

COEN 331 Summer 2021 Final Test

Due Aug 30 at 5:55pm **Points** 35 **Questions** 35
Available Aug 30 at 5:30pm - Aug 30 at 5:55pm 25 minutes
Time Limit 25 Minutes **Allowed Attempts** Unlimited

This quiz was locked Aug 30 at 5:55pm.

Attempt History

	Attempt	Time	Score
LATEST	<u>Attempt 1</u>	23 minutes	24 out of 35

⚠ Correct answers will be available Aug 30 at 6pm - Aug 30 at 6:10pm.

Score for this attempt: **24** out of 35

Submitted Aug 30 at 5:55pm

This attempt took 23 minutes.

Incorrect

Question 1

0 / 1 pts

1-In LTE 4G the enodeB (enhanced NodeB) using Hard Handover to connect multiple base stations to serve one mobile device.

☒ True

☐ False

Question 2

1 / 1 pts

2-In GPRS if requested QoS for MS (Mobile Subscriber) could not be supported by GGSN (Gateway GPRS Support Node) then SGSN (Serving GPRS Support Node) will allocate temporarily bandwidth to MS.

☐ True☒ False**Question 3****1 / 1 pts**

3- In IEEE 802.11 for IBSS (Independent Basic Service Set) Power Conservation the unicast message ATIMs (Announcement Traffic Indication Messages) are used to preempt other stations from sleeping if there is message for them.

☒ True☐ False**Question 4****1 / 1 pts**

4- In LTE 4G the S1 interface connects eNodeB to eNodeB, for communication is using TDM (Time Division Multiplexing).

☐ True☒ False**Question 5****1 / 1 pts**

5- In LTE AGW (Access GateWay) provides termination of LTE bearer, consists of:

Mobility Management Entity for control plane and SAE AGW (System Architecture Evolution Packet Data Network Gateway) for user plane.

☒ True

☐ False

Incorrect

Question 6

0 / 1 pts

6- Hidden nodes cause interference and collision. The client will find the other clients who are sitting at the edge of the coverage areas.

To prevent interference and collision the IEEE 802.11k is used, the other clients will provide the hidden client with a list of clients to choose the best client to connect to for better connectivity and coverage.

☒ True

☐ False

Question 7

1 / 1 pts

7- In IEEE 802.11e standard each station is polled periodically, and each station is granted a transmission start time and a maximum transmit time.

☒ True

☐ False

Question 8**1 / 1 pts**

8- In Network Slicing for 5G technology all the slices of network are visible to user's application for modification of bandwidth.

☐ True

☒ False

Question 9**1 / 1 pts**

9- In Mobile IP the "Tunnel" is a path that an encapsulated IP packet will follow, at the end of tunnel after de-capsulation the agent will deliver IP packet to the mobile user.

☒ True

☐ False

Question 10**1 / 1 pts**

10- In ZigBee IEEE 802.15.4 are two Phy device types:

- **RFD (Reduced Function Device), minimum RAM and ROM, are battery powered, can sleep to reduce power consumption, RFD can talk only to FFD(Full Function Device).**
- **FFD(Full Function Device) is line powered, serves as network coordinator and link coordinator. Talks to any FFDs or RFDs.**

☒ True

☐ False

Incorrect

Question 11**0 / 1 pts**

11. In GSM the TDMA (Time Division Multiple Access) and CDMA (Code Division Multiple Access) are combined.

☒ True☐ False**Question 12****1 / 1 pts**

12- In GSM “Inter-Base Station Handoff” when the new and old BS (Base Station) are connected to the same MSC(Mobile Switching Center), the MS (Mobile Subscriber) will issue handoff request by using a free channel of new BS (Base Station).

After MS (Mobile Subscriber) receives the handoff signal the MSC will bridge new and old paths and will ask MS (Mobile Subscriber) to use the new channel.

The old path and resources will be released.

☒ True☐ False

Incorrect

Question 13**0 / 1 pts**

13- The 5G mobile device is using the fourth part of IPV6 address field, which is used for local VPN to control frequency spectrum.

☒ True☐ False

Incorrect

Question 14**0 / 1 pts**

14- In Bluetooth the master initiates the connection to one or more masters.

☒ True☐ False**Question 15****1 / 1 pts**

15- The SDR (Software Defined Radio) deployment provides DHCP (Dynamic Host Configuration Protocol) for IP address assignment to the link in 5G wireless network.

☐ True☒ False**Question 16****1 / 1 pts**

16- In GSM the Subscriber Identity Module (SIM) database contains MSC and SGSN data of home location.

☐ True☒ False

Question 17**1 / 1 pts**

17- In GSM the VLR (Visitor Location Register) contains information, which is static user information and independent of user's location.

☐ True

☒ False

Question 18**1 / 1 pts**

18- In SS7 the SCCP (Signaling Connection Control Part) provides Global Title Translation, which performs incremental routing(forwarding).

☒ True

☐ False

Question 19**1 / 1 pts**

19- In the Mobile IP "Life time" in "Response Registration" message will define how long registration time will last before expires. "Life time" of FFFF (Hex) means the address never expires.

☒ True

☐ False

Question 20**1 / 1 pts**

20- The best transmission codes are those in which the state of the line does not frequently changes.

☐ True☒ False**Question 21****1 / 1 pts**

21- In GPRS the PAGING procedure informs BSS (Base Station Subsystem) of packet-switched (if initiated by SGSN) or circuit-switched (if initiated by an MSC/VLR) transmission.

☒ True☐ False**Incorrect****Question 22****0 / 1 pts**

22- In LTE the HARQ (Hybrid Automatic Repeat Request) method is used, which consists of ARQ (Automatic Repeat Request) with frequency hopping feature.

☒ True☐ False**Incorrect****Question 23****0 / 1 pts**

23- H.323 provides multimedia requirements for communication over circuit switching networks.

☒ True

☐ False

Question 24

1 / 1 pts

24- In the 5G base station using massive MIMO which is an antenna with one single element.

☐ True

☒ False

Question 25

1 / 1 pts

25- In GPRS (General Packet Radio Services) the GTP (GPRS Tunneling Protocol) provides path management, tunnel management, location management, and mobility management.

☒ True

☐ False

Question 26

1 / 1 pts

26- UWB (Ultra Wide Band) signals are modulated pulses with very short pulse duration flows. Power seen by a narrowband system is a fraction of the total.

☒ True☐ False

Incorrect

Question 27

0 / 1 pts

27- In Satellite communication the Conjunction is the condition when the two elements, earth station and the Sun are aligned.

☒ True☐ False**Question 28**

1 / 1 pts

28- Cognitive Radio is the method that user's device will scan the frequency spectrum to verify if the spectrum is used.

☒ True☐ False

Incorrect

Question 29

0 / 1 pts

29- Each 5G device has a permanent "home" IP address, with a "care-of address" that provides its current location. When a peer device on a packet network wants to communicate with a 5G device, communicates first with the 5G phone's foreign agent address.

☒ True

☐ False

Incorrect

Question 30

0 / 1 pts

30- The sky waves travel over the long distances over the earth surface, do not propagate in the upper atmosphere and using AM (Amplitude Modulation) for satellite communications.

☒ True

☐ False

Question 31

1 / 1 pts

31- In LTE the AGW (Access GateWay) provides termination of LTE signaling, and provides:

1. **PSTN for control plane**
2. **SAE AGW (System Architecture Evolution PSTN Network Gateway) for user plane**

☐ True

☒ False

Incorrect

Question 32

0 / 1 pts

32- In 802.11h the DFS (dynamic frequency selection) is used to detect other devices using the same radio channel and switches WLAN (Wireless LAN) to the other cellular network.

☒ True☐ False**Question 33****1 / 1 pts**

33- In IEEE 802.11 one PS-Poll frame retrieves all buffered frames from access point and will ACK only the last frame.

☐ True☒ False**Question 34****1 / 1 pts**

34- In 5G Radio Access Network Virtualization provides sharing of wireless network elements such as routers, switches and Radio Frequencies between wireless ISPs.

☒ True☐ False**Question 35****1 / 1 pts**

35- The major mmWave obstacles for mobile communications are:

- **Line-Of-Sight (LOS)**
- **RF signals propagation prevention by building's structures**
- **Higher path loss at these bands, compared to 3GHz spectrum.**

☒ True☐ False

Quiz Score: **24** out of 35