

University of Mumbai

Examination 2020

Examinations Commencing from 7th January 2021 to 20th January 2021

Program: Information Technology Engineering

Curriculum Scheme: Rev 2012

Examination: BE Semester VII

Course Code: BEITC 704 and Course Name: WT

Time: 2 hour

Max. Marks: 80

| Q1. | Choose the correct option for following questions. All the Questions are compulsory and carry equal marks |
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| Q1. | If a datagram router goes down then |
| Option A: | all packets will suffer |
| Option B: | only those packets which are queued in the router at that time will suffer |
| Option C: | only those packets which are not queued in the router at that time will suffer |
| Option D: | no packets will suffer |
| Q2. | The PSTN is an example of a network. |
| Option A: | packet switched |
| Option B: | circuit switched |
| Option C: | message switched |
| Option D: | alert switched |
| Q3. | Each packet is routed independently in |
| Option A: | virtual circuit subnet |
| Option B: | short circuit subnet |
| Option C: | datagram subnet |
| Option D: | ATM subnet |
| Q4. | For a connection oriented service, we need a |
| Option A: | virtual circuit subnet |
| Option B: | short circuit subnet |
| Option C: | datagram subnet |
| Option D: | wireless subnet |
| Q5. | Which type of switching uses the entire capacity of a dedicated link? |
| Option A: | circuit switching |
| Option B: | datagram packet switching |
| Option C: | virtual circuit packet switching |
| Option D: | message switching |
| Q6. | In ____, each packet of a message need not follow the same path from sender to receiver. |
| Option A: | circuit switching |
| Option B: | message switching |
| Option C: | virtual approach to packet switching |
| Option D: | datagram approach to packet switching |
| Q7. | In ____, each packet of a message need to follow the same path from sender to receiver. |
| Option A: | circuit switching |
| Option B: | message switching |
| Option C: | virtual approach to packet switching |
| Option D: | datagram approach to packet switching |

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| Q8. | If the subnet uses virtual circuits internally, routing decisions are made only when a new virtual circuit is being setup. This is called as..... |
| Option A: | Session routing |
| Option B: | Circuit routing |
| Option C: | Datagram routing |
| Option D: | Forwarding |
| | |
| Q9. | _____ change their routing decisions to reflect changes in the topology. |
| Option A: | Nonadaptive algorithms |
| Option B: | Adaptive algorithms |
| Option C: | Static algorithms |
| Option D: | Recursive algorithms |
| | |
| Q10. | Sending a packet to all destinations simultaneously is called |
| Option A: | Multicasting |
| Option B: | Unicasting |
| Option C: | Telecasting |
| Option D: | Broadcasting |
| | |
| Q11. | Sending a message to a well-defined group that are numerically large in size but small compared to the network as a whole is called |
| Option A: | Unicasting |
| Option B: | Multicasting |
| Option C: | Broadcasting |
| Option D: | Telecasting |
| | |
| Q12. | In Broadcast routing, if the router does not know anything all about spanning tree, _____ method is preferred. |
| Option A: | Reverse Path forwarding |
| Option B: | Multidestination |
| Option C: | Flooding |
| Option D: | Spanning tree |
| | |
| Q13. | Term that is used for stationary or mobile wireless station and also have optional central base station is called |
| Option A: | Point to point. |
| Option B: | Multi point. |
| Option C: | Network point. |
| Option D: | Access point |
| | |
| Q14. | Wireless communication is started in |
| Option A: | 1869. |
| Option B: | 1895. |
| Option C: | 1879. |
| Option D: | 1885. |
| | |
| Q15. | In wireless LAN, there are many hidden stations so we cannot detect the |
| Option A: | Frames. |
| Option B: | Collision. |
| Option C: | Signal. |
| Option D: | Data. |
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| Q16. | Specifications for a wireless LAN are called |
| Option A: | Standard 802.3z. |

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| Option B: | Standard 802.3u. |
| Option C: | Project 802.3. |
| Option D: | IEEE 802.11. |
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| Q17. | Which mode is used for installing networks in wireless communication device characteristics? |
| Option A: | Fixed and wired. |
| Option B: | Mobile and wired. |
| Option C: | Fixed and wired. |
| Option D: | Mobile and wireless. |
| | |
| Q18. | 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 |
| | |
| Q19. | In _____ multiple accesses are achieved by allocating different time slots for the different users. |
| Option A: | TDMA |
| Option B: | CDMA |
| Option C: | FDMA |
| Option D: | FGMA |
| | |
| Q20. | _____ are typically characterized by very small cells, especially in densely populated areas. |
| Option A: | 2G system. |
| Option B: | 3G system. |
| Option C: | 2.5G system. |
| Option D: | 3.5G system. |

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| Q2. | Solve any Two Questions out of Three | 10 marks each |
| A | Discuss the threats and challenges in wireless systems. Explain the different types of device security issues. | |
| B | Explain WIMAX system and compare different 802.16 standards. | |
| C | Why is the concept of Spread Spectrum important? Explain briefly FHSS and DSSS concept. | |

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| Q3. | | |
| A | Solve any Two | 5 marks each |
| i. | Write a short note on Multiple Access Technique. | |
| ii. | Explain exposed and hidden terminal problem with solution. | |
| iii. | Explain Piconet and Scatternet with respect to Bluetooth. | |
| | | |
| B | Solve any One | 10 marks each |
| i. | Explain the GSM Architecture with a neat diagram. | |
| ii. | Explain Wireless sensor networks with a suitable diagram. | |