

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

# GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII • EXAMINATION – WINTER • 2014

**Subject Code: 180704**

**Date: 27-11-2014**

**Subject Name: Advance Computer Networks**

**Time: 02:30 pm - 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) Briefly discuss protocols associated with layers of TCP/IP protocol suite. **07**  
(b) Discuss benefits and drawback of optical networking. **07**
- Q.2** (a) Write a note on IOS (Internetwork Operating System). **07**  
(b) Draw and explain the ATM reference model. **07**
- OR**
- (b) Explain ATM header cell format. **07**
- Q.3** (a) What is packet switching? Explain X.25 equipments. **07**  
(b) Write a short note on SNMP (Standard Network Management Protocol). **07**
- OR**
- Q.3** (a) Discuss layer of X.25 packet switching network. **07**  
(b) What is traffic engineering? Give and explain traffic characteristics. **07**
- Q.4** (a) What is dynamic routing? Create WAN (wide area network) using three routers and assign appropriate IP addresses to each router port. Also show the router configuration command for setting up of any one dynamic routing protocol. **07**  
(b) Explain BGP (Border Gateway protocol) routing protocol. **07**
- OR**
- Q.4** (a) What is static routing? Create WAN (wide area network) using three routers and assign appropriate IP addresses to each router port. Also show the router configuration command for setting up a static routing for network. **07**  
(b) Explain OSPF (Open shortest path first Protocol) dynamic routing protocol. **07**
- Q.5** (a) Explain layer2 switching methods. **07**  
(b) What is multimedia over Internet? Explain VOIP. **07**
- OR**
- Q.5** (a) Write short note on Spanning tree protocol (STP). **07**  
(b) What is count to infinity (routing loop) problem? Discuss possible solutions to reduce count to infinity problem. **07**

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