Roll No. .....

## 24328

## B. Tech. 6th Semester (ECE)

# Examination – May, 2014

### **COMPUTER NETWORK**

Paper: IT-305-E

Time: Three hours]

[ Maximum Marks: 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

*Note*: Attempt *five* questions. Q. 1 is *compulsory*. Select *one* question from each Section.

- 1 (a) Differentiate between LAN, WAN, MAN.
  - (b) What is DNS? Explain.
  - (c) What is Token ring? Explain.
  - (d) How quality of services are managed in network?
  - (e) Explain Fast Ethernet and Gigabit Ethernet.

## SECTION - A

- **2.** Define computer network? What is network topology? Explain it with their advantages and disadvantages.
- **3.** Explain the ISO-OSI reference model in details.

## SECTION - B

- **4.** (a) What is protocol? How it work? Discuss its types (IP,TCP,UDP).
  - (b) What do you mean by IP addressing? How it is classified? How is subnet addressing performed.
- **5.** (a) What is IPv6? Explain the frame structure of IPv6.
  - (b) What do you mean by E-Mail System? Explain.

#### SECTION - C

- 6. Explain:
  - (i) ALOHA
- (ii) DQDB
- (a) What is CSMA protocol? Explain the different version of CSMA protocol? Discuss the role of CSMA/CD.
  - (b) What do you mean by congestion? How we control the congestion? Explain.

### SECTION - D

- 8. Explain:
  - (i) ATM

- (ii) Frame Relay
- 9. Explain the following:
  - (i) Polling
  - (ii) Proxy Servers
  - (iii) Traps
  - (iv) VLAN
  - (v) Network OS