

University of Mumbai
Examination 2020 under cluster ___ (APSIT)

Program: EXTC Engineering
Curriculum Scheme: Rev2016

Examination: Second Year Semester IV
Course Code: ECC405 and Course Name: Principles of Communication Engineering
Time: 1 hour Max. Marks: 50

For the students:- All the Questions are compulsory and carry equal marks .

Q1.	In _____ communication channel is able to transmit data in both directions on a signal carrier at the same time.
Option A:	Simplex
Option B:	Half duplex
Option C:	Full duplex
Option D:	Half simplex
Q2.	Due to modulation process height of antenna
Option A:	Decreases
Option B:	Increases
Option C:	Remains same
Option D:	infinite
Q3.	In FM, the carrier amplitude remains constant and the carrier _____ is changed according to the instantaneous value of the modulating signal.
Option A:	Amplitude
Option B:	Phase
Option C:	power
Option D:	Frequency
Q4.	Types of angle modulation are
Option A:	AM and FM
Option B:	PAM and PWM
Option C:	FM and PM
Option D:	PCM and PPM
Q5.	Signal to noise ratio is ratio of
Option A:	Signal power to noise power
Option B:	Noise power to signal power
Option C:	Input noise power to output noise power
Option D:	Input signal power to output signalpower
Q6.	Types of FM are
Option A:	AM and PM
Option B:	Narrow band and wide band
Option C:	PAM and PWM
Option D:	PCM and PPM
Q7.	Super-heterodyne Receiver is type of _____ receiver.
Option A:	AM

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Option B:	FM
Option C:	PM
Option D:	PPM
Q8.	In amplitude modulation the _____ of the high frequency carrier wave is varied with the instantaneous amplitude of the modulating signal.
Option A:	power
Option B:	Phase
Option C:	frequency
Option D:	Amplitude
Q9.	Pre-emphasis and De-emphasis is used in
Option A:	AM
Option B:	PM
Option C:	FM
Option D:	PWM
Q10.	Selectivity is defined as the ability of the receiver to _____ signals.
Option A:	reject wanted
Option B:	Add unwanted
Option C:	Multiply unwanted
Option D:	reject unwanted
Q11.	The maximum deviation allowed in FM is _____ and the maximum modulating frequency is set to _____.
Option A:	15KHz, 75KHz
Option B:	75KHz, 15KHz
Option C:	15MHz, 75MHz
Option D:	75MHz, 15MHz
Q12.	In AM modulation index m is
Option A:	E_m/E_c
Option B:	$2E_m/E_c$
Option C:	$E_m/2E_c$
Option D:	$E_m \times E_c$
Q13.	Pulse modulation also known as
Option A:	Continuous wave
Option B:	Sine wave
Option C:	Discrete
Option D:	Dis-continuous wave
Q14.	ARMSTRONG method is _____ method of FM generation.
Option A:	direct
Option B:	complex
Option C:	duplex
Option D:	indirect

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Q15.	Friss formula is power is _____ proportional to square of distance between transmitter and receiver antenna
Option A:	directly
Option B:	inversely
Option C:	exponentially
Option D:	parabolic
Q16.	In AM maximum transmitted power P_t is
Option A:	$1.2P_c$
Option B:	$2P_c$
Option C:	$4P_c$
Option D:	$1.5P_c$
Q17.	Most efficient sampling is
Option A:	Flat Top
Option B:	Natural
Option C:	Round top
Option D:	None
Q18.	Frequency Division Multiplexing (FDM) is preferred for
Option A:	Both
Option B:	Digital signals
Option C:	Analog signals
Option D:	None
Q19.	In the process of demodulation of PAM _____ filter is used
Option A:	High pass
Option B:	Low pass
Option C:	Band pass
Option D:	Band reject
Q20.	In DSB-SC, total power saved is
Option A:	66.66%
Option B:	50%
Option C:	25%
Option D:	90%
Q21.	PPM generator requires
Option A:	Comparator and bistable multivibrator
Option B:	Comparator
Option C:	bistable multivibrator
Option D:	Comparator and Monostable Multivibrator
Q22.	Frequency range for FM is
Option A:	88KHz to 108MHz
Option B:	88KHz to 108KHz
Option C:	88MHz to 108MHz

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Option D:	88MHz to 108GHz
Q23.	Time Division Multiplexing (TDM) is preferred for
Option A:	Digital signals
Option B:	Analog signals
Option C:	Both
Option D:	None
Q24.	Error detection and correction is possible in
Option A:	PAM
Option B:	PCM
Option C:	PWM
Option D:	PPM
Q25.	Image frequency is given by
Option A:	$f_{si} = 2f_s + f_f$
Option B:	$f_{si} = f_s + f_f$
Option C:	$f_{si} = f_s + 2f_f$
Option D:	$f_{si} = f_s + 2 * f_f$