

**Day and Date: Saturday, 22/01/2022**

**Time: 11.00 am to 12.30 Pm**

Seat No:

**Max. Marks- 50**

**Instructions:**

- All Questions are compulsory.
- Figure to the right indicate full marks.
- Give suitable general Instructions
- Any other Course Specific Instructions.

BT	CO's	Q. No.		Marks
		<b>Q.1</b>	<b>Attempt the following</b>	<b>20</b>
2	CO1	<b>a</b>	With neat sketch explain Low level AM transmitter	7
3	CO1	<b>b</b>	Interpret Mathematical representation of F.M.	7
2	CO4	<b>c</b>	Explain Shannon's theorem of information theory	6
		<b>Q.2</b>	<b>Attempt the following</b>	<b>15</b>
4	CO4	<b>a</b>	Compare phase shift-keying (PSK) and differential phase shift-keying (DPSK).	7
		<b>OR</b>		
4	CO4	<b>a</b>	Compare FSSS with DSSS	7
3	CO2	<b>b</b>	Draw a diagram for the modulation of single-sideband (SSB) signal and explain.	8
		<b>Q.3</b>	<b>Attempt the following</b>	<b>15</b>
3	CO3	<b>a</b>	Draw eye diagram and explain ISI in detail	7
4	CO3	<b>b</b>	Differentiate between Uniform and Non-uniform Quantization	8
		<b>OR</b>		
3	CO2	<b>b</b>	Derive estimation of power spectral density	8

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