#### 22CMP211

# PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

### **MSc DEGREE EXAMINATION MAY 2023**

(Second Semester)

### Branch - COMPUTER SCIENCE

## **TCP/IP PROTOCOL SUITE**

	Time: Three Hours Maximum: 50 M	arks
	SECTION-A (5 Marks)	
	Answer ALL questions	`
	<b>ALL</b> questions carry <b>EQUAL</b> marks $(5 \times 1 = 5)$	)
1	An internetworking device operating at the transport layer is called a  (i) Bridge (ii) Router (iii) Repeater (iv) Gatew	'ay
2	In a periodic update, a node sends its routing table normally after every (i) 10s (ii) 20s (iii) 30s (iv) 40s	
3	To prevent unnecessary traffic, Internet Group Management Protocol (IGMP) uses a (i) delayed response strategy  (ii) delayed response stations	
•	(iii) delayed response solutions (iv) delayed response signals	
4	What is the basic purpose of the Address Resolution Protocol (ARP)?  (i) To convert Ethernet addresses to IP addresses  (ii) To list all configured interfaces on a system  (iii) To list the Ethernet name of a host machine  (iv) To resolve IP addresses to Ethernet addresses	
5	In User Datagram Protocol (UDP), the checksum calculation is different from the one for IP and (i) TCP (ii) TCP/IP (iii) FSP (iv) ICMP	
	SECTION - B (15 Marks)	
	Answer ALL Questions	
	<b>ALL</b> Questions Carry <b>EQUAL</b> Marks $(5 \times 3 = 1)$	5)
6	a. Explain TCP/IP protocol Suite.  OR	
	b. Describe Ethernet Switch.	
7	a. Explain Forwarding Techniques. OR	
	b. Sketch out the Structure of a Router.	
8	a. Describe the different types of messages.  OR	
	b. Outline Debugging tools.	
9	a. Explain Cache Table in short. OR	
	b. Describe RARP Server.	
10	a. How to you apply Checksum? Explain. OR	
	b. List out the features of Stream Control Transmission Protocol.	

### SECTION -C (30 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks

 $(5 \times 6 = 30)$ 

11 a. Describe Transport Layer in detail.

OR

- b. Elucidate ARCNET.
- 12. a. Explain Routing Protocols.

OR

- b. Discuss on Teleconferencing.
- 13. a. Explain Internet Group Management Protocol.

OR

- b. Describe error reporting in Internet Control Message Protocol.
- 14. a. Explain Proxy ARP in detail.

OR

- b. Describe RARP Packet formation.
- 15. a. Explain TCP Services in detail.

OR

b. Elucidate TCP Connection.

Z-Z-Z

**END**