MCSE/MSE- 105 M.E./M.Tcch.,

I Semester

Examination. December 2014

Advanced Computer Networking

Time: Three Hours Maximum Marks : 70

Notes i) Attempt am live questions. ii) All questions carry equal marks.

1. a) What are the different types of delays experienced by the packet alone the path between source and destination? Explain. 7

b) Explain in detail about the Ethernet 802.3 with its access protocol and addressing mechanism. 7

2. at Discuss in detail the architecture of the OSI reference model.

b) Consider a LAN with a maximum distance of 2 km. At what bandwidth would the propagation delay equal transmit delay for 100- byte packets? What about 512-byte packets? 7

3. a) What is internet working? Discuss the various global addressing schemes and the issues in forwarding the IP. 7

b) What DNS cache issues arc involved in changing the IP address of a web server host name? How might these be minimized?

4. a) Discuss in detail about the token ring network and its principle of operation with neat diagram. Explain the frame formats used in token rings. 7

b) Describe the link state routing algorithm with an example. 7

5. a) Compare and contrast SNMP with SMTP with their pros

and eons. 7

b) Enumerate on the Various reasons that are present behind the transition from IPv4 to IPv6. 7

6. Write short notes on following with respect to TCP

i) End to End issues

ii) Segment format

iii) Connection Establishment and termination. 14

7.a) Explain briefly the implementation of virtual private network with the help of diagram.

b) Explain how rooting is possible in VPN? 7

8. Write short note. 14

i) IEEE802.11

ii) HiperLAN

iii) CDMA

iv) ISM