3112_IT_Sem-III_R19_PC_Inst. Name

1) The Question Paper will have MCQs (for 20 marks) and Subjective/Descriptive Questions (for 60 marks).

2) MCQ correct options and subjective question answers to be written on A4 size papers. Scan all pages of answer papers of Q.1 to Q.4 and create single file in pdf format to upload in the link given.

* Required

1. Enter your Name *

2. Enter your Seat Number *

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Q.1) 1 to 3

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	Which one of the following channels has higher data rates as compared to the other wired communication channels?
Option A:	Coaxial cable channel
Option B:	Shielded Twisted pair cable channel
Option C:	Optical fiber channel
Option D:	Unshielded Twisted pair cable channel
2.	In a Super heterodyne receiver
Option A:	the RF stage has better selectivity than IF stage
Option B:	the IF stage has better selectivity than RF stage
Option C:	the RF stage has same selectivity than IF stage
Option D:	the antenna has better selectivity than IF stage
3.	A broadcast radio transmitter radiates 15Kwatt .when the modulation percentage is 60. How much of this is carrier power
Option A:	14.2KW
Option B:	12.711KW
Option C:	20.07KW
Option D:	17.89KW

Q.1) 4 to 7

4.	The function of an AM detector circuit is to
Option A:	Add input signal and carrier signal
Option B:	Discard the carrier signal
Option C:	Amplify the signal
Option D:	Remove baseband signal
5.	Quantizing error occurs in
Option A:	AM
Option B:	Pulse Position Modulation
Option C:	Pulse Width Modulation
Option D:	Pulse Code Modulation
6.	Which multiplexing is based on Orthogonality
Option A:	TDM
Option B:	WDM
Option C:	Pulse Modulation
Option D:	OFDM
7.	The Pulse Modulation technique most effected by noise
Option A:	PWM
Option B:	PPM
Option C:	PAM
Option D:	Adaptive Delta Modulation

Q.1) 8 to 10

8.	Sampling technique having minimum noise is
Option A:	Instantaneous sampling
Option B:	Flat Top Sampling
Option C:	Natural Sampling
Option D:	Periodic Sampling
9.	In PWM signal reception Schmitt Trigger circuit is used
Option A:	To remove noise
Option B:	To produce ramp signal
Option C:	For synchronization
Option D:	Boost the signal
10.	Which phenomenon do the waves arrive at receiving antenna in ionospheric propagation
Option A:	Defraction
Option B:	Refraction
Option C:	Reflection or scattering
Option D:	Radiated

Q.2, Q.3 & Q.4

Q2	Solve any Two Questions out of Three	10 marks each
A	Draw and explain the block diagram of Digital communication system and compare with analog communication system.	
B	Compare AM and FM, Derive the expression for AM Wave.	
C	Derive Friss Formula for two stage cascade amplifier	

Q3	Solve any Two Questions out of Three	10 marks each
A	State and prove the following properties of Fourier Transform with example i.Time Shifting ii.Convolution in Time domain	
B	Explain Foster Seeley discriminator with neat diagram	
C	With reference to AM receiver explain I. Selectivity ii. Sensitivity iii. Fidelity iv. Image Frequency Rejection v. Double Spotting	

Q4.	Solve any Two Questions out of Three	10 marks each
A	Explain PCM Encoder and decoder with block diagram	
B	Draw and explain OFDM Transmitter and receiver	
C	Explain Space Wave Propagation with its advantages and disadvantages	

3. Upload your answer papers *

   Files submitted:

4. Have you uploaded required pdf file of answers? *

   Mark only one oval.

   ◯ Yes