

University of Mumbai
Examination 2020 under cluster 5 (APSIT)

Program: BE Electronics and Telecommunication Engineering

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VII

Course Code: ETC702 and Course Name: Mobile Communication

Time: 1 hour

Max. Marks: 50

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

Q1.	Which of the following is not a characteristic of Cdma2000?
Option A:	Adaptable baseband signaling rates
Option B:	Adaptable baseband chipping rates
Option C:	Multicarrier technologies
Option D:	OFDMA
Q2.	_____ manages the switching function in GSM.
Option A:	BSS
Option B:	NSS
Option C:	OSS
Option D:	MSC
Q3.	What processing step combines multiple OFDM subcarriers into a single signal for transmission?
Option A:	FFT
Option B:	IFFT
Option C:	RF combining
Option D:	Channel mapping
Q4.	What is 3GPP?
Option A:	Project based on W-CDMA
Option B:	Project based on cdma2000
Option C:	Project based on 2G standards
Option D:	Project based on 2.5G standards
Q5.	Interference on voice channels causes _____
Option A:	Blocked calls
Option B:	Cross talk
Option C:	Queuing
Option D:	Missed calls
Q6.	The free space model predicts that received signal decays as a function of _____
Option A:	Gain of transmitter antenna

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Option B:	T-R separation
Option C:	Power of transmitter antenna
Option D:	Effective aperture of the antenna
Q7.	_____ uses directional antennas to control interference.
Option A:	Sectoring
Option B:	Cell splitting
Option C:	Repeaters
Option D:	Micro cell zone concept
Q8.	Which of the following does not come under subsystem of GSM architecture?
Option A:	BSS
Option B:	NSS
Option C:	OSS
Option D:	Channel
Q9.	In cellular telephony , channels 1 to 7 of IS-95 forward transmission are used for
Option A:	Framing
Option B:	Paging
Option C:	Channeling
Option D:	Traffic Control
Q10.	Time dispersion due to multipath causes the transmitted signal to undergo either flat or _____ fading.
Option A:	frequency selective
Option B:	frequency receptive
Option C:	time selective
Option D:	time receptive
Q11.	MIMO technology makes advantage of a natural radio wave phenomenon called _____
Option A:	Reflection
Option B:	Multipath
Option C:	Refraction
Option D:	Diffraction
Q12.	What is the concept for accommodating a large number of users in a limited radio spectrum?
Option A:	Grade of service
Option B:	Trunking
Option C:	Multiplexing
Option D:	Multitasking
Q13.	UMTS use which multiple access technique?
Option A:	CDMA
Option B:	TDMA

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Option C:	FDMA
Option D:	SDMA
Q14.	_____ is often referred to as 2.5G technologies.
Option A:	GPRS
Option B:	EDGE
Option C:	WCDMA
Option D:	UMTS
Q15.	What is the condition for handoff?
Option A:	A mobile moves into a different cell while in conversation
Option B:	A mobile remains in the same cell while in conversation
Option C:	A mobile moves to different cell when idle
Option D:	A mobile remains in the same cell and is idle
Q16.	What is the largest channel bandwidth a UE is required to support in LTE?
Option A:	10 MHz
Option B:	20 MHz
Option C:	32MHz
Option D:	5 MHz.
Q17.	What changes GPRS need to acquire while upgrading itself from GSM?
Option A:	A whole new base station
Option B:	New transceiver at base station
Option C:	New channel cards
Option D:	New packet overlay including routers and gateways
Q18.	The frame length in W-CDMA standard is
Option A:	10 ms
Option B:	20 ms
Option C:	30 ms
Option D:	40 ms
Q19.	Which of the following technology does not use MIMO?
Option A:	4G
Option B:	Wifi
Option C:	WiMax
Option D:	AMPS
Q20.	Which of the following is not a TDMA standard of 2.5G network?
Option A:	HSCSD
Option B:	GPRS
Option C:	EDGE
Option D:	GSM

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Q21.	The design process of selecting and allocating channel groups for all of the cellular base stations within a system is called _____
Option A:	Frequency selecting
Option B:	Frequency distribution
Option C:	Frequency shifting
Option D:	Frequency reuse
Q22.	This form of MIMO is used to provide additional data capacity by utilizing the different paths to carry additional traffic, i.e. increasing the data throughput capability
Option A:	Spatial Diversity
Option B:	Spatial Multiplexing
Option C:	Time Multiplexing
Option D:	Time Diversity
Q23.	In WCDMA there is _____ dedicated transport channel.
Option A:	One
Option B:	Two
Option C:	Three
Option D:	Four
Q24.	The layer _____ in GSM signaling protocol architecture specifies the modulation and coding techniques used in the system.
Option A:	physical
Option B:	Data Link
Option C:	Networking
Option D:	Messaging
Q25.	Which of the following is not an effect caused by multipath in radio channel?
Option A:	Rapid changes in signal strength
Option B:	Random frequency modulation
Option C:	Power of base station
Option D:	Time dispersion