

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech. (ECE) (2012 to 2017)/(Electronics & Telecomm. Engg.)
(Sem.-4)**

ANALOG COMMUNICATION SYSTEMS

Subject Code : BTEC-401

M.Code : 57593

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

1. Answer briefly :

- Discuss the in analog communication system with neat diagram.
- Define noise and noise factor.
- Discuss tracking and alignment in AM reception.
- Discuss the AM receiver using phase locked loop.
- What do you mean by balanced modulator?
- What is selectivity in AM reception?
- Define modulation and demodulation.
- Discuss square law modulation.
- What do you mean by SSB system?
- Discuss the concept of pulse position modulation.

SECTION-B

2. Explain how the phase modulation obtained from the frequency modulation.
3. Give a fair Comparison between AM and FM.
4. Write a short note on receiver parameters.
5. Discuss the frequency modulator with diagram.
6. Explain the AM receiver characteristics.

SECTION-C

7. Discuss the generation of SSB transition with their three different methods.
8. Write a note on multiplicative mixer using dual gate MOSFET with diagram.
9. Discuss the different element of communication system with block diagram.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.