K. J. Somaiya Institute of Technology, Sion, Mumbai-22 (Autonomous College Affiliated to University of Mumbai)

May-June 2025

B. Tech Program

Scheme IIB

Regular Examination: SY

Semester: IV

Course Code: EXC 404 Date of Exam: 26/05/2025

Course Name: Principle of Communication Engineering

Duration: 02.5 Hours

Max. Marks: 60

Instructions:

(1)All questions are compulsory.

(2)Draw neat diagrams wherever applicable.

(3)Assume suitable data, if necessary.

).	Question	Max. Marks	СО	BT level
No.	Solve any two questions out of three: (05 marks each)	10		
Q 1	Compare Analog and Digital Communication System		CO1	U
o)	Modulation index for AM should be less than one. Justify/Contradict		CO2	U
c)	Explain FM Modulator		CO3	U
Q 2	Solve any two questions out of three: (05 marks each)	10		
a)	Explain TRF receiver drawbacks		CO4	U
a) b)	What is aliasing? How can it be prevented?		CO5	U
	Write applications of TDM and FDM?		CO6	U
c)	Solve any two questions out of three. (10 marks each)	20	8	
Q.3	Classify Noise and Explain the internal noises affecting communication		CO1	U
a)			CO2	U
b)	Explain Low Level AM Modulator		CO3	U
c)	Explain the working of indirect FM signal generation method	20		
Q.4	Solve any two questions out of three. (10 marks each)		CO	l U
a)	Explain FM Receiver		CO	5 U
b)	Explain PPM modulation and demodulation techniques		CO	
(c)	Explain DM modulation and demodulation techniques		100	
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