

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VIII (OLD) EXAMINATION – WINTER 2018****Subject Code: 180704****Date: 29/11/2018****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 OSI reference model? Explain Layers of OSI model in details. **07**  
(b) Explain in detail TCP/IP Protocol suite. **07**

- Q.2** (a) Discuss the functions of each SONET layer. What is the relationship between SONET and SDH? **07**  
(b) Explain working of DWDM and network configuration in DWDM. **07**

**OR**

- (b) Explain the functions of ATM adaption layers with ALL1 and ALL2 in Details. **07**

- Q.3** (a) Write a short note on: X.25 **07**  
(b) Write a short note on: Virtual Circuit Packet Switching. **07**

**OR**

- Q.3** (a) Discuss the benefits of using ATM technology **07**  
(b) Explain ATM header cell format. **07**

- Q.4** (a) List and explain various QoS and Traffic parameters used in ATM networks **07**  
(b) What is multimedia over Internet? Explain VOIP. **07**

**OR**

- Q.4** (a) Write a short note on SNMP (Standard Network Management Protocol). **07**  
(b) Explain BGP (Border Gateway Protocol) routing protocol. **07**

- Q.5** (a) Write a Short note on Dynamic Host Configuration protocol **07**  
(b) Compare and contrast ATM and MPLS networks. **07**

**OR**

- Q.5** (a) Explain availability, reliability and maintainability of a network in detail. **07**  
(b) Explain Open Shortest Path First Protocol. **07**

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