**BS 33 (NS)** 

# III Semester B.Sc. (I.T.) Examination, June/July 2010 DATA COMMUNICATION

Time: 3 Hours Max. Marks: 75

### PART - A

## Answer all questions:

 $(10 \times 2 + 5 \times 1 = 25)$ 

- 1. Write the basic data communication model.
- 2. Name the layers of OSI reference model.
- 3. What is half-duplex transmission?
- 4. Distinguish between continuous signal and discrete signal.
- 5. Define repeater.
- 6. What is line coding?
- 7. Write the basic characteristics of HDLC.
- 8. Give the IEEE 802.5 frame structure.
- 9. What are datagrams?
- 10. What is peer-to-peer network?
- 11. Explain the following:
  - a) URL
  - b) LLC
  - c) WLAN
  - d) CRC
  - e) WAP.

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#### PART - B

## Answer any five questions:

 $(5 \times 10 = 50)$ 

- 1. Explain the basic components of a communication model with diagram.
- 2. Write a short note on TCP/IP reference model.
- 3. Explain the different guided transmission media in detail.
- 4. Write a note on Go-back-N ARQ.
- 5. Explain link state and hierarchical routing.
- 6. Discuss various congestion prevention policies.
- 7. Write a note on NAT.
- 8. Why should one deploy a WLAN? Explain.