

**University of Mumbai**  
**Examination 2020 under cluster 5 (APSIT)**

Program: BE Information Technology

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VII

Course Code: BEITC704 and Course Name: Wireless Technology

Time: 1-hour

Max. Marks: 50

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

|           |   |
|-----------|---|
| Q1.       | 3G W-CDMA is also known as  |
| Option A: | UMTS  |
| Option B: | DECT  |
| Option C: | DCS-1800  |
| Option D: | ETACS   |
|           |   |
| Q2.       | Fading of the received radio signals in a mobile communication environment occurs because of .... |
| Option A: | Direct propagation  |
| Option B: | Multipath Propagation   |
| Option C: | Bi-path Propagation   |
| Option D: | Bi-polar Propagation  |
|           |   |
| Q3.       | In ..... Frequency Spectrum is divided into smaller spectra and is allocated to each user         |
| Option A: | TDMA  |
| Option B: | CDMA  |
| Option C: | FDMA  |
| Option D: | FGMA  |
|           |   |
| Q4.       | In ..... multiple access is achieved by allocating different time slots for the different users   |
| Option A: | TDMA  |
| Option B: | CDMA  |
| Option C: | FDMA  |
| Option D: | FGMA  |
|           |   |
| Q5.       | Which of the following measures spectrum efficiency of a wireless system?                         |
| Option A: | Channel capacity  |
| Option B: | Radio capacity  |
| Option C: | Spectral capacity   |
| Option D: | Carrier capacity  |

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| Q6.       | If D is the distance between co-channel cells and R be the cell radius, co-channel reuse ratio is given by _____ |
| Option A: | $D \cdot R$  |
| Option B: | $D^2/R$  |
| Option C: | $D/R$  |
| Option D: | $D/R^2$  |
|           |  |
| Q7.       | Frequency reuse factor for CDMA system is _____  |
| Option A: | One  |
| Option B: | Two  |
| Option C: | Zero   |
| Option D: | Ten  |
|           |  |
| Q8.       | _____ is the maximum number of channels that can be provided in a fixed frequency band                           |
| Option A: | Channel capacity   |
| Option B: | Radio capacity   |
| Option C: | Spectral capacity  |
| Option D: | Carrier capacity   |
|           |  |
| Q9.       | Which of the following is not a characteristic of cellular telephone system?                                     |
| Option A: | Accommodate a large number of users  |
| Option B: | Large geographic area  |
| Option C: | Limited frequency spectrum   |
| Option D: | Large frequency spectrum   |
|           |  |
| Q10.      | What is the frequency range of the IEEE 802.11a standard?  |
| Option A: | 2.4Gbps  |
| Option B: | 5Gbps  |
| Option C: | 2.4GHz   |
| Option D: | 5GHz   |
|           |  |
| Q11.      | What is the maximum distance running the lowest data rate for 802.11b?   |
| Option A: | About 100 feet   |
| Option B: | About 175 feet   |
| Option C: | About 300 feet   |
| Option D: | About 350 feet   |
|           |  |
| Q12.      | What is the access point (AP) in a wireless LAN?   |
| Option A: | Device that allows wireless devices to connect to a wired network  |
| Option B: | Wireless devices itself  |
| Option C: | Both device that allows wireless devices to connect to a wired network and wireless devices itself               |
| Option D: | All the nodes in the network   |

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| Q13.      | In wireless ad-hoc network _____  |
| Option A: | Access point is not required  |
| Option B: | Access point is must  |
| Option C: | Nodes are not required  |
| Option D: | All nodes are access points   |
|           |   |
| Q14.      | Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?             |
| Option A: | CDMA  |
| Option B: | CSMA/CA   |
| Option C: | ALOHA   |
| Option D: | CSMA/CD   |
|           |   |
| Q15.      | In wireless distribution system _____   |
| Option A: | Access points are not required  |
| Option B: | Multiple access point is inter-connected with each other                                      |
| Option C: | There is no access point  |
| Option D: | Only one access point exists  |
|           |   |
| Q16.      | Bluetooth is the wireless technology for _____  |
| Option A: | Local area network  |
| Option B: | Personal area network   |
| Option C: | Metropolitan area network   |
| Option D: | Wide area network   |
|           |   |
| Q17.      | In a piconet, there can be up to _____ parked nodes in the network                            |
| Option A: | 63  |
| Option B: | 127   |
| Option C: | 255   |
| Option D: | 511   |
|           |   |
| Q18.      | Which of the following are problems in the context of wi-fi MAC DESIGN? Select all that apply |
| Option A: | Hidden node and Exposed node problem  |
| Option B: | Near far Problem  |
| Option C: | Cell breathing problem  |
| Option D: | Long range  |
|           |   |
| Q19.      | Frequency bands of Wi-Fi  |
| Option A: | 4GHz  |
| Option B: | 5GHz and 2.4 GHz  |
| Option C: | 2.4 GHz   |
| Option D: | 87MHz   |
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| Q20.      | What is the IEEE standard for WiMAX?                                   |
| Option A: | 802.16   |
| Option B: | 802.11   |
| Option C: | 802.11a  |
| Option D: | 802.15   |
|           |  |
| Q21.      | WiMAX stands for?  |
| Option A: | Worldwide Interoperability for Microwave Access                        |
| Option B: | Worldwide Interference for Microwave Access                            |
| Option C: | Wireless Interoperability for Microwave Access                         |
| Option D: | Worldwide Interoperability for Multiple Access                         |
|           |  |
| Q22.      | Wireless LANs implement security measures in the                       |
| Option A: | System Layers.   |
| Option B: | Data Link Layers   |
| Option C: | Sub Layers   |
| Option D: | Multi Layers   |
|           |  |
| Q23.      | IPsec involves which two security services                             |
| Option A: | Authentication Header and Encapsulating Security payload               |
| Option B: | Authentication Header and Encapsulating Security services              |
| Option C: | Authentication Header and Encrypted Security payload                   |
| Option D: | Authentication Header and Encrypted Security                           |
|           |  |
| Q24.      | Having less or no cables in network is the benefit of _____            |
| Option A: | Wired network  |
| Option B: | Composite network  |
| Option C: | Pulse modulation   |
| Option D: | Wireless networks  |
|           |  |
| Q25.      | Temporary networks is one of the benefits of wireless networks because |
| Option A: | It is easy to deploy   |
| Option B: | Hard to install  |
| Option C: | Take time to deploy  |
| Option D: | Hard to remove   |