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Department of Electronics and Communication Engineering

EC8004 WIRELESS NETWORKS

Multiple Choice Questions Bank

Unit-I Wireless LAN

1. Which of the following is not correct with respect to WLAN?
 - a) Very flexible within the reception area
 - b) Ad-hoc networks without previous planning possible
 - c) **Very high bandwidth compared to wired networks**
 - d) No wiring difficulties

Answer: (c)

2. Choose the design goals for wireless LANs
 - a) Global, seamless operation
 - b) Low power for battery use
 - c) No special permissions or licenses needed to use the LAN
 - d) **All the above**

Answer: (d)

3. Which of the following IEEE 802.11 system architecture requires a wired backhaul?
 - a) **Infrastructure network**
 - b) Adhoc Network
 - c) All the above
 - d) None of the above

Answer: (a)

4. What is the main role of physical layer in IEEE 802.11?
 - a) **Modulation**
 - b) Flow control
 - c) Routing
 - d) Scheduling

Answer: (a)

5. Routing falls under which layer?

- a) MAC
- b) Network**
- c) PHY layer
- d) Session layer

Answer: (b)

6. Pick the correct modulation scheme for FHSS.

- a) GFSK modulation**
- b) DBPSK modulation
- c) DQPSK modulation
- d) None of the above

Answer: (a)

7. Check the correct modulation schemes for DSSS.

- a) GFSK modulation
- b) DBPSK modulation**
- c) GMSK modulation
- d) None of the above

Answer: (b)

8. PLCP header fields in FHSS PHY packet format comprises of

- a) PLW
- b) PSF
- c) HEC
- d) All the above**

Answer: (d)

9. PLCP header fields in DSSS PHY packet format comprises of

- a) Signal
- b) Service
- c) Length
- d) All the above**

Answer: (d)

10. Which of the following MAC schemes in IEEE 802.11 avoids hidden terminal problem?

- a) DFWMAC-DCF CSMA/CA
- b) DFWMAC-DCF RTS/CTS**
- c) DFWMAC- PCF
- d) All the above

Answer: (b)

11. Choose the IFS with highest Priority.

- a) **SIFS**
- b) PIFS
- c) DIFS
- d) All the above

Answer: (a)

12. Transmitter and Receiver addresses are present in

- a) ACK packet
- b) RTS packet
- c) **CTS packet**
- d) All the above

Answer: (c)

13. WLAN: IEEE 802.11a and WLAN: IEEE 802.11b operate with the transmission frequencies _____ and _____ respectively.

- a) **5 GHz and 2.4 GHz**
- b) 2.4 GHz and 5 GHz

Answer: (a)

14. Maximum data rate of WLAN: IEEE 802.11a and WLAN: IEEE 802.11b are _____ and _____ respectively.

- a) 6 Mbps and 54 Mbps
- b) **54 Mbps and 6 Mbps**

Answer: (b)

15. Consider an OFDM system that uses 52 sub-carriers out of which 48 are data sub-carriers and 4 are pilot sub-carriers. System bandwidth is 20 MHz and OFDM symbol Duration including cyclic prefix is 4 micro seconds. If code rate is $\frac{3}{4}$ and 64 QAM is used, what is the data rate?

- a) **54 Mbps**
- b) 10 Mbps
- c) 14Mbps
- d) 48 Mbps

Answer: (a)

16. _____ Offers connection-oriented service.

- a) **TCP**
- b) UDP
- c) STCP
- d) None of the above

Answer: (a)

17. Which of the following is not true regarding HiperLAN2?

- a) Connection oriented
- b) QoS support
- c) Dynamic frequency selection
- d) Network and application dependent**

Answer: (d)

18. Which of the following is not a characteristic of Bluetooth?

- a) 2.4 GHz ISM band
- b) G-MSK modulation**
- c) FHSS and TDD
- d) Topology-scatternet

Answer: (b)

19. Active Member Address (AMA) and Parked Member Address (PMA) are _____ and bits respectively.

- a) 3 bits and 8 bits**
- b) 8 bits and 3 bits

Answer: (a)

20. Check the correct statement regarding Base band link types.

- a) SCO (Synchronous Connection Oriented) – Voice**
- b) ACL (Asynchronous ConnectionLess) – Voice
- c) SCO (Synchronous Connection Oriented) – Data
- d) None of the above

Answer: (a)

21. WiMAX provides you?

- a) Full duplex communication**
- b) Half duplex communication
- c) Simplex communication
- d) duplex communication

Answer: (a)

22. ETSI stands for

- a) European Telephone Standards Institute
- b) European Telecommunication Systems Institute
- c) European Telecom Standards Institute
- d) European Telecommunication Standards Institute**

Answer: (d)

23. Which topologies supported by zigbee?

- a) Star
- b) Peer to peer
- c) Cluster
- d) All the above**

Answer: (d)

24. What is the data rate of Wireless HART Protocol?

- a) 250 kbps**
- b) 1 mbps
- c) 5 mbps
- d) 1 kbps

Answer: (a)

25. Which are the applications of WUSB?

- a) Home and office
- b) MP3
- c) Adhoc LoWPAN
- d) Both a & b**

Answer: (d)