Keys

1. To enhance the spectrum efficiency, massive MIMO technology is introduced in 5G network, whose maximum number of antennas may reach 64T64R.

True correct

False

2. C-band is the main frequency band of 5G. Currently, a maximum of 100 MHz bandwidth can be deployed. Uplink and downlink imbalance can be resolved by the uplink and downlink decoupling feature.

True correct

False

3.The 5G network features high rate, low latency, and massive connections, and can better support vertical industry applications.

True correct

False

4. Based on the massive MIMO beam forming capability, 5G base stations can better support low-altitude coverage.

True correct

False

5. The SA mode of 5G network favors aggressive operators on fast deployment of 5G services based on 4G network.

True

False

6. For intelligent grid service, power transmission and power generation will be the main application field for 5G.

True

False

7. The IEEE is responsible for 5G standardization, and formulates and releases 5G mobile communication technical specifications and reports.

True

False

8. Because of the high frequency band of millimeter wave, the penetration loss of it is very small.

True

False

9. mMTC can be supported by both NSA and SA mode.

True

False

10. In IoV scenarios, the DSRC technology provides better coverage than C-V2X.

True

False

## Random questions on 5G Technology (Single choice)

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| 11. Which of the following statements about the 5G protocol standardization process is correct?  The 5G protocol is divided into two phases: Phase 1 and Phase 2, which correspond to two protocol versions: R15 and R16.  3GPP Release 16 focuses on the standardization of eMBB service scenarios.  3GPP Release 15 focuses on the standardization of mMTC service scenarios.  Based on the current protocol progress, 5G will be put into commercial use globally in 2025.    12. Which one of the following scenarios are the first batch of 5G network applications mainly focused on?  eMBB  mMTC  uRLLC  ALL    13. Which of the below frequency bands is the C-Band supported by 5G?  2600MHz  3.5GHz  28G  700MHz    14. For eMBB scenario of 5G, the peak rate is required to reach ( ).  1 Gbps  10 Gbps  100 Gbps  1000 Gbps    15. Which of the following functions can be tailored for smart grid meter reading services?  Charging function  Mobility management  Session management  Terminal management    16. Which of the below statements about 5G NSA networking is incorrect?  The signaling of the UE can be forwarded only by the eNodeB.  The UE signaling can be directly sent to the gNodeB.  Downlink user plane data can be sent to UE through gNodeB.  Downlink user plane data can be sent to UE through eNodeB.    17. Which RAN structure will be separated into CU and DU two parts?  C-RAN  D-RAN  Cloud RAN  All of them    18. Which of the below key technologies of 5G can effectively support the precise load control of intelligent grid?  Massive MIMO  Base station cloudification  Edge computing  F-OFDM    19. Which of the following technologies can shorten the air interface latency?  High-level Modulation  Massive MIMO  Flexible frame structure  F-OFDM    20. 5G network can use high-order modulation to increase the air interface rate. Which of the following statements about high-order modulation is incorrect?  Higher-order modulation can improve spectrum utilization.  Higher-order modulation has higher requirements on the SINR of signals.  High-order modulation technologies increase terminal costs.  256QAM and massive MIMO cannot be used together.    21. Which of the following statements about the causes of insufficient 5G uplink coverage is incorrect?  The UE transmit power is low.  No beamforming is used in the uplink.  Uplink slot assignment is few.  UE receiver sensitivity is poor.    22. In 5G system, spectrum utilization can be improved by using the F-OFDM technology. When the SCS is 30 kHz, which system bandwidth is of the maximum spectrum utilization?  20MHz  60MHz  80MHz  100MHz |

Multiple

23. Which of the following are CloudRAN benefits?

Unified architecture, achieving multi-dimensional convergence of multiple RATs, frequency bands, multi-layer networks, and ultra-dense networks.

On-demand deployment, intelligent slicing, and adaptation to diverse services, such as large bandwidth, short latency, and massive connections.

Open platform and intelligent O&M, promoting agile service rollout.

Resource pooling, improving resource utilization and elastic network capacity expansion.

correct

24. In the future, the 5G-V2X technology can be used to enable high-level autonomous driving applications. Which of the following are included?

Vehicle platooning

Advanced driving

Sensor information sharing

Remote driving

correct

25. Based on the C-V2X technology, multi-party collaboration among transportation participants can be implemented to facilitate intelligent transportation. The C-V2X includes:

V2V

V2P

V2N

V2I

correct

26. Compared with 4G networks, which ones of the following services can be better supported by 5G networks that support higher rates?

4K and 8K HD video

VR

AR

Holographic image service

correct

27. For 5G network, what are the benefits of using a globally unified standard?

Supporting global roaming

Economies of scale

Reducing industry chain risks

Increasing complexity of mobile phones

correct

28. With the rapid development of mobile services and the emergence of new services, what are the challenges faced by mobile communications networks?

Rapid growth of mobile data volume

The number of network connections keeps increasing

Diversified service scenarios

Rapid development of video call service

correct

29. Which ones of the following statements about millimeter waves are incorrect?

The lower the frequency band is, the better the coverage is.

Newly introduced in NR which has the maximum cell bandwidth.

The available frequency resouce is limited, most of which was occupied by current systems.

Coverage capability is poor and requirements on RF components are high.

correct

30. Which ones of the below 5G core network functions belong to control plane?

AMF

UPF

SMF

PCF

correct