

GUJARAT TECHNOLOGICAL UNIVERSITY**ME – SEMESTER – III (New)– EXAMINATION – WINTER-2019****Subject Code: 3730505****Date: 16-11-2019****Subject Name: High Performance 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 meant by RSVP? Define and explain the different reservation styles in RSVP. **07**
- (b) Give the overview of IP telephony with the help of its architecture. Also differentiate between packet delay and packet jitter. **07**
- Q.2** (a) Discuss the labeling and label switched path of MPLS networks? **07**
- (b) Why scheduling and policing mechanism is required? Explain different scheduling mechanism with their advantage and disadvantage. **07**
- OR**
- (b) Describe Network Performance Evaluation in traffic modeling. **07**
- Q.3** (a) Differentiate between SIP and H.323 protocol. Explain H.323 signaling protocol in detail. **07**
- (b) Illustrate in detail about the working of overlay networks. **07**
- OR**
- Q.3** (a) What do you mean by tunneling? Explain point to point tunneling protocol. **07**
- (b) What is Firewall? Explain the types of firewall in detail. **07**
- Q.4** (a) Draw the RTP header format and explain the significance of each field. What are the difference between RTP and RTCP? **07**
- (b) Summarize the working of SNMP protocol. **07**
- OR**
- Q.4** (a) What is real time streaming protocol? Explain with the help of an RTSP session between a client and a sender. **07**
- (b) What is the Infrastructure required for Network Management? Explain with the help of an example. **07**
- Q.5** (a) Explain integrated service model. **07**
- (b) Explain Poisson modeling and its failure. **07**
- OR**
- Q.5** (a) How do you access VPN? Explain Remote access and site to site VPN. **07**
- (b) Why do we require Network Security? Brief all the principles of Cryptography. **07**
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