Program: BE Computer Engineering

Curriculum Scheme: Revised 2016

Examination: Fourth Year Semester VII

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

Time: 1hour Max. Marks: 50

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

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| Q1. | Half duplex system for communication has |
| Option A: | Communication in single direction |
| Option B: | Communication in single direction at a time |
| Option C: | Communication in both directions at the same time |
| Option D: | Communication in both directions |
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| Q2. | The minimum spectrum allocation required for W-CDMA is |
| Option A: | 5MHz |
| Option B: | 2MHz |
| Option C: | 500KHz |
| Option D: | 100KHz |
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| Q3. | The shape of the cellular region for maximum radio coverage is |
| Option A: | Circular |
| Option B: | Rectangle |
| Option C: | Oval |
| Option D: | Hexagon |
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| Q4. | Centre excited hexagonal cells use |
| Option A: | Yagi uda antennas |
| Option B: | Sectored directional antennas |
| Option C: | Omni directional antennas |
| Option D: | Uni directional antennas |
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| Q5. | In a fixed channel assignment strategy, if all the assigned channels are occupied, the call |
| Option A: | Gets transferred to another cell |
| Option B: | Gets blocked |
| Option C: | Is kept on waiting |
| Option D: | Call is diverted to specific number |
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| Q6. | Trunking in a cellular network refers to |
| Option A: | Termination of a call |
| Option B: | Spectrum unavailability |
| Option C: | Accommodating large number of users in limited spectrum |
| Option D: | All users are active |
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| Q7. | Slow frequency hopping refers to |
| Option A: | One or more symbols transmitted in time interval between frequency hops |
| Option B: | More than one frequency hop during each symbol |
| Option C: | Hopping rate greater than or equal to information symbol rate |
| Option D: | Hopping rate less than information symbol rate |
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| Q8. | The process of transferring a mobile station from one base station to another is |
| Option A: | MSC |
| Option B: | Roaming |
| Option C: | Forward channel |
| Option D: | Hand off |
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| Q9. | GPRS uses which unused channels for transportation of Data in general? |
| Option A: | SDCCH |
| Option B: | BCCH |
| Option C: | TCH |
| Option D: | SCH |
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| Q10. | The MAC sub-layer acts as an interface between the Logical Link Control (LLC) sublayer and which layer? |
| Option A: | Physical |
| Option B: | Application |
| Option C: | Data Link |
| Option D: | Transport |
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| Q11. | In \_\_\_\_\_\_, the chance of collision can be reduced if a station senses the medium before trying to use it. |
| Option A: | CSMA |
| Option B: | MA |
| Option C: | CDMA |
| Option D: | FDMA |
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| Q12. | In \_\_\_\_\_\_\_\_\_\_, each station is forced to send only at the beginning of the time slot. |
| Option A: | pure ALOHA |
| Option B: | slotted ALOHA |
| Option C: | CS |
| Option D: | CDMA |
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| Q13. | Network layer at source is responsible for creating a packet from data coming from another \_\_\_\_\_\_\_\_ |
| Option A: | Station |
| Option B: | Link |
| Option C: | Node |
| Option D: | Protocol |
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| Q14. | A wireless network interface controller can work in \_\_\_\_\_\_\_ |
| Option A: | infrastructure mode |
| Option B: | ad-hoc mode |
| Option C: | both infrastructure mode and ad-hoc mode |
| Option D: | WDS mode |
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| Q15. | What is Wired Equivalent Privacy (WEP)? |
| Option A: | security algorithm for Ethernet |
| Option B: | security algorithm for wireless networks |
| Option C: | security algorithm for usb communication |
| Option D: | security algorithm for emails |
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| Q16. | What is WISP? |
| Option A: | Wideband Internet Service Protocol |
| Option B: | Wideband Internet Source Protocol |
| Option C: | Wireless Instantaneous Source Provider |
| Option D: | Wireless Internet Service Provider |
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| Q17. | Three strategies used to handle transition from version 4 to version 6 are dual-stack, tunneling and \_\_\_\_\_\_\_\_ |
| Option A: | Header Switching |
| Option B: | Header Translation |
| Option C: | Header Transfer |
| Option D: | Header Transmission |
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| Q18. | Which one of the following descriptions about IPv6 is correct? |
| Option A: | Addresses are not hierarchical and are assigned at random |
| Option B: | Broadcasts have been eliminated and replaced with multicasts |
| Option C: | There are 2.7 billion available addresses |
| Option D: | An interface can only be configured with one IPv6 address |
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| Q19. | What is the largest channel bandwidth a UE is required to support in LTE? |
| Option A: | 10 MHz |
| Option B: | 1.4 MHz |
| Option C: | 20 MHz |
| Option D: | 5 MHz |
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| Q20. | In LTE, what is the benefit of PAPR reduction in the uplink? |
| Option A: | Improved uplink coverage |
| Option B: | Lower UE power consumption |
| Option C: | Reduced equalizer complexity |
| Option D: | Improved uplink coverage, lower UE power consumption and reduced equalizer |
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| Q21. | How much bandwidth is required to transmit the primary and secondary synchronization signals? |
| Option A: | 1.08 MHz |
| Option B: | 1.4 MHz |
| Option C: | 930 kHz |
| Option D: | 20 MHz |
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| Q22. | Which is the main protocol that transfers packets in a GPRS Core network? |
| Option A: | GTP |
| Option B: | SSTP |
| Option C: | SCTP |
| Option D: | GSTP |
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| Q23. | What type of handovers is supported by LTE? |
| Option A: | a) Hard handover only |
| Option B: | b) Soft handover only |
| Option C: | c) Hard and soft handover |
| Option D: | d) Hard, soft and softest handover |
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| Q24. | What is the minimum amount of RF spectrum needed for an FDD LTE radio channel? |
| Option A: | 1.4 MHz |
| Option B: | 2.8 MHz |
| Option C: | 5 MHz |
| Option D: | 20 MHz |
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| Q25. | Which RLC mode adds the least amount of delay to user traffic? |
| Option A: | Unacknowledged mode (UM) |
| Option B: | Acknowledged mode (AM) |
| Option C: | Low latency mode (LM) |
| Option D: | Transparent mode (TM) |