

4. Attempt ANY ONE questions. Each questions carry equal marks.**Marks: 1*10=10**

Q. No.	Question	Level of Taxonomy	Course Outcome
a.	A single-tone FM is represented by the voltage equation $X_{FM}(t) = 10\cos(6 \times 10^8 \cdot 2\pi t + 5\sin 2\pi \cdot 3000t + 10 \sin 2\pi \cdot 2000t)$. Find the following (1) Total power of FM (2) frequency deviation Δf (3) Bandwidth of FM signal.	L3	CO2
b.	Explain the Foster-Seely Discriminator method?	L2	CO2

5. Attempt ANY ONE questions. Each questions carry equal marks.**Marks: 1*10=10**

Q. No.	Question	Level of Taxonomy	Course Outcome
a.	Calculate the signal to noise ratio of frequency modulation. Also calculate noise figure.	L2	CO3
b.	Calculate the figure of merit in DSB-SC signal?	L2	CO3

6. Attempt ANY ONE questions. Each questions carry equal marks.**Marks: 1*10=10**

Q. No.	Question	Level of Taxonomy	Course Outcome
a.	Explain the PCM-TDM system with proper block diagram?	L2	CO4
b.	Describe the delta modulation with proper block diagram?	L2	CO4

7. Attempt ANY ONE questions. Each questions carry equal marks.**Marks: 1*10=10**

Q. No.	Question	Level of Taxonomy	Course Outcome
a.	Describe the PSK (Phase Shift Keying) Generation and demodulation with neat diagram.	L2	CO5
b.	Illustrate the concept of MSK with its modulator and demodulator. Also draw the signal space diagram for the MSK.	L2	CO5

Note: Revised Bloom's Taxonomy Levels-**L1-> Remembering, L2-> Understanding, L3-> Applying, L4-> Analyzing, L5-> Evaluating, L6-> Creating**