10+2 = 12.

SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR

ROLL No: | | | | | | | | | | | | | **Total number of pages:[1]**
Total number of questions: 06

B.Tech. || ECE|| 3rd Sem Reappear

Analog Communication Systems

Subject Code: BTEC-301A 2015 onwards

Paper ID: May, 2018

Max Marks: 60

Time allowed: 3 Hrs

Important Instructions:

- **All questions are compulsory.**
- **Assume any missing data**

PART A (2×10)

Q. 1. Short-Answer Questions:
(a) Why do we need Modulation?
(b) Compare AM and FM modulation?
(c) What are AM receiver characteristics?
(d) What is Pilot Carrier?
(e) What is Figure of Merit?
(f) Write down the full form of WiMAX, SSB, SC-DSB.
(g) Write a short note on VSB band.
(h) Compare PAM and PPM modulation schemes.
(i) What are different methods of generating SSB?
(j) Differentiate natural and flat top sampling.

PART B (8×5)

Q. 2. Write a short note on Pulse Modulation and Demodulation Techniques. CO1

OR

Mathematically represent AM and FM waves and explains in detail. CO1

Q. 3. Explain and compare the different methods used in generating SSB signals. CO4

OR

Write a short note on AM-SSB system. CO4

Q. 4. Explain in detail the working of Super heterodyne receiver (SHR). CO2

OR

Explain in detail the Tuned Radio Frequency receiver and compare with SHR. CO2

Q. 5. Write a short note on Foster-Seeley method and its pros and cons. CO3

OR

Compare and contrast of Direct and Indirect methods of FM transmission? CO3

Q. 6. Comparison SSB Transmission to the conventional AM transmission scheme. CO4

OR

Explain in detail the coherent reception of SSB signals. CO4