Roll No ....

EC - 803

B.E. VIII Semester

Examination, June 2014

Computer Network

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt one question from each unit. Each unit have internal choice.

ii) Assume data/value if required.

Unit 1

1. a) What are the various protocols at the different layer in the TCP/IP protocol suite?

   b) What are the different transmission media used in computer communication? Compare with data rates.

Or

2. a) Compare the different types of switching techniques used in communication networks. Discuss their advantages and disadvantages with the help of timing diagrams.

   b) What is network topology? Explain mesh, ring and star topologies bringing out their merits and demerits.

Unit - II

3. a) How does selective- repeat -ARQ protocol differ from Go-back-N ARQ? Discuss with suitable diagrams.

   b) Name the three types of HDLC frames and give a brief explanation of each.

Or

4. a) What is CSMA Scheme? Discuss non-persistent, 1-persistent and p-persistent CSMA with a diagram.

   b) Derive an expression for the through put of a slotted ALOHA system and compare this with pure ALOHA system.

Unit - III

5. a) Draw the frame format of IEEE802.11 standard and briefly discuss the function of each field.

   b) Explain uses of different network devices.

Or

6. a) Describe the structure of IPv4 IP packet with a diagram.

   b) List the advantages of IPv6.

Unit - IV

7. a) Draw the UDP header format and brief the function of each field.

   b) Discuss the various types of services provided by the transport layer.

Or

8. a) Draw the TCP header format and explain the function of each field.

   b) How are transport layer protocols different from data link layer protocols?

Unit - V

9. a) What are the different ways of sending e-mail? Discuss with suitable diagrams.

   b) What is the function of a browser in WWW? Explain with a diagram.

Or

10. a) List and explain the various characteristics of real time audio/ video communication.

    b) What is the need for a DNS system? When IP address can be directly used?

******