



قائمة الاسئلة

الشبكات اللاسلكية والحوسبة النقالية - المستوى الثالث - قسم تكنولوجيا المعلومات - كلية الحاسوب وتكنولوجيا المعلومات - الفترة - درجة الامتحان

أ.م.د. عمار الزهاري

- 1) The frequency range of the radio wave is _____.
 - 1) - A- From 30 KHz to 300 KHz
 - 2) - B- From 300 KHz to 3 MHz
 - 3) + C- From 30 MHz to 1 GHz
 - 4) - D- From 30 GHz to 300 GHz
- 2) UMTS is the _____ cellular system used in Europe.
 - 1) - 1G
 - 2) - 2G
 - 3) + 3G
 - 4) - 4G
- 3) A technology used in GSM cellular system is _____.
 - 1) - FDMA
 - 2) + TDMA
 - 3) - CDMA
 - 4) - OFDMA
- 4) In the frequency spectrum, a frequency of ____ is located between 10^{10} and 10^{11} .
 - 1) - 2 GHz
 - 2) + 20 GHz
 - 3) - 200 GHz
 - 4) - 2 THz
- 5) Free license frequencies are 2.4GHz and 5GHz, these frequencies are also called _____.
 - 1) + Wi-Fi frequencies
 - 2) - WiMAX frequencies
 - 3) - Radio Frequencies
 - 4) - Microwave Satellite frequencies
- 6) OFDMA is the technique used in _____.
 - 1) - 1G
 - 2) - 2G
 - 3) - 3G
 - 4) + 4G
- 7) The technique used in 3G in Europe is _____.
 - 1) - FDMA
 - 2) - OFDM
 - 3) - TDMA
 - 4) + WCDMA
- 8) _____ is a technology used for data communication in single user satellite system.
 - 1) - GPS
 - 2) + VSAT
 - 3) - HEO
 - 4) - Bulk carrier
- 9) When satellite is far out into space, it takes photos. When satellite is close to earth, it transmits data. This type of satellite is called _____.
 - 1) - LEO
 - 2) - MEO
 - 3) - GEO



- 4) ☒ HEO
- 10) Terrestrial Microwave is outdoor wireless network used in ____.
- 1) - WPAN
 - 2) - WLAN
 - 3) - WMAN
 - 4) ☒ WWAN
- 11) ____ is a cellular system used in 4G.
- 1) - GPRS
 - 2) - UMTS
 - 3) ☒ LTE
 - 4) - HSPA
- 12) HSPA+ cellular operation used in Europe has a theoretical downlink speed of ____.
- 1) - 14 Mbps
 - 2) - 40 Mbps
 - 3) ☒ 84 Mbps
 - 4) - 128 Mbps
- 13) Which one of the following technologies has a speed that can reach up to 400Mbps.
- 1) - Bluetooth
 - 2) - WiMAX
 - 3) - Zigbee
 - 4) ☒ UWB
- 14) ____ is a type of Bluetooth modified to work with wireless sensor networks with low power consumption.
- 1) - UWB
 - 2) - Infrared
 - 3) ☒ Zigbee
 - 4) - FSO
- 15) LoRa is a new wireless technology used in ____ which can transmit data up to 1Km.
- 1) - WiMAX
 - 2) - Wi-Fi
 - 3) ☒ IoT
 - 4) - LTE
- 16) A wireless technique transmits data only with line-of-sight is ____.
- 1) - Wi-Fi
 - 2) - UWB
 - 3) ☒ FSO
 - 4) - Bluetooth
- 17) NFC is a wireless technique that is mainly used in ____.
- 1) ☒ WPAN
 - 2) - WLAN
 - 3) - WMAN
 - 4) - WWAN
- 18) ____ is a technique used to transmit data in 3.5G.
- 1) - GPRS
 - 2) - UMTS
 - 3) - LTE
 - 4) ☒ HSPA
- 19) The wireless technique used for transmitting data for very close distance or device touching is called ____.
- 1) - mmWave



- 2) - RFID
3) ☒ NFC
4) - FSO
- 20) Zigbee distance can reach up to _____.
1) ☒ 10 m
2) - 30 m
3) - 100 m
4) - 1000 m
- 21) One of the WLAN standards, capable of transmitting data at 54 Mbps using 2.4 GHz frequency range, for 30 m maximum coverage radius is _____.
1) - Wi-Fi (IEEE 802.11n)
2) - Wi-Fi (IEEE 802.11b)
3) ☒ Wi-Fi (IEEE 802.11a)
4) - Wi-Fi (IEEE 802.11g)
- 22) A wireless technique transmits data without needing to be line-of-sight is _____.
1) ☒ UWB
2) - FSO
3) - Terrestrial Microwave
4) - Infrared
- 23) In the frequency spectrum, Laser frequency (428 THz) is roughly located between _____.
1) - 1013 and 1014
2) ☒ 1014 and 1015
3) - 1015 and 1016
4) - 1016 and 1017
- 24) The bandwidth of _____ technology is 80MHz.
1) ☒ Zigbee
2) - UWB
3) - NFC
4) - WiMAX
- 25) The meaning of "Autonomous" in wireless networks is that _____.
1) ☒ No server, No router, no admin
2) - It is infrastructure-based
3) - It is single hop
4) - It works only with high mobility
- 26) Which one of the following wireless networks is "Autonomous"?
1) - Wi-Fi
2) - WiMAX
3) ☒ MANET
4) - LTE
- 27) Which one of the following networks is not an ad hoc network?
1) - MANET
2) ☒ Wi-Fi
3) - WSN
4) - VANET
- 28) Which one of the following networks is a multihop and infrastructureless network?
1) - Wi-Fi
2) - Cellular network
3) ☒ WSN
4) - WiMAX



- 29) WSN is mainly uses _____ transmission.
- 1) - Unicast
 - 2) - Multicast
 - 3) ☒ Broadcast
 - 4) - Non of the above
- 30) The main nodes of MANET are _____.
- 1) ☒ People
 - 2) - Sensors and actuators
 - 3) - Vehicles
 - 4) - Drones
- 31) AODV routing protocol in MANET is:
- 1) ☒ Single path and distance vector
 - 2) - Multipath and distance vector
 - 3) - Single path and link state
 - 4) - Multipath and link state
- 32) OLSR routing protocol in MANET is:
- 1) - Single path and distance vector
 - 2) - Multipath and distance vector
 - 3) ☒ Single path and link state
 - 4) - Multipath and link state
- 33) DSDV routing protocol in MANET is:
- 1) ☒ Proactive and table driven
 - 2) - Reactive and table driven
 - 3) - Proactive and on-demand
 - 4) - Reactive and on-demand
- 34) Which ad hoc routing protocol of the following is link state?
- 1) - DSR
 - 2) - TORA
 - 3) ☒ SSA
 - 4) - ZRP
- 35) All of the following are ad hoc hybrid/clustered routing protocols except _____.
- 1) ☒ DSR
 - 2) - ZRP
 - 3) - CGSR
 - 4) - CEDAR
- 36) MANET is mainly uses _____ transmission.
- 1) ☒ Unicast (point-to-point)
 - 2) - Multicast
 - 3) - Broadcast
 - 4) - None of the above
- 37) Mote is the main element of WSN, it usually consists of three components. One of the following is no a mote component.
- 1) - Embedded part
 - 2) - Communication part
 - 3) ☒ Software part
 - 4) - Sensing part
- 38) The Internet contains people, things, data, and process is called _____.
- 1) - IoT
 - 2) ☒ IoE



- 3) - IIoT
4) - IoMT
- 39) IoT technology is based on _____.
1) - sensors only
2) - actuators only
3) + sensors and actuators
4) - none of the above
- 40) The main difference between sensor and actuator is that _____.
1) - sensor can sense and act.
2) - actuator can sense but cannot act
3) - sensor cannot sense and cannot act
4) + actuator can sense and act