BL</b>
2. a With a neat diagram explain the TCP/IP model in detail?	5	CO1	L2
b Compare Twisted pair and Coaxial Cable?	5	CO1	L4
OR			
3. a With a neat diagram explain the OSI reference model in detail?	5	CO1	L2
b Illustrate different types of Network Topologies?	5	CO1	L2
4. a Explain about different types MAC Protocols?	5	CO2	L2
b Explain about Selective Repeat ARQ?	5	CO2	L2
OR			
5. a With an example explain the sliding window Flow control mechanism.	5	CO2	L2
b Explain about CSMA/CD protocols in detail with neat diagrams?	5	CO2	L2

6	a	Demonstrate Distance Vector routing algorithm with Suitable example?	5	CO3	L2
	b	Explain the operations of ARP and RARP with examples.	5	CO3	L2
OR					
7	a	Illustrate in detail about IPv4 Packet format? Explain each field of IPv4 packet with a diagram?	5	CO3	L2
	b	Explain in brief about Multicast routing algorithm?	5	CO3	L2
8	a	Explain in detail about crash recovery in transport layer?	5	CO4	L2
	b	Discover what are the services provided by Transport layer to the Upper layer?	5	CO4	L4
OR					
9	a	Explain in detail User datagram Protocol?	5	CO4	L2
	b	Conclude in brief about TCP connection establishment and connection release?	5	CO4	L5
10	a	Explain in brief about SNMP?	5	CO5	L2
	b	Describe with detailed explanation about sending and receiving e-mail. Justify Case study how the tool is used for providing Communication?	5	CO5	L2
OR					
11	a	Illustrate Streaming Video and Audio?	5	CO5	L2
	b	Explain in detail WWW?	5	CO5	L2

**CO : Course Outcomes**

**BL : Bloom's Taxonomy Levels**

**L 1 : Remembering**

**L 2 : Understanding**

**L 3 : Applying**

**L 4 : Analysing**

**L 5 : Evaluating**

**L 6 : Creating**

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