

Program: BE Electronics and Telecommunication Engineering

Curriculum Scheme: Revised 2016

Examination: Final Year Semester VII

Course Code: ECC 702 and Course Name: Mobile Communication System

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 interference between the neighboring base stations is avoided by
Option A:	Assigning different group of channels
Option B:	Using transmitters with different power level
Option C:	Using different antenna types
Option D:	Using transmitters with different antenna lengths
Q2.	Traffic intensity is expressed in
Option A:	Erlangs /MHz /km
Option B:	Erlangs
Option C:	sec
Option D:	dB/sec
Q3.	Umbrella cell approach
Option A:	Uses large cells only
Option B:	Uses fixed antenna heights
Option C:	Is used for high speed users with large coverage area & low speed users with small coverage area
Option D:	Uses small cells only
Q4.	Which can be repeated any number of times in systematic manner in order to cover the large geographical area
Option A:	Cell
Option B:	Cluster
Option C:	Cell-site
Option D:	Channel
Q5.	Multiple copies of a transmitted signal are received at the receiver, due to the presence of multiple radio paths
Option A:	Reflection
Option B:	Diffraction
Option C:	Multipath
Option D:	Scattering
Q6.	Frequency division duplexing(FDD) uses

Option A:	Time in Forward link and Time in Reverse link
Option B:	Frequency in Forward link and Frequency in Reverse link
Option C:	Time in Forward link and Frequency in Reverse link
Option D:	Frequency in Forward link and Time in Reverse link
Q7.	PN sequence converts
Option A:	Narrowband to wideband signal
Option B:	Wideband to narrowband signal
Option C:	Unmodulated to modulated signal
Option D:	Low frequency to high frequency signal
Q8.	Small Scale fading based on doppler spread is
Option A:	Flat Fading
Option B:	Frequency Selective Fading
Option C:	Fast Fading and Slow Fading
Option D:	Coherence Bandwidth
Q9.	Organization is responsible for developing LTE standards
Option A:	UMTS
Option B:	3GPP
Option C:	3GPP2
Option D:	ISO
Q10.	Which of the following is the advantage of LTE
Option A:	Low throughput
Option B:	High latency
Option C:	Superior end-user experience
Option D:	Complex architecture
Q11.	LTE supports flexible carrier bandwidths from
Option A:	1.4 MHz up to 20 MHz
Option B:	868 KHz to 978 KHz
Option C:	1MHz to 5MHz
Option D:	100MHz to 500MHz
Q12.	PBCH scrambled with
Option A:	Current frame number
Option B:	Physical cell ID
Option C:	Not scrambled
Option D:	Current Slot Number
Q13.	Which digital modulation is used in the CDMA reverse channel.
Option A:	BPSK
Option B:	QPSK
Option C:	OQPSK
Option D:	OFDM

Q14.	A mobile assisted power control on the forward channel is implemented to reduce _____ interference.
Option A:	Co-channel
Option B:	Inter-cell
Option C:	Intra-cell
Option D:	Near-far
Q15.	Value of E_b/N_0 is usually depends on the speed of the mobile user, propagation conditions, and the diversity scheme used in CDMA systems is
Option A:	9dB
Option B:	6dB
Option C:	12dB
Option D:	18dB
Q16.	The function of block interleaver in IS95 is
Option A:	Protect from single bit errors
Option B:	Protect from multiple bit errors
Option C:	Protect from burst errors
Option D:	Protect from multipath
Q17.	Which of the following leads to evolution of 3G networks in CDMA systems?
Option A:	IS-95
Option B:	IS-95B
Option C:	CdmaOne
Option D:	Cdma2000
Q18.	UMTS stands for
Option A:	Universal Mobile Telecommunication System
Option B:	Ubiquitous Mobile Telephone System
Option C:	Ubiquitous Mobile Telemetry System
Option D:	Universal Machine Telemedicine System
Q19.	Multiple access technique used in UMTS is
Option A:	CDMA
Option B:	TDMA
Option C:	FDMA
Option D:	SDMA
Q20.	chip rate of W-CDMA is
Option A:	1.2288 Mcps
Option B:	3.84 Mcps
Option C:	270.833 Mcps
Option D:	100 Mcps
Q21.	Maximal length sequences are

Option A:	Output of an LFSR with maximum period
Option B:	Output of an LFSR with seed=0
Option C:	Output of an LFSR without feedback
Option D:	Output with feed forward shift registers
Q22.	Which is not a position sensing technique?
Option A:	Radio vision
Option B:	Radio networking
Option C:	Radio sensing
Option D:	Radio hearing
Q23.	Which of the following is not a processing scheme at the relay
Option A:	Amplify and forward
Option B:	Decode and forward
Option C:	Compress and forward
Option D:	Compress and reverse
Q24.	Multihop relaying in large networks requires
Option A:	Joint routing
Option B:	Independent resource allocation
Option C:	Independent routing
Option D:	No resource allocation
Q25.	Which algorithm provides shortest path routing method
Option A:	Dijkstra and Bellman Ford
Option B:	Flooding and Directed Diffusion
Option C:	Directed Diffusion and Leach
Option D:	Leach and Flooding