rgpvonline.com

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-NARQ? Discuss with suitable diagrams.
 - b) Name the three types of HDLC frames and give a brief explanation of each.

Or

rgpvonline.com

- 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?

EC-803

EC-803