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| Q1. | Choose the correct option for following questions. All the Questions are compulsory and carry equal marks |
|---|---|
| | |
| 1. | The sharing of a medium and its link by two or more devices is called _____ |
| Option A: | Fully Duplexing |
| Option B: | Multiplexing |
| Option C: | Microplexing |
| Option D: | Duplexing |
| | |
| 2. | Which multiplexing technique used to transmit digital signals? |
| Option A: | FDM |
| Option B: | TDM |
| Option C: | CDM |
| Option D: | FDM & CDM |
| | |
| 3. | The process of transferring a mobile station from one base station to another is |
| Option A: | MSC |
| Option B: | Hand-off |
| Option C: | Roamer |
| Option D: | Forward Channel |
| | |
| 4. | Which of the following is the world's first cellular system to specify digital modulation and network level architecture? |
| Option A: | GSM |
| Option B: | AMPS |
| Option C: | CDMA |
| Option D: | IS-54 |
| | |
| 5. | Which of the following memory device stores information such as subscriber's identification number in GSM? |
| Option A: | Register |
| Option B: | FLIP |
| Option C: | SIM |
| Option D: | SMS |
| | |
| 6. | Which of the following subsystem provides radio transmission between mobile station and MSC? |
| Option A: | BSS |
| Option B: | NSS |
| Option C: | OSS |
| Option D: | BSC |
| | |

| 7. | In _____ each station sends a frame whenever it has a frame to send. |
|---|---|
| Option A: | Pure ALOHA |
| Option B: | Slotted ALOHA |
| Option C: | both a and b |
| Option D: | None of this |
| | |
| 8. | In the _____ method, after the station finds the line idle, it sends its frame immediately. If the line is not idle, it continuously senses the line until it finds it idle. |
| Option A: | Non persistant |
| Option B: | 1-persistant |
| Option C: | n-persistant |
| Option D: | None of this |
| | |
| 9. | In Carrier Sense Multiple Access (CSMA), the possibility of collision still exist because of |
| Option A: | Propagation Delay |
| Option B: | Sender-receiver delay |
| Option C: | Sense delay |
| Option D: | Transmit delay |
| | |
| 10. | _____ is a hop-by-hop vector routing protocol requiring each node to periodically broadcast routing updates |
| Option A: | DSR |
| Option B: | AODV |
| Option C: | OSDV |
| Option D: | DSDV |
| | |
| 11. | 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 |
| | |
| 12. | 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 |
| | |
| 13. | 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 |
| | |

| 14. | Which of the following field in IPv4 datagram is not related to fragmentation? |
|---|---|
| Option A: | Flags |
| Option B: | Offset |
| Option C: | TOS |
| Option D: | Identifier |
| | |
| 15. | Which of these is not applicable for IP protocol? |
| Option A: | is connectionless |
| Option B: | offer reliable service |
| Option C: | offer unreliable service |
| Option D: | does not offer error reporting |
| | |
| 16. | The Internet Protocol version 4 (IPv4) delivery mechanism is used by |
| Option A: | IEEE protocols |
| Option B: | TCP/IP protocols |
| Option C: | Internet protocols |
| Option D: | UDP |
| | |
| 17. | In LTE, what is the benefit of PAPR reduction in the uplink? |
| Option A: | mproved uplink coverage |
| Option B: | Lower UE power consumption |
| Option C: | Lower UE power consumption |
| Option D: | Improved uplink coverage, lower UE power consumption and reduced equalizer |
| | |
| 18. | Which RLC mode adds the least amount of delay to user traffic? |
| Option A: | Unacknowledged mode (UM) |
| Option B: | Unacknowledged mode (UM) |
| Option C: | Low latency mode (LM) |
| Option D: | Transparent mode (TM) |
| | |
| 19. | What is the largest channel bandwidth a UE is required to support in LTE? |
| Option A: | 10 MHz |
| Option B: | 20 MHz |
| Option C: | 1.4 MHz |
| Option D: | 5 MHz |
| | |
| 20. | How often can resources be allocated to the UE? |
| Option A: | Every symbol |
| Option B: | Every slot |
| Option C: | Every subframe |
| Option D: | Every frame |

| Q2 | Solve any Four out of Six    (5 marks each) |
|---|---|
| A | Explain Concept of Frequency Reuse with clustering |
| B | GSM maintain end to end security by retaining the confidentiality of calls and anonymity of the GSM subscriber, Justify the statement. |
| C | Explain the functioning of Mobile TCP |
| D | Explain HIPERLAN2 Data Link Control Layer. |
| E | Explain Cellular IP. |
| F | Explain in Short Voice Over LTE |

| Q3. | Solve any Two Questions out of Three. ( 10 marks each) |
|---|---|
| A | Explain the GPRS architecture in detail. compare it with GSM architecture |
| B | Explain DSDV and DSR routing algorithm for adhoc networks |
| C | Explain various networks nodes present in E-UTRAN architecture |