

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII (Old) EXAMINATION – WINTER 2019****Subject Code: 180704****Date: 29/11/2019****Subject Name: Advance Computer Networks****Time: 02:30 PM TO 05:00 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) What is the relationship between SONET and SDH? Describe DWDM in detail. **07**
- (b) Explain optical networking with its benefits and drawbacks. **07**
- Q.2** (a) Discuss the benefits of using ATM technology. **07**
- (b) Explain SONET Layered architecture and Frame format for SONET. **07**
- OR**
- (b) Explain the different traffic descriptors used in ATM. **07**
- Q.3** (a) Compare static and dynamic routing. **07**
- (b) Explain in detail TCP/IP Protocol suite. **07**
- OR**
- Q.3** (a) Write different equipment used in X.25 and explain architecture of X.25. **07**
- (b) Describe the multiprotocol label switching's (MPLS's) working and operation? **07**
Compare MPLS with ATM network
- Q.4** (a) Write a Short note on Dynamic Host Configuration protocol. **07**
- (b) Write a short note on SNMP (Standard Network Management Protocol). **07**
- OR**
- Q.4** (a) Explain OSPF (Open shortest path first Protocol) dynamic routing protocol. **07**
- (b) Explain Error control in UDP. **07**
- Q.5** (a) Write a short note: VOIP **07**
- (b) Describe in detail about multi-protocol label switching **07**
- OR**
- Q.5** (a) Explain availability, reliability and maintainability of a network in detail. **07**
- (b) Write a short note on SAN(Storage Area Network). **07**
