

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (Old) EXAMINATION – WINTER 2019****Subject Code: 150702****Date: 25/11/2019****Subject Name: Computer Network****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.

- Q.1** (a) Draw diagram of OSI reference model? What are the benefits of layering approach in OSI model? **07**
- (b) Explain :LAN, WAN and internet **07**
- Q.2** (a) Explain the role of fiber optics in computer networks. How a fiber optic network is formed? **07**
- (b) List demerits of unguided transmission media **07**
- OR**
- (b) List difference between Transport layer and Network layer **07**
- Q.3** (a) What do you mean by framing? List various framing techniques and explain any two of them. **07**
- (b) What is ALOHA? Explain variants of ALOHA protocol. **07**
- OR**
- Q.3** (a) Explain Sliding Window Protocol. **07**
- (b) What is error control? Explain CRC with example **07**
- Q.4** (a) Explain IPv4 datagram format and importance of each field. **07**
- (b) Explain Distance Vector Routing with example. **07**
- OR**
- Q.4** (a) Discuss the working principle of TCP **07**
- (b) Explain various versions of CSMA protocols. **07**
- Q.5** (a) Write a note on HTTP. **07**
- (b) What is the need of Domain name service? Explain DNS architecture. **07**
- OR**
- Q.5** (a) Explain: ATM, DNS and its use. **07**
- (b) Explain in detail Virtual LANs. **07**
