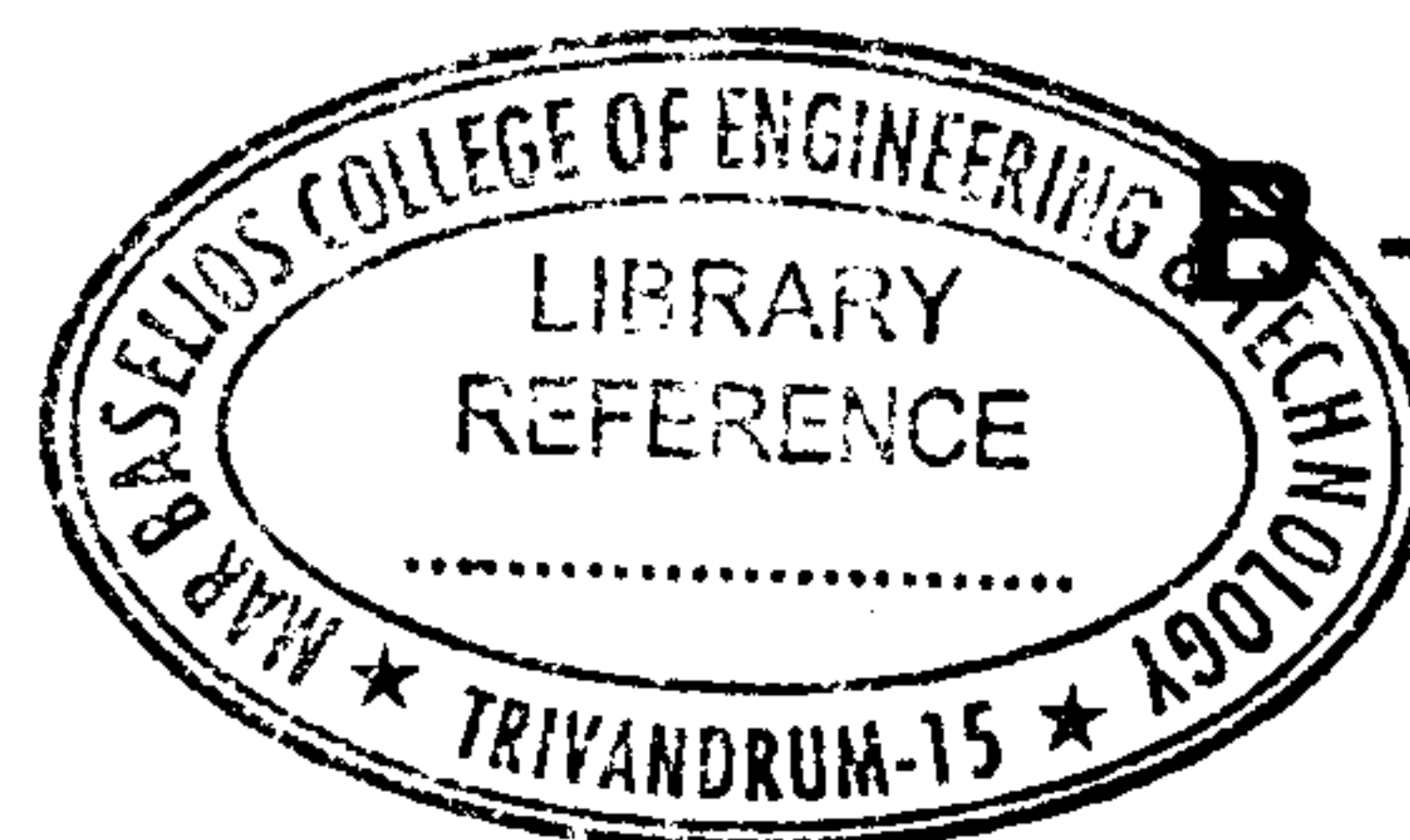




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2927

Reg. No. :

Name :

**Second Semester M.Tech. Degree Examination, December 2016
(2013 Scheme)**

**Branch : COMPUTER SCIENCE AND ENGINEERING
RCC 2002 : Advanced Computer Networks**

Time : 3 Hours

Max. Marks : 60

Answer **any two** questions from **each** Module :

Module – I

1. a) Suggest a set of characteristics that you would like to include into a SLA, provided that you need to transmit the traffic of an real live streaming of video through the network. 7
- b) Is it possible to transmit traffic with long delay but without jitter ? 3
2. a) The performance of a client server system is influenced by two network factors : the bandwidth of the network (how many bits/sec it can transport) and the latency (how many seconds it takes for the first bit to get from the client to the server). Give an example of a network that exhibits high bandwidth and high latency. Then give an example of one with low bandwidth and low latency. 6
- b) Compare IEEE 802.11 with 802.16. 4
3. a) A switch designed for use with fast Ethernet has a backplane that can move 10 Gbps. How many frames/sec can it handle in the worst case ? 4
- b) Explain features of switched LAN. 3
- c) Compare Fast Ethernet and Gigabit Ethernet. 3

Module – II

4. Explain with example Bellman Ford Algorithm. How count to infinite problem can be solved using link state protocol ? 10

P.T.O.



5. a) How many subnets and hosts per subnet can you get from the network 192.161.204.0/30 ? Also give the broad cast address for subnet zero and all ones subnet. 5
- b) Compare AH protocol and ESP protocol. 3
- c) How does an ICMP message improve the reliability of data transmission in an IP networks ? 2
6. a) What will happen to the packet if it was fragmented in the course of being transmitted and one of the fragment did not arrive at the destination host after timeout expired. 2
- b) A classless address is given as 167.199.170.82/27.
- i) Find the number of addresses in the block.
- ii) Find the first and last addresses.
- iii) If a mask of 255.255.255.224 is used then
- a) Find the no. of addresses in the block.
- b) Find first and last addresses using mask. 8

Module – III

7. Explain RSVP with an example for reservation style. 10
8. a) Explain various parameters in ATM Qos. 5
- b) Compare wavelet compression, JPEG compression and MPEG compression. 5
9. a) Compare the transport and tunnel modes of IPSec. Which one ensures a higher security level ? Which one provides better scalability ? Which one is more economical ? 4
- b) Describe the mechanism used in MPLS VPN for the segregation of the address spaces of networks belonging to different clients. 6

