

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**M. E. - SEMESTER – II • EXAMINATION – SUMMER • 2014**

**Subject code: 2715304**

**Date: 26-06-2014**

**Subject Name: Advanced 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 mark.**

- Q.1 (a)** Compare FIFO, fair queuing, and weighted fair queuing algorithms with suitable example **07**  
**(b)** Explain the operation of multi protocol label switching **07**
- Q.2 (a)** Explain the RED algorithm **07**  
**(b)** Explain the various queering disciplines in ISA **07**
- OR**
- (b)** Define Differentiated services **07**
- Q.3 (a)** Explain the services offered by ISA **07**  
**(b)** Explain the block diagram for Integrated Services Architecture. and give details about Components **07**
- OR**
- Q.3 (a)** Explain TCP flow & congestion control **07**  
**(b)** Explain various ATM services **07**
- Q.4 (a)** Justify usage of hierarchical labels in Multi Protocol Label Switching (MPLS). **07**  
**(b)** In future, ATM will replace IP in Internet. Comment on this statement **07**
- OR**
- Q.4 (a)** Explain advantages and disadvantages of fixed and small sized ATM cell. **07**  
**(b)** What is the difference between resource reservation in connection oriented network and RSVP based connection less network. **07**
- Q.5 (a)** Explain TTL processing in MPLS switching. **07**  
**(b)** Integrated service and Differentiated service are principally different in the way they function. How do they differ? **07**
- OR**
- Q.5 (a)** Multiprotocol Label Switching as the name suggests justify multiprotocol in the name. **07**  
**(b)** Define cell delay variation and Cell delay variation tolerance. **07**

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