Roll No	·		
	24	042	
	B. Tech. 3rd	Semester (IT)	)
E	Examination –	December, 20	018
	DIGITAL ANALOG	G COMMUNICATIO	N
	Paper:	EE-217-F	
Time : T	[hree Hours ]	[ Maximum ]	Marks : 100
been supp	swering the questions, ca plied the correct and com d, will be entertained after	plete question paper. No	•
	Attempt five questio	0	•
	from each Section. ( All questions carry e		ompulsory.
<b>1.</b> (a)	What is Nyquist Cr	riteria ?	4
(b)	Define Delay distor	tion.	. 4
(c)	Design Hamming (	Code for 1010.	4
(d)	Define Asynchrono	ous Transmission.	4
(e)	What do you mea Burst length with s	n by Burst Error? uitable example.	Also define 4

SECTION - A

2. (a) Explain the block diagram of communication

P. T. O.

10

system.

	(b)	Discuss various signal properties in detail.				
3.	(a)	What are sign waves? Expand sign waves withe help of Fourier series.	ith 10			
•	(b)		he 10			
		SECTION - B				
4.	(a)	Define modulation. Explain Frequence Modulation (FM) in detail.	су 10			
	(b)	Explain various Data Encoding techniques with help of waveforms.	th 10			
<b>5</b> .	(a)	Write briefly about physical layer interface Explain any <i>one</i> in detail.	ce. 10			
	(b)	What do you mean by Transmission media Discuss Co-axial cable and fibre opticable wireline communication medium.				
		SECTION - C				
6.	(a)	Discuss various circuit switching techniques.	10			
	(b)	Write briefly about simplex protocol and sto and-wait protocol.	p- 10			
7.	(a)	Discuss PSTN in detail.	10			

(b)	What	do.	you	mean	by	multiplex	ing	?
	Explain	Freq	luency	Division	n Mı	ıltiplexing	(FD	M)
	in detai	1.						10

## SECTION - D

8.	(a)	A seri	ies of 8 bit d	ata 110101	101 is t	ransn	nitted.	Do
		CRC	generation	process	with	the	help	of
		generator polynomial given as 1101.						10

- (b) Discuss Huffman encoding with the help of example.
- **9.** Write short notes on the following :
  - (a) Public Key Cryptography 10
  - (b) Data Compression 10