Roll No. ⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚   Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(Electronics & Computer Engg.) (2011 Onwards E-I)   (Sem.–6)
COMMUNICATION SYSTEM
Subject Code : BTEL-904
Paper ID : [A2634]

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 have to attempt any FOUR questions.**
 3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Q1.   Answer briefly :

a) What is the need for modulation?

b) What are the advantages of VSB-AM?

c) What is super heterodyne receiver?

d) What do you mean by quantization error?

e) Explain the concept of equalization.

f) Why frequency modulation is better than amplitude modulation?

g) Difference between detector and demodulator.

h) Define bandwidth of PCM.

i) State sampling theorem.

j) Describe Shannon channel capacity.

SECTION-B

Q2. Compare AM with DSB-SC and SSB-SC.

Q3. Explain FSK detection using PLL.

Q4. Explain principle and generation of FM signal.

Q5. Explain in brief Armstrong method.

Q6. Discuss advantages and disadvantages of TDM and FDM.

SECTION-C

Q7. a) Explain Foster Discriminator in brief.

b) Discuss with block diagram Adaptive delta modulation.

Q8. Explain in brief about diversity reception.

Q9. Explain about generation and detection of PAM and PWM signals.