University of Mumbai

Examination 2020 under cluster 4 (PCE)

Program: BE Electronics and Telecommunication
Curriculum Scheme: Rev2012
Examination: Final Year Semester VIII
Course Code: ETC802 and Course Name: Satellite Communication and Networks

Time: 1 hour   Max. Marks: 50

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

Q1.	The area on the surface of the earth covered by satellite beam is called as
Option A:	Zone
Option B:	Beam width
Option C:	Band width
Option D:	Footprint
Q2.	Number of geostationary orbits possible are
Option A:	1
Option B:	2
Option C:	3
Option D:	Infinite
Q3.	The period of geostationary satellite is
Option A:	Same as earth's period of rotation around its axis
Option B:	Greater than earth's period of rotation around its axis
Option C:	Less than earth's period of rotation around its axis
Option D:	Same as earth's period of rotation around sun
Q4.	The True Anamoly is
Option A:	Angle between line of nodes and line of apsides
Option B:	Angle between orbital plane and equitorial plane
Option C:	Angular position of satellite from Perigee
Option D:	Angular position of satellite from Apogee
Q5.	The effect of Atmospheric drag is more on
Option A:	LEO
Option B:	MEO
Option C:	HEO
Option D:	Geostationary orbit
Q6.	The equipment used to provide the service for which the satellite has been launched called as
Option A:	power control
Option B:	Attitude control
Option C:	Payload
Option D:	Telemetry command
Q7.	Station keeping deals with
Option A:	Maintaining attitude control
Option B:	Maintaining correct orbital slot

Option C:	Maintaining orbital motion
Option D:	Maintaining antenna boresight
Q8.	Thermal blankets and shields may be used to
Option A:	Provide isolation from heat
Option B:	Provide insulation from heat
Option C:	Provide cooling effect from sun radiation
Option D:	Provide heating effect
Q9.	A stability of satellite can be achieved by
Option A:	Firing AKM
Option B:	Firing jet thrusters
Option C:	Gyroscopic effect of a spinning flywheel,
Option D:	Spinning the satellite itself
Q10.	Intermodulation noise is ---------
Option A:	Intermodulation occurs where multiple carriers pass through any device with nonlinear characteristics
Option B:	Where a large number of modulated carriers are present, the inter-modulation products are not distinguishable separately but instead appear as a type of noise which is termed intermodulation noise.
Option C:	Intermodulation occurs where single carriers pass through any device with nonlinear characteristics
Option D:	Intermodulation occurs where single carriers pass through any device with linear characteristics
Q11.	In order to reduce intermodulation noise:
Option A:	In order to reduce intermodulation noise, the TWT must be operated in a saturation condition
Option B:	In order to reduce intermodulation noise, the TWT must be operated in a linear condition
Option C:	In order to reduce intermodulation noise, the TWT must be operated in a BO condition.
Option D:	In order to reduce intermodulation noise, the TWT must be operated in a on condition
Q12.	EIRP indicates
Option A:	The power output of an ideal radiator
Option B:	The power radiated from a practical antenna
Option C:	The gain of the antenna
Option D:	The power output of a transmitter
Q13.	What is a noise power spectral density?

Option A:	N0 = BN/PN
Option B:	N0 = PN/BN=KTN joules
Option C:	N0 = BN/PN =KTNB0 joule
Option D:	N0=PN/BN
Q14.	If at End Of Life (EOL) LNA gain of an earth station is expected to decrease by 3 dB from the beginning of its operation, but the antenna gain remains same, then G/T of the earth station at EOL will
Option A:	Remain same
Option B:	Increase
Option C:	Decrease
Option D:	unpredictable
Q15.	In transmit receive earth station the wide band power signal is connected to antenna through ---
Option A:	Diplexer
Option B:	Power amplifier
Option C:	Up convertor
Option D:	Down convertor
Q16.	Which of these is common to earth station and space segment of satellite?
Option A:	Power sub system
Option B:	TT AND C
Option C:	AOC
Option D:	AKM
Q17.	The unique word is used to establish _____
Option A:	burst timing in TDMA
Option B:	burst timing in FDMA
Option C:	Guard time in FDMA
Option D:	Preamble in TDMA
Q18.	DAMA stands for
Option A:	Data accessibility master aerial
Option B:	Digital attenuators microwave antenna
Option C:	Dual accessibility mode antenna
Option D:	Demand assigned multiple access
Q19.	Define guard time.
Option A:	It is necessary to prevent signals frequency mixing.
Option B:	It is necessary to prevent signals frequency mixing.
Option C:	It is necessary to prevent signals frequency mixing.
Option D:	It is necessary to prevent signals frequency mixing.
Q20.	What is an important feature of Intelsat SCPC system?
Option A:	The system is that each channel is video activated. This means that on a two way telephone conversation, only one carrier is operative at any one time

Option B:	The system is that each channel is video activated. This means that on a two way telephone conversation, both carrier is operative at any one time
Option C:	The system is that each channel is voice activated. This means that on a two way telephone conversation, only one carrier is operative at any one time.
Option D:	The system is that each channel is voice activated. This means that on a two way telephone conversation, both carrier is operative at any one time
Q21.	Which layer is used to link the network support layers and user support layers?
Option A:	Transport layer
Option B:	Application layer
Option C:	Data link layer
Option D:	Physical Layer
Q22.	The number of layers in ISO OSI reference model is _____
Option A:	5
Option B:	4
Option C:	6
Option D:	7
Q23.	Application layer is implemented in _____
Option A:	End system
Option B:	Ethernet
Option C:	NIC
Option D:	Packet transfer
Q24.	The window in window organization is
Option A:	The duration of a connection between an up beam and a down beam
Option B:	The duration of a connection between down beams
Option C:	The duration of a connection between an up beams
Option D:	beam transmission
Q25.	The Frame in Frame organization contains
Option A:	The frame contains a network field and a traffic field.
Option B:	The frame contains a synchronizing field
Option C:	The frame contains a synchronizing field and a traffic field.
Option D:	The frame contains a traffic field.

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Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	D
Q2.	A
Q3.	A
Q4	C
Q5	A
Q6	C
Q7	B
Q8.	B
Q9.	C
Q10.	B
Q11.	C
Q12.	B
Q13.	B
Q14.	C
Q15.	A
Q16.	B
Q17.	A
Q18.	D
Q19.	C
Q20.	C
Q21.	A
Q22.	D
Q23.	A
Q24.	A
Q25.	C