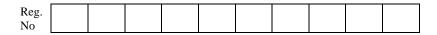# GIET UNIVERSITY, GUNUPUR – 765022
M. C. A (Third Semester) Regular Examinations, January – 2024
MCA20302 – Computer Networks

Time: 3 hrs   Maximum: 70 Marks

(The figures in the right hand margin indicate marks.)

PART – A   **(2 x 10 = 20 Marks)**

Q.1. Answer *ALL* questions

		CO #	Blooms Level
a.	Write five Components of a Computer Network.	CO1	K1
b.	Define IP address.	CO2	K1
c.	Define Slotted ALOHA.	CO2	K1
d.	Define is Collision Avoidance in Datalink Layer.	CO2	K2
e.	Define SSH & PGP.	CO3	K2
f.	Differentiate FTP & Telnet.	CO3	K2
g.	Define Error Correction Techniques in Transport Layer	CO1	K2
h.	Define FDDI.	CO2	K2
i.	Define DORA process.	CO2	K2
j.	Define Framing.	CO1	K1

PART – B   **(10 x 5 = 50 Marks)**

Answer *ANY FIVE* questions

		Marks	CO #	Blooms Level
2. a.	What is a Networking Bridge? Explain its types and uses.	5	CO2	K2
b.	Explain different types of Computer Networks.	5	CO1	K2
3. a.	Explain the OSI Model with a suitable Diagram.	5	CO1	K2
b.	Differentiate Between CSMA/CA & CSMA/CD.	5	CO2	K2
4. a.	Explain Controlled Access Protocols.	5	CO2	K2
b.	Differentiate Message Switching and Packet Switching.	5	CO2	K2
5. a.	Explain about DHCP and its Working of DHCP?	5	CO2	K2
b.	Explain types of networks Topologies.	5	CO1	K3
6. a.	Differentiate IP v4 and IP v6.	5	CO2	K3
b.	Explain Different types of Ethernet Networks and discuss the advantages and disadvantages of Ethernet Networks.	5	CO2	K3
7. a.	Differentiate Pure ALOHA and Slotted ALOHA.	5	CO2	K2

b.	What is the OSPF protocol and Mention different Types of OSPF Message Format.	5	CO2 K3
8. a.	Create Subnets to the IP Address is 192.168.4.0 where Subnet 1 has 60 devices, Subnet 2 has 32 devices, Subnet 3 has 30 devices, Subnet 4 has 12 devices and Subnet 5 has 2 devices. Note each Subnet IP range, Subnet representation address, Subnet broadcast address, Host address range.	10	CO2 K3

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