

Roll No. 

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(Electronics & Electrical) (2011 Onwards E-II)/  
(Electrical & Electronics) (2013 & Onwards E-II) (Sem.-7,8)

**COMPUTER NETWORKS**

Subject Code : BTEEE-804E

Paper ID : [A3024]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

**SECTION-A****Q1. Write briefly :**

- a) Differentiate between digital and analog communication.
- b) Compare OSI and TCP/IP reference models.
- c) Discuss IP addressing.
- d) Differentiate between TCP and UDP.
- e) Give the advantages and disadvantage of Fiber Optic Cables.
- f) Discuss SMTP and MIME protocols.
- g) What is FDDI?
- h) What is Internet? Write its applications.
- i) Discuss Token Ring protocol.
- j) Compare Hub, Bridge and Repeater.

**SECTION-B**

- Q2. Compare LAN, MAN and WAN.
- Q3. What is CSMA/CD protocol? Explain.
- Q4. What are different framing methods? Explain with examples.
- Q5. Illustrate the structure of coaxial cable with a suitable sketch. What are its advantages and disadvantages? Write its applications also.
- Q6. Discuss and compare various IEEE 802 standards.

**SECTION-C**

- Q7. Discuss the OSI reference model with functioning of each layer. Also write merits and demerits of OSI model.
- Q8. Explain and compare HDLC and SDLC protocols in detail.
- Q9. a) Discuss link state routing algorithm.
- b) Discuss the Leaky Bucket congestion control algorithm.