

University of Mumbai
Examination 2020 under cluster (Lead College)

Program: **Computer Engineering**

Curriculum Scheme: Rev 2016

Examination: BE Semester - VII

Course Code: CSC702 and Course Name: Mobile Communication and Computing

Time: 2 hour

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	Which of the following acts as an interface between the external Internet and LTE network?
Option A:	eNodeB
Option B:	SGW
Option C:	MME
Option D:	PGW
2.	What is the largest channel bandwidth a UE is required to support in LTE?
Option A:	1.4 MHz
Option B:	5 MHz
Option C:	10 MHz
Option D:	20 MHz
3.	Which of the following is not a component of high level network architecture of LTE?
Option A:	UE
Option B:	UTRAN
Option C:	MSC
Option D:	EPC
4.	What is the name of the process that connects a moving UE from one eNodeB to the other eNodeB without service disconnection?
Option A:	Handover
Option B:	Anchoring
Option C:	Cell Coverage

Option D:	Cell Identity
5.	For Cellular IP which of the following statement is not true?
Option A:	Most important component is Base Station (BS)
Option B:	BS routes the packet inside the cellular network
Option C:	CIP Gateway router does not connect Cellular IP Network to Internet
Option D:	CIP Gateway router does connect Cellular IP Network to Internet
6.	Which of the following is not the location management scheme?
Option A:	HLR/VLR Scheme
Option B:	Hierarchical scheme
Option C:	Predictive management scheme
Option D:	Channel selection scheme
7.	Which of the following is the Highest Data Rate in 802.11a
Option A:	1 Mbps
Option B:	2 Mbps
Option C:	11 Mbps
Option D:	54 Mbps
8.	Which among the following is not suitable for Short inter-frame spacing (SIFS)?
Option A:	Short Control Message
Option B:	Asynchronous Data Service
Option C:	Data Packet
Option D:	Acknowledgement
9.	Forming a group of Bluetooth PICONETs is called as _____.
Option A:	NANONET
Option B:	MICRONET
Option C:	SCATTERNET
Option D:	INTRANET
10.	In EY-NPMA which of the following phase assures – Elimination of all but one

	of the contenders, if more than one sender has the highest current priority?
Option A:	Contention
Option B:	Prioritization
Option C:	Transmission
Option D:	Synchronization
11.	Wireless network with Access Point is known as _____.
Option A:	AD-HOC NETWORK
Option B:	MOBILE AD-HOC NETWORK
Option C:	INFRA-STRUCTURE NETWORK
Option D:	INTER NETWORK
12.	Address space in IPV4 is _____.
Option A:	32 bits
Option B:	64 bits
Option C:	128 bits
Option D:	256 bits
13.	TCP uses slow start mechanism to avoid _____.
Option A:	Power consumption
Option B:	Congestion
Option C:	Interference
Option D:	Longer path
14.	End to end semantics is not maintained in _____.
Option A:	Snooping TCP
Option B:	Direct TCP
Option C:	Indirect TCP
Option D:	Mobile TCP
15.	_____ algorithm is used for authentication in GSM.
Option A:	A8.

Option B:	A2.
Option C:	A3.
Option D:	A5.
16.	In GSM System which of the following component is taking care of billing?
Option A:	BSC
Option B:	MSC
Option C:	BTS
Option D:	OMC
17.	A UMTS (Universal Mobile Telecommunication) network is a ___ network.
Option A:	First Generation
Option B:	Second Generation
Option C:	Third Generation
Option D:	Fourth Generation
18.	In GSM TDMA frame numbers of time slots are _____.
Option A:	2
Option B:	18
Option C:	8
Option D:	14
19.	Code Division Multiplexing is useful for
Option A:	Increasing the information transmission rate
Option B:	using same set frequencies at the same time, at same location, but with different code
Option C:	using different frequency bands for different signals
Option D:	protecting all small signals in PCM from quantizing noise
20.	Antenna which transmits equally in all direction is called as
Option A:	Dipole antenna
Option B:	Omni directional antenna
Option C:	Directed antenna

Option D:	Sectorized antenna
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Q2. (20 Marks)	Solve any Four out of Six	5 marks each
A	What is the difference between infrastructure wireless networks and ad-hoc wireless networks?	
B	What is snooping TCP in mobile transport layer?	
C	What is a cell cluster in cellular systems? Why it is needed?	
D	What is the difference between LTE and LTEA?	
E	What is Macro and Micro mobility?	
F	How power management is taken care in 802.11 MAC Layer?	

Q3. (20 Marks)	Solve any Two Questions out of Three	10 marks each
A	What is hidden and exposed terminal problem? How it is solved?	
B	What is the concept of Mobile IP? What is tunneling?	
C	What are different subsystems, elements and interfaces in agsm?	