Roll No. Total No. of Pages : 2

Total No. of Questions: 09

B.Tech. (CSE/IT) (Sem.-4)

DATA COMMUNICATION

Subject Code : CS-206 Paper ID : [A0460]

Time: 3 Hrs. Max. Marks: 60

## **INSTRUCTION TO CANDIDATES:**

- 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**

- 1. Write briefly:
  - a) Compare LAN and MAN.
  - b) What are the disadvantages of bus topology?
  - c) What is a protocol?
  - d) What is the difference in UTP and STP cable?
  - e) List the different error detection codes.
  - f) What is a hamming distance?
  - g) What is IEEE 802.14 standard?
  - h) Compare switch and router.
  - i) Define the term collision in data communication.
  - j) What is a firewall?

## SECTION-B

- 2. Explain the process of signal transmission in optical fiber.
- 3. How ALOHA is different from slotted ALOHA?
- 4. Compare IEEE standard 802.3 and 802.4.
- 5. Explain the working of leaky bucket congestion control algorithm.
- 6. How TCP is different from UDP? Which of the two protocols is more favorable for real time applications and why?

## **SECTION-C**

- 7. Compare OS1 and TCP/IP models.
- 8. Explain the working of Sliding Window flow control using diagram.
- 9. Write short note on:
  - a) DNS
  - b) Email