

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
Diploma Engineering, Mid semester Examination

Semester : 4 th
Subject Code: 03608255
Subject Name: Digital Communication Systems

Date: 20/01/2023
Time: (1hr: 30min)
Total Marks: 40

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

Q.1	Answer any six out of Ten. (2 Marks Each)	(12)	Co/Po Name	Blooms Taxonomy Words
	1. Write properties of Line Coding.		CO2	Understand
	2. Write Full form of ADM and DPCM?		CO2	Understand
	3. Define: Quantization		CO1	Knowledge
	4. Define: Digital Signal		CO1	Knowledge
	5. Define: Analog Signal		CO1	Knowledge
	6. Define: sampling		CO1	Knowledge
	7. Define: Communication Channel.		CO1	Knowledge
	8. Define: Communication.		CO1	Knowledge
	9. Write Application of PCM.		CO2	Understand
	10. Write Application of PAM.		CO2	Understand
Q.2	A) Describe Low pass signal sampling.	(03)	CO2	Understand
	OR			
	A) Describe Band pass signal sampling.	(03)	CO2	Understand
	B) Explain Uniform Quantization.	(03)	CO3	Apply
	OR			
	B) Explain Non Uniform Quantization.	(03)	CO3	Apply
	C) Compare Delta Modulation and Adaptive Delta Modulation.	(04)	CO4	Analyze
	OR			
	C) Compare Pulse Code Modulation and Differential Pulse Code Modulation.	(04)	CO4	Analyze
	D) Write difference between Baseband transmission and Broadcast transmission.	(04)	CO4	Analyze
Q.3	A) Explain Block Diagram of Digital Communication?	(03)	CO3	Apply
	OR			
	A) Describe Advantages & Disadvantages & Application of Digital Communication.	(03)	CO4	Analyze
	B) Describe Pulse Amplitude Modulation.	(03)	CO4	Analyze
	OR			
	B) Describe Pulse Code Modulation.	(03)	CO4	Analyze
	C) Explain Block Diagram of Digital Modulation Transmitter	(04)	CO3	Apply
	OR			
	C) Explain Block Diagram of Digital Modulation Receiver.	(04)	CO3	Apply
	D) Compare Analog Signal and Digital Signal.	(04)	CO4	Analyze

ગુજરાતી

પ્રશ્ન.૧	દસમાંથી કોઈપણ છ જવાબ આપો . (દરેક માટે ૨ ગુણ)	(૧૦)
	૦. ઠઠઠઠ ઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠઠ ઠઠઠ.	
	૦. ADM ઠઠ ઠઠ DPCMઠઠ ઠઠઠઠ ઠઠઠઠઠ ઠઠઠ?	
	૦. ઠઠઠઠઠઠઠઠઠઠ ઠઠઠ: ઠઠઠઠઠઠ	
	૦. ઠઠઠઠઠઠઠઠઠઠ ઠઠઠ: ઠઠઠઠઠઠ ઠઠઠઠઠઠ	
	૦. ઠઠઠઠઠઠઠઠઠઠ ઠઠઠ: ઠઠઠઠઠઠ ઠઠઠઠઠઠ	
	૦. ઠઠઠઠઠઠઠઠઠઠ ઠઠઠ: ઠઠઠઠઠઠઠઠઠ	
	૦. ઠઠઠઠઠઠઠઠઠઠ ઠઠઠ: ઠઠઠઠઠઠઠઠઠઠ ઠઠઠઠ.	
	૦. ઠઠઠઠઠઠઠઠઠઠ ઠઠઠ: ઠઠઠઠઠઠ	
	૦. PCM ઠઠ ઠઠઠઠ ઠઠઠ.	
	૦૦. PAM ઠઠ ઠઠઠઠ ઠઠઠ.	
પ્રશ્ન.૨	એ) ઠઠ ઠઠ ઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠઠ ઠઠઠઠ ઠઠઠ.	(૦૩)
	અથવા	
	૦) ઠઠઠઠ ઠઠ ઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠઠ ઠઠઠઠ ઠઠઠ.	(૦૦)
	૦૦) ઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠ.	(૦૩)
	અથવા	
	૦૦) ઠઠ ઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠ.	(૦૩)
	૦૦) ઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠ ઠઠ ઠઠઠઠઠઠ ઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠ ઠઠઠઠઠ ઠઠઠ.	(૦૪)
	અથવા	
	૦૦) ઠઠઠ ઠઠ ઠઠઠઠઠઠઠઠ ઠઠ ઠઠઠઠઠઠઠઠ ઠઠઠ ઠઠ ઠઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠ ઠઠઠઠઠઠ.	(૦૪)
	૦૦) ઠઠઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠ ઠઠ ઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠઠ ઠઠઠઠઠ ઠઠઠઠઠ ઠઠઠઠઠઠ.	(૦૦)
પ્રશ્ન.૩	એ) ઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠઠઠ ઠઠઠઠ ઠઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠ?	(૦૩)
	અથવા	
	૦) ઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠઠઠ ઠઠઠઠ ઠઠ ઠઠઠઠઠઠ ઠઠ ઠઠઠઠઠઠઠઠઠ ઠઠઠઠઠ ઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠ.	(૦૩)
	૦૦) ઠઠઠ ઠઠઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠઠ ઠઠઠઠ ઠઠઠ.	(૦૩)
	અથવા	
	૦૦) ઠઠઠ ઠઠ ઠઠઠઠઠઠઠઠઠઠ ઠઠઠઠ ઠઠઠ.	(૦૩)
	૦૦) ઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠ ઠઠઠઠ ઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠ	(૦૪)
	અથવા	
	૦૦) ઠઠઠઠઠ ઠઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠ ઠઠઠઠ ઠઠઠઠઠઠઠઠ ઠઠઠઠઠઠઠ.	(૦૪)
	૦૦) ઠઠઠઠઠ ઠઠઠઠઠ ઠઠ ઠઠઠઠઠ ઠઠઠઠઠઠઠ ઠઠઠઠઠઠ ઠઠઠઠઠઠ ઠઠઠ.	(૦૪)