Q=QUESTION A=ANSWER	question_description answer_description	question_explanation answer_explanation	question_type answer_isright	question_difficulty answer_position	
Q	If Unconditional stability condition is met, then the transistor can be_____ for any load		M	1	1
A	difficult to matche		0	1	
B	impidance mismatched		0	2	
C	impidance matched		1	3	
D	Easy to match		0	4	
Q	The network is unconditionally stable if the value of |Γin| and |Γout| is ____for all passive source and load impedance		M	1	2
A	<1		1	1	
B	>1		0	2	
C	=1		0	3	
D	0		0	4	
Q	Conditional stability is also reffered as		M	1	3
A	potentially stable		0	1	
B	potentially unstable		1	2	
C	fully stable		0	3	
D	fully unstable		0	4	
Q	The Rollets condition says that the value of K should be		M	1	4
A	<1		0	1	
B	>1		1	2	
C	=1		0	3	
D	0		0	4	
Q	The device to be unconditionally stable the value of μ should be		M	1	5
A	=1		0	1	
B	0		0	2	
C	<1		0	3	
D	>1		1	4	

Q	In a two port network, the source impedance was measured to be 5 Ω and the characteristic impedance of the transmission line was measured to be 50 Ω. Then the reflection coefficient at the source end is:		M	1	6
A	1		0	1	
B	-0.8182		1	2	
C	-0.333		0	3	
D	-0.01		0	4	
Q	The Transducer Power Gain 'G_T' is given by		M	1	7
A	P_{avs}/P_{avn}		0	1	
B	P_{avn}/P_{avs}		0	2	
C	P_{avs}/P_L		0	3	
D	P_L/P_{avs}		1	4	
Q	In term of S parameter, the relation $\|S_{21}\|/\|S_{12}\|$ is known as		M	1	8
A	Avalable gain		0	1	
B	Transducer Gain		1	2	
C	Total Gain		0	3	
D	Maximum gain		0	4	
Q	If the output power of an amplifier is 10 V, and the input power supplied to the amplifier is 0.5 V given that the DC voltage used is 40 V, efficiency of the power amplifier is:		M	1	9
A	23.75%		0	1	
B	26%		0	2	
C	50%		0	3	
D	75%		1	4	
Q	lange coupler is used in _____to achive achieve the required performance.		M	1	10
A	Unbalanced amplifiers		0	1	
B	balanced amplifiers		1	2	
C	Power amplifier		0	3	

D	Filter		0	4	
Q	The free running multivibrator is also called as		M	1	11
A	Bi Stable multivibrator		0	1	
B	Quasi Stable		0	2	
C	Voltage control oscillator		1	3	
D	Sine wave oscillator		0	4	
Q	Phase detector's output voltage is		M	1	12
A	Phase voltage		0	1	
B	Free running voltage		0	2	
C	Amplified Voltage		0	3	
D	Error voltage		1	4	
Q	Phase-locked loop tracks any change in input frequency in which state		M	1	13
A	Phase locked state		1	1	
B	Free running state		0	2	
C	Capture state		0	3	
D	Buffer state		0	4	
Q	Function of low pass filter in phase-locked loop is		M	1	
A	Removes high frequency noise		1	1	14
B	Improves low frequency noise		0	2	
C	Tracks the voltage changes		0	3	
D	Changes the input frequency		0	4	
Q	What is the need to generate corrective control voltage in PLL?		M	1	15
A	To filter the input		0	1	
B	To track the frequency change		1	2	
C	To amplify the input		0	3	
D	To Rectify the input		0	4	
Q	At what range the PLL can maintain the lock in the circuit?		M	1	16
A	Input range		0	1	
B	Output range		0	2	
C	Attenuation range		0	3	

D	Lock in range		1	4	
Q	The pull-in time dosen't depends on following		M	1	17
A	initial phase and frequency difference between two sign		0	1	
B	Overall loop gain		0	2	
C	Loop filter characteristics		0	3	
D	Power supply values		0	4	
Q	Analog phase detector is often referred as		M	1	18
A	Full wave detector		0	1	
B	Rectifier wave detector		0	2	
C	Half wave detector		1	3	
D	Active Filter		0	4	
Q	What happens when VCO output is 90 degrees out of phase with respect to input signal?		M	1	19
A	Attenuation		0	1	
B	Shift in phase of comparator		0	2	
C	Perfect lock		1	3	
D	Error signal is removed		0	4	
Q	How to overcome the problem associated with switch type phase detective?		M	1	20
A	Increase loop gain depending on input signal		0	1	
B	Phase shift is made linear		0	2	
C	Limit the amplifier of input signal		1	3	
D	rectify input		0	4	
Q	An RF input signal at 1.89GHz is required to be downconverted to an output IF of 200MHz. The required frequency of the local oscillator will be		M	1	21
A	1.69 GHz		0	1	
B	2.09 GHz		0	2	
C	Either 1.69 GHZ or 2.09 GHz		1	3	
D	3.5321GHz		0	4	

Q	Let the scattering parameters of a transistor in polar forms are, S11 [Mag=2.18 , angle= -35], S12 [Mag= 1.26 , angle= 18], S21 [Mag=2.75 , angle= 96], S22 [Mag=0.52, angle= 155]. To test k-delta satbility, the value of k is found to be		M	1	22
A	1		0	1	
B	0.21		1	2	
C	infinity		0	3	
D	0		0	4	
Q	Let the scattering parameters of a transistor in polar forms are, S11 [Mag=2.18 , angle= -35], S12 [Mag= 1.26 , angle= 18], S21 [Mag=2.75 , angle= 96], S22 [Mag=0.52, angle= 155]. To test the satbility, delta is found to be		M	1	23
A	2		0	1	
B	3		0	2	
C	4		0	3	
D	2.341		1	4	
Q	Conversion gain of a Mixer is defined as		M	1	24
A	Output power in One sideband (IF)/ Signal input (RF) power		1	1	
B	Signal input (RF) power/Output power in One sideband (IF)		0	2	
C	Signal input (RF) power / Total output power		0	3	
D	Total output power / Signal input (RF) power		0	4	
Q	Typical conversion effciency for Varactor multipliers is		M	1	25
A	Less than 25 percent		0	1	
B	Between 25 to 50 percent		0	2	
C	Between 50 to 80 percent		1	3	
D	More than 80 percent		0	4	

Q	If the parameters of a FET of a single ended FET mixer are Rd=300 Ohm, Ri=10 Ohm, Cgs=0.3pF, g1=10mS and if f= 2.4GHz, then the maximum conversion gain will be		M	1	26
A	Gc= 36.6 dB		0	1	
B	Gc=15.6 dB		1	2	
C	Gc= -36.6 dB		0	3	
D	Gc= -15.6 dB		0	4	
Q	Conversion loss of a down-conversion mixer in dB is expressed as		M	1	27
A	Available IF input power /Available RF output power		0	1	
B	Available RF input power /Available IF output power		1	2	
C	Available LO input power /Available RF output power		0	3	
D	Available RF input power /Available LO output power		0	4	
Q	The efficiency of a resistive multipler drops as		M	1	28
A	1/m		0	1	
B	1/ (square of m)		1	2	
C	1/ (cube of m)		0	3	
D	1/ (m raised to power 4)		0	4	
Q	A RF Mixer is a		M	1	29
A	One port device		0	1	
B	Two port Device		0	2	
C	Three Port Device		1	3	
D	Four port device		0	4	
Q	Which of the following type of noise is induced at higher frequencies operation of an Oscillator		M	1	30
A	Thermal noise		1	1	

B	White noise		0	2	
C	Shot noise		0	3	
D	Flicker noise		0	4	
Q	Characteristic Impedance is denoted as		M	1	31
A	Z_0		1	1	
B	Z_i		0	2	
C	Z_n		0	3	
D	Z_x		0	4	
Q	The value of Z_{i2} is given by		M	1	32
A	z_{i2} = Sqrt(AB/CD)		0	1	
B	z_{i2} = Sqrt(CD/AB)		0	2	
C	z_{i2} = Sqrt(BD/AC)		1	3	
D	z_{i2}= Sqrt(AC/BD)		0	4	
Q	In principle the Richards transformation replaces Capacitor by		M	1	33
A	Voltage Source		0	1	
B	Current Source		0	2	
C	Open Circuit		1	3	
D	Short Circuit		0	4	
Q	The expression of the open circuit impedance Z_{oc} is?		M	1	34
A	$Z_{oc}=Z_1/2+Z_2$		1	1	
B	$Z_{oc}=Z_2/2+Z_2$		0	2	
C	$Z_{oc}=Z_1/2+Z_1$		0	3	
D	$Z_{oc}=Z_1/2-Z_2$		0	4	
Q	The Condition that corresponds to the wave does not propagate, but is attenuated along the line; this defines the stopband of the structure		M	1	35
A	$\alpha \neq 0, \beta = 0,\pi$		1	1	
B	$\alpha = 0, \beta = 0,\pi$		0	2	
C	$\alpha = 0, \beta \neq 0,\pi$		0	3	

D	$\alpha \neq 0, \beta \neq 0,\pi$		0	4	
Q	For Equal Ripple Response which polynomial is used to specify Insertion Loss		M	1	36
A	Chebyshev Response		1	1	
B	Poissons Response		0	2	
C	Butterworth Response		0	3	
D	Maxwells Response		0	4	
Q	For Equal-Ripple Low Pass Filter Prototype the filter will have power loss ratioof $1+k^2$ at $\omega=0$ when		M	1	37
A	N is Odd		0	1	
B	N is Even		1	2	
C	N is some random number		0	3	
D	N is zero		0	4	
Q	For a constant k low pass filter section find the value of 'C', if fc = 4MHz and $R_0=75\Omega$		M	1	38
A	1.06nF		1	1	
B	2.06nF		0	2	
C	3.06nF		0	3	
D	4.06nF		0	4	
Q	The first stage in a four stage composite filter is		M	1	39
A	Constant k		0	1	
B	Sharp Cutoff		0	2	
C	Matching Section		1	3	
D	High f cutoff		0	4	
Q	After Impedance Scaling is done the new value of Capacitence becomes		M	1	40
A	$C' = R_0xC$		0	1	
B	$C' = R_0/C$		0	2	
C	$C' = C/R_0$		1	3	
D	C' = C		0	4	
Q	The circuit causing the interference is called		M	1	41
A	Static strength		0	1	

B	Receptor		0	2	
C	Source		1	3	
D	Noncoupling		0	4	
Q	The resistance R of a simple one conductor earth electrode system is defined as		M	1	42
A	V / I		1	1	
B	I / V		0	2	
C	C / V		0	3	
D	V / C		0	4	
Q	What is abbreviation of EMI		M	1	43
A	Electromagnetic Interfernce		1	1	
B	Electromagnetic Compatibility		0	2	
C	Electronics Measurement Instrumentation		0	3	
D	Electomagnetic engineering		0	4	
Q	When the cause of the EMI problem is within the system then it is called as		M	1	44
A	Intersystem EMI problem		1	1	
B	Intrasystem EMI problem		0	2	
C	Susceptor		0	3	
D	Emitter		0	4	
Q	The victim device affected by EMI is called		M	1	45
A	Susceptor		1	1	
B	Emitter		0	2	
C	Base and Emitter		0	3	
D	Base and Collector		0	4	
Q	EMI occur for a very short duration like pulses, it is known as		M	1	46
A	Continous EMI		0	1	
B	Impulse EMI		1	2	
C	Natural EMI		0	3	
D	Human-made EMI		0	4	
Q	When two conductors are used, when the noise is out of phase on the conductors, it is said to operate in		M	1	47

A	Common Mode		0	1	
B	Conduction Coupling		0	2	
C	Differential Mode		1	3	
D	Radiation Coupling		0	4	
Q	When the cause of the EMI problem is within the system then it is called as		M	1	48
A	Intersystem EMI problem		0	1	
B	Intrasystem EMI problem		1	2	
C	Susceptor		0	3	
D	Emitter		0	4	
Q	The sudden flow of electricity between two electrically charged objects caused by contact, an electrical short, or dielectric breakdown is called		M	1	49
A	Discharge		0	1	
B	Electrostatic discharge		1	2	
C	Electromagnetic interference		0	3	
D	Interference		0	4	
Q	The initial current rises very rapidly to a high peak value and then gradually _____ to the normal load current after undergoing a damped oscillation at a frequency.		M	1	50
A	Decrease		0	1	
B	Equal		0	2	
C	Decays		1	3	
D	Increase		0	4	
Q	Pulsars radiate electromagnetic noise, which is a_____?		M	1	51
A	continuous wave		0	1	
B	similar to white noise		0	2	
C	in aperiodic pulses		0	3	
D	in pulses with constant repetition frequency		1	4	
Q	Extremely high votages due to the buildup of static electricity occur in		M	1	52

A	objects with sharper radii such as furniture		0	1	
B	objects which do not have corners with sharper radii		1	2	
C	humid weather such as beach resorts		0	3	
D	objects with corners having sharper radii under highly humid weather		0	4	
Q	Automobile ignition system generate EM noise due to		M	1	53
A	large transient current		1	1	
B	Short luminous steps		0	2	
C	small transient current		0	3	
D	interference		0	4	
Q	which of the following appliances has maximum electric field intensity?		M	1	54
A	Electric blanket		1	1	
B	Boiler		0	2	
C	stereo		0	3	
D	Toaster		0	4	
Q	which of the following appliances has minimum electric field intensity?		M	1	55
A	Hair dryer		0	1	
B	Coffee pot		0	2	
C	Stereo		0	3	
D	Incandescent bulb		1	4	
Q	During nuclear explosion, there is increase in conductivity due to		M	1	56
A	protons pair generation by molecules		0	1	
B	ion pair generation by photons		1	2	
C	electron pair generation		0	3	
D	air density		0	4	
Q	cross-talk refers to		M	1	57
A	convection between EM waves		0	1	
B	coupling of EM waves		1	2	
C	Reflection of Em waves		0	3	

D	conduction of EM waves		0	4	
Q	Which of the following components does NOT cause passive intermodulation?		M	1	58
A	ferrite isolators		0	1	
B	filters		0	2	
C	resistors		1	3	
D	connectors		0	4	
Q	Which of the following techniques are used for measuring Antenna factor?		M	1	59
A	Standard site method		1	1	
B	OATS		0	2	
C	Anechoic Chamber		0	3	
D	Current probe		0	4	
Q	In an OATS, the maximum allowable terrain toughness at wavelength λ is given by _____.		M	1	60
A	λ/8		0	1	
B	λ/6		0	2	
C	λ/4		0	3	
D	set by Rayleigh criterion		1	4	
Q	DDFS system is a Clock		1	1	61
A	Multiplier		0	1	
B	Adder		0	2	
C	Subtractor		0	3	
D	Divider		1	4	
Q	Programmable frequency dividers are		1	1	62
A	Highly frequency limited		1	1	
B	Noise limited		0	2	
C	Voltage limited		0	3	
D	Gain limited		0	4	
Q	The soil conductivity of earth is about		M	1	63
A	0.1 mhos/m		0	1	
B	0.01 mhos/m		1	2	

C	0.001 mhos/m		0	3	
D	1 mhos/m		0	4	
Q	The ocean conductivity is measured as		M	1	64
A	1 mhos/m		0	1	
B	2 mhos/m		0	2	
C	3mhos/m		0	3	
D	4mhos/m		1	4	
Q	Current pulse is also known as		M	1	65
A	Faraday's current		0	1	
B	Maxwell's current		0	2	
C	Compton's current		1	3	
D	Ohm's current		0	4	
Q	The downward moving gamma rays interact with atmosphere at an altitude of		M	1	66
A	20-30km		0	1	
B	30-40km		0	2	
C	40-50km		1	3	
D	50-60km		0	4	
Q	The intensity of electromagnetic field generated by nuclear explosion has an extended frequency range upto_____		M	1	67
A	1 MHz		0	1	
B	10 MHz		0	2	
C	1 GHz		1	3	
D	10 GHz		0	4	
Q	The non linear I-V charactristics in a Resistive multipleirs generally is obtained by using		M	1	68
A	Resistor		0	1	
B	Inductor		0	2	
C	Zener diode		0	3	
D	Forward-biased Schottky Barrier diode		1	4	

Q	Which of the following Oscilators have lower frequency and power capabilities		M	1	69
A	Tunnel diode oscillator		0	1	
B	Gunn diode oscillator		0	2	
C	IMPATT diode oscillator		0	3	
D	Transistor Oscillator		1	4	
Q	Which of the following Oscilators offers better control on oscillation frequency, temperature stability and output noise		M	1	70
A	Tunnel diode oscillator		0	1	
B	Gunn diode oscillator		0	2	
C	IMPATT diode oscillator		0	3	
D	Transistor Oscillator		1	4	
Q	Which of the following Oscilators lend themselves well to frequency tuning, phase locking and various modulation requirement		M	1	71
A	Tunnel diode oscillator		0	1	
B	Gunn diode oscillator		0	2	
C	IMPATT diode oscillator		0	3	
D	Transistor Oscillator		1	4	
Q	Plot of propagation constant, β, versus the propagation constant of the unloaded line, k (or ω) is called as		M	1	72
A	Venn Diagram		0	1	
B	Bloch Diagrams		0	2	
C	Rayleigh Diagram		0	3	
D	Brillouin Diagram		1	4	
Q	The formula to calculate the value of propagation constant β is		M	1	73
A	$\beta = \sqrt{(k^2 - K_c^2)}$		1	1	
B	$\beta = \sqrt{(K_c^2 - k^2)}$		0	2	

C	$\beta = \sqrt{(k^2 + K_c^2)}$		0	3	
D	$\beta = \sqrt{(k^2 / K_c^2)}$		0	4	
Q	In Image Parameter Method, which condition tells that the network is symmetrical		M	1	74
A	$z_{i1} = Z_{i2}$		1	1	
B	$z_{i1} \neq Z_{i2}$		0	2	
C	$z_{i1} + Z_{i2} = 0$		0	3	
D	$z_{i1} - Z_{i2} = 0$		0	4	
Q	Find the value of cutoff frequency f_c for Low Pass Filter if the values of L and C are 11.94µH and 2.122 nF respectively.		M	1	75
A	4 MHz		0	1	
B	3 MHz		0	2	
C	2 MHz		1	3	
D	1 MHz		0	4	
Q	Maximally Flat characteristics are also called as		M	1	76
A	Chebyshev Response		0	1	
B	Poissons Response		0	2	
C	Butterworth Response		1	3	
D	Maxwells Response		0	4	
Q	What is the condition required to cascade two lower order filters to obtain good attenuation characteristics		M	1	77
A	N<10		0	1	
B	N>10		1	2	
C	N=10		0	3	
D	N=0		0	4	
Q	For Equal-Ripple Low Pass Filter Prototype the filter will have unity power loss ratio at ω=0 when		M	1	78
A	N is Odd		1	1	

B	N is Even		0	2	
C	N is some random number		0	3	
D	N is zero		0	4	
Q	After Impedance Scaling is done the new value of Inductance becomes		M	1	79
A	$L' = R_0 x L$		1	1	
B	$L' = R_0 / L$		0	2	
C	$L' = L / R_0$		0	3	
D	$L' = L$		0	4	
Q	If the S parameters of a transistor given are :S11=-0.811-j0.311, S12= 0.0306+j0.0048, S21=2.06+j3.717, S22=-0.230-j0.4517. Then Δ for the given transistor is:		M	1	80
A	0.336		1	1	
B	0.383		0	2	
C	0.456		0	3	
D	1		0	4	
Q	In the S matrix of a transistor, if the parameter S_{21} is 2.6 then the gain G_0 of the transistor has the value		M	1	81
A	6.2 dB		0	1	
B	8.3 dB		1	2	
C	2.22 dB		0	3	
D	1.22 dB		0	4	
Q	If the output power of an amplifier is 10 V, and the input power supplied to the amplifier is 0.229 V given that the DC voltage used is 38.5 V, efficiency of the power amplifier is:		M	1	82
A	25%		1	1	
B	50%		0	2	
C	75%		0	3	
D	35%		0	4	

Q	If a power amplifier has an output power of 10 W, and an amplifier gain of 16.4 dB, then the input drive power is:		M	1	83
A	400 mW		0	1	
B	225 mW		0	2	
C	229 mW		1	3	
D	240 mW		0	4	
Q	Which device is used for diagnostic purposes and for recording?		M	1	84
A	Low pass filter		0	1	
B	High Pass filter		0	2	
C	crystal oscillator		0	3	
D	VCO		1	4	
Q	Find the value of R_S for following specifications S_{11}=0.869∠-159°,S_{12}=0.031∠-9°, S_{21}=4.250∠61°, S_{22}=0.507∠-117°		M	1	85
A	0.305		0	1	
B	0.405		0	2	
C	0.105		0	3	
D	0.205		1	4	
Q	What is full form of RE		M	1	86
A	Radition Electric Network		0	1	
B	Radiated Emission		1	2	
C	Radio Engineering		0	3	
D	Radar Engineering		0	4	
Q	What is full form of RS		M	1	87
A	Radiated Susceptibility		1	1	
B	Radio station		0	2	
C	Radiated Sources		0	3	
D	Radar Engineering		0	4	

Q	An electromagnetic disturbance coupled from one circuit to another through a common earth or ground-return path is called		M	1	88
A	Ground internet		0	1	
B	Ground Path		0	2	
C	Ground shielding		0	3	
D	Ground coupled interference		1	4	
Q	How interference is avoided in power supply lines?		M	1	89
A	Ground Path		0	1	
B	Power line filter		1	2	
C	Electric field Coupling		0	3	
D	Noncoupling		0	4	
Q	LISN stand for		M	1	90
A	Lighting Impedance Stabilisation Network		0	1	
B	Line Impedance Stabilisation Network		1	2	
C	Linear Impedance Stabilisation Network		0	3	
D	Look Impedance Stabilisation Network		0	4	
Q	What is the main objective of LISN?		M	1	91
A	Provide constant impedance over range of frequency		0	1	
B	Provide pure power without EM noise		0	2	
C	Linear Impedance Stabilisation Network		0	3	
D	Both A and B		1	4	92
Q	Conducted emission as electromagnetic energy created by device and transmitted in the form of the electric current is called		M	1	
A	Conducted EMI		1	1	
B	Radiated EMI		0	2	
C	Radiated Susceptibility		0	3	
D	Electric field Coupling		0	4	
Q	_____ is useful in creating desired wave pattern such as binary bit pattern of a computer.		M	1	93
A	Time domain analysis		0	1	
B	Frequency domain analysis		1	2	

C	Radio Frequency analysis		0	3	
D	Network Analysis		0	4	
Q	The effects of EMI can not be reduced by		M	1	94
A	Reducing the efficiency of the coupling path		0	1	
B	Reducing the susceptibility of the receptor		0	2	
C	Suppressing emissions		0	3	
D	Static strength		1	4	
Q	The opposite of susceptibility is		M	1	95
A	Interference		0	1	
B	Immunity		1	2	
C	Emission		0	3	
D	Electromagnetic compatibility		0	4	
Q	Determine the offset frequency of frequency translation, when the output and input frequency are given as 75kHz and 1000Hz.		M	1	96
A	35 kHz		0	1	
B	20 kHz		1	2	
C	29 kHz		0	3	
D	14 kHz		0	4	
Q	The frequency corresponding to logic 1 state in FSK is called		M	1	97
A	Space frequency		0	1	
B	Mark frequency		1	2	
C	Both mark and space frequency		0	3	
D	Cut off Freq		0	4	
Q	Find the frequency shift in FSK generator?		M	1	98
A	230 Hz		0	1	
B	250 Hz		0	2	
C	180 Hz		0	3	
D	200Hz		1	4	
Q	Which of the following is not the characteristics of Frequency Synthesizers?		M	1	99
A	Sinusoidal Output		0	1	

B	High stability		0	2	
C	High Accuracy		0	3	
D	zero output impedance		1	4	
Q	The Modern Direct Digital Frequency Synthesis uses		M	1	100
A	A/Dconverters		0	1	
B	D/A onverters		1	2	
C	V/F Converters		0	3	
D	Harmonic Converter		0	4	

Unit 2

Unit-4

Unit-3

Unit-1

Unit-5

Unit-6