

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER IV- EXAMINATION –SUMMER-2024

Subject Code: 2648603

Date: 17/05/2024

Subject Name: Computer Networking

Time: 10:30 AM TO 01:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

- Q.1** (a) Explain TCP/IP reference model. **07**
(b) Explain twisted pair cable with appropriate diagram. **07**
- Q.2** (a) Explain CRC method for error detection with appropriate example. **07**
(b) Explain store-and-forward packet switching mechanism. **07**
- OR**
- (b) Compare OSI and TCP/IP reference model. **07**
- Q.3** (a) Explain hidden terminals and exposed terminals. **07**
(b) Explain UDP header format. **07**
- OR**
- Q.3** (a) Compare two different light sources for fiber cable. **07**
(b) Explain principal DNS resource record types. **07**
- Q.4** (a) Explain stop-and-wait protocol. **07**
(b) Explain link state routing algorithm. **07**
- OR**
- Q.4** (a) Explain radio transmission. **07**
(b) Explain transport service primitives. **07**
- Q.5** (a) Explain carrier sense multiple access protocols. **07**
(b) Explain architecture of the email system. **07**
- OR**
- Q.5** (a) Explain byte stuffing with appropriate example. **07**
(b) Explain shortest path algorithm. **07**
