

II Semester M.C.A. Examination, Nov./Dec. 2022 (CBCS Scheme) (2020-21 and Onwards) COMPUTER SCIENCE

2MCA3: Computer Networks

Time: 3 Hours

Max. Marks: 70

Instructions : Part – A : Answer any five questions.

Part - B: Answer any four questions.

PART - A

Answer any five questions. Each question carries six marks:

(5×6=30)

- 1. Explain half and full duplex communication in brief with example.
- Define network topology. Explain different topologies with its merits and demerits.
- 3. What is switching? Explain circuit switching technique.
- 4. Define multiplexing. Explain its types.
- 5. Discuss the functioning of ISO-OSI layering model.
- What do you mean by transmission error? With an example explain Cyclic Redundancy Check Technique.
- Explain ALOHA and slotted ALOHA.
- 8. What are bridges? Explain its types with advantages and disadvantages.



PART - B

Ar	nswer any four questions. Each question carries ten marks :	(4×10=40)
9.	Explain TCP/IP Protocol suite with a neat diagram.	10
10.	Explain in brief the different types of guided transmission media.	10
11.	What is IPv4 addressing format ? Explain class A, class B and class C addressing format with suitable examples.	10
12.	Write a note on :	
	a) Point to Point (PPP)	
	b) HDLC.	(4+6)
13.	a) Explain FDMA, TDMA and CDMA.	6
	b) Write a note on Domain Name System.	4
14.	a) Write a note on 802.11 wireless architecture.	5
	b) Write a short note on congestion control methods.	5