

Register Number :

Name of the Candidate :

**5 3 4 2**

**B.Sc. DEGREE EXAMINATION, 2011**

( INFORMATION TECHNOLOGY )

( SECOND YEAR )

( PART - III )

( PAPER - VI )

**210. PRINCIPLES OF COMMUNICATION**

( Common with Double Degree & Lateral Entry)

December ] [ Time : 3 Hours

Maximum : 100 Marks

**SECTION - A** ( 8× 5=40)

*Answer any EIGHT questions.*

*ALL questions carry equal marks.*

1. Discuss the spectral characteristics of periodic signals.
2. Discuss the effect of transfer function on Power Spectral Density (PSD).

**Turn Over**

3. Explain the modulator and demodulator with diagram.
4. Discuss any two sampling in detail.
5. What are the basic differences between the digital and analog signal? Explain.
6. Explain the components of Pulse Code Modulation (PCM) encoder with diagram.
7. What is meant by multiplexing? Explain.
8. Explain the structure of circuit switching with diagram.
9. Explain the basic concepts of FDM and TDM strategies.
10. Explain the persistent and non-persistent CSMA.

**SECTION - B** ( 3× 20=60)

*Answer any THREE questions.*

*ALL questions carry equal marks.*

11. Explain the cross correlation and autocorrelation related waveforms with diagram.

12. Explain the pulse amplitude modulation and concept of time division multiplexing.
13. Discuss how to convert digital analog data to digital signals.
14. Explain the following:
  - (a) Synchronous transmission.
  - (b) Interfacing data link control.
15. Explain the following;
  - (a) Datagrams and virtual circuits.
  - (b) Radio access protocol.