ROLLING.						

Total No. of Pages : 02

Total No. of Questions : 08

## M.Tech. (ECE) (2018 & Onwards Batch) (Sem.–1) ADVANCED COMMUNICATION NETWORKS Subject Code : MTEC-101-18 M.Code : 75172

Time : 2 Hrs.

Max. Marks : 30

INSTRUCTIONS TO CANDIDATES :

- 1. Attempt any FIVE question(s), each question carries 6 marks.
- Q1 a) What is throughput issue over internet? Explain the methods used to enhance throughput over internet.
  - b) Explain the importance of high bandwidth delay product in TCP networks design.
- Q2 a) Explain Resource Reservation Protocol (RSVP) with neat diagram.
  - b) Explain Active Queue Management (AQM) policy with its advantages and drawbacks.
- Q3 a) Draw and explain the linearly bounded arrival processes (LBAP) model for characterization of multimedia traffic over internet.
  - b) Explain controlled prefix expansion algorithm for fast IP address lookups over internet.
- Q4 a) Explain Multipath Load Sharing (MLS) scheme used to improve performance of traffic over internet.
  - b) Differentiate routing and switching process used in internet applications.
- Q5 a) What are the various packet classification algorithms. Explain one of them.
  - b) What is the need of Local Area Network (LAN) protocol in communication network? Specify its variants.

- Q6 a) What are the various differentiated services in Internet? Explain one of them in detail to provide Quality of Service (QoS).
  - b) Explain measurement based admission control method for IP network in detail.
- Q7 a) Draw and explain the Multiprotocol Label Switching (MPLS) architecture with neat block diagram.
  - b) Explain the fundamental issues of IP over ATM in detail with suitable example.
- Q8 Write short notes on any two of the following :
  - a) IPV4
  - b) IP tunneling.
  - c) Leaky bucket algorithm

<u>Note</u>:Any student found attempting answer sheet from any other person(s), using incriminating material or involved in any wrong activity reported by evaluator shall be treated under UMC provisions.

Student found sharing the question paper(s)/answer sheet on digital media or with any other person or any organization/institution shall also be treated under UMC.

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