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Question Paper Code: 35423

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2021

Fifth Semester

Electrical and Electronics Engineering

01UEC523-COMMUNICATION ENGINEERING

(Common to EIE and ICE)

(Regulation 2013)

Duration: Threehours

Maximum: 100 Marks Answer ALL Questions

PART A - $(10 \times 2 = 20 \text{ Marks})$

- 1. What are the various types of AM?
- 2. List two major limitations of amplitude modulation.
- 3. Define sampling theorem.
- 4. What is the main difference between DPCM and DM?
- 5. Define entropy.
- 6. When will entropy function have its maximum value?
- 7. Give the advantages of CDMA.
- 8. Define spread spectrum.
- 9. What are the losses in optical fibers?
- 10. What is SCADA?

PART - B ($5 \times 16 = 80$ Marks)

11. (a) Explain the generation of FM signal using reactance modulator with neat diagram.

(16)

	(b) (i) Illustrate the generation of SSB-SC using phase shift method.	(8)	
	(ii) Explain the working principle of Armstrong transmitter.	(8)	
12.	(a) Explain in detail about FSK.	(16)	
	Or		
	(b) List out the various pulse modulation schemes and explain PAM.	(16)	
13.	(a) Encode the data 01001110 using NRZ,RZ,AMI coding.	(16)	
	Or		
	(b) Briefly discuss on various error control codes with an example.	(16)	
14.	(a) Discuss in detail about CDMA technique and mention its advantages and disadvantages.	(16)	
Or			
	(b) Explain in detail about time division multiple access. (16)		
15.	(a) Explain the block diagram of an optical fiber communication system.	(16)	
	Or		

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(b) Brief the concepts of SCADA. (16)