DUMPSARENA

HCIE-5G Radio V1.0 (Written)

Huawei H35-582

Version Demo

Total Demo Questions: 16

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Topic Break Down

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QUESTION NO: 1

In the IMT2020 vision, which of following is correct ratio of 5G service delay to the 4G service delay?

A. 1/100

B. 1/20

C. 1/10

D. 1/50

ANSWER: C

Explanation:

1/10 is the correct ratio. The IMT-2020 vision identifies very low latency as a key 5G capability, with a target user-plane latency of about 1 ms for ultra-reliable and low-latency communications. In commonly used 4G-versus-5G capability comparisons, 4G service latency is represented as approximately 10 ms. Comparing the two target values gives 1 ms divided by 10 ms, which equals 1/10. This ratio expresses the intended order-of-magnitude reduction in service delay: 5G is designed to reduce latency from the tens-of-milliseconds range associated with conventional mobile broadband toward the approximately one-millisecond level needed by time-sensitive services. Such low delay supports use cases including industrial automation, vehicle-related communications, and immersive interactive applications. The ITU IMT-2020 framework defines latency among its minimum technical-performance requirements and highlights the need for substantially improved responsiveness relative to earlier IMT systems. See the ITU IMT-2020 Vision recommendation and the ITU IMT-2020 minimum requirements.

QUESTION NO: 2

Which of the following are the key requirements of power distribution automation on communication networks? -MC

A. Millisecond-level Ultra-low latency

B. High isolation

C. High reliability

D. Ultra-high bandwidth

ANSWER: A B C

Explanation:

Power distribution automation supports protection, fault location, isolation, and service restoration functions whose communications must operate predictably during grid disturbances. **Millisecond-level Ultra-low latency** is therefore required so control commands, telemetry, and protection-related information can be delivered within the stringent time window needed for rapid fault handling and closed-loop automation. **High reliability** is equally essential because communications loss, excessive packet loss, or unstable delay can prevent timely switching actions and reduce the availability of distribution automation services. Networks serving these critical operational flows need resilient access and transport, redundant design where applicable, and service assurance mechanisms.

High isolation is also a key requirement. Distribution automation traffic is operationally critical and must remain logically separated from other utility, enterprise, or public traffic. Isolation protects the service against congestion and interference from noncritical flows while enabling differentiated policies for performance and security. In 5G-based power networks, capabilities such as dedicated logical resources and network slicing support this separation and allow service-level guarantees to be applied to critical grid applications. Huawei describes electric-power communications as requiring secure, reliable connectivity for power-production and grid-operation scenarios; see Huawei Electric Power. The role of 5G capabilities, including ultra-reliable low-latency communication, is also described by the 3GPP 5G System Overview.

QUESTION NO: 3

In the smart grid, which of the following services belongs to the uRLLC service? (single-choice question, 2 points)

A. Remote meter reading

B. Automatic Power Distribution

C. Line video surveillance

D. Collection of electricity consumption information of the whole network

ANSWER: B

Explanation:

Automatic Power Distribution is a uRLLC service because grid fault isolation and distribution-network restoration require commands to be delivered with extremely low latency and very high reliability. When a fault occurs, the network must support rapid detection, switching, and control so that the affected section can be isolated and electricity can be restored to unaffected users promptly. These control actions are safety- and continuity-critical: delayed or lost communications can increase the outage area, damage equipment, and create operational risks. uRLLC, meaning ultra-reliable and low-latency communications, is designed for precisely this type of time-sensitive industrial control traffic. In 5G service classification, uRLLC addresses applications that need deterministic-like responsiveness together with dependable packet delivery, rather than simply high bandwidth or massive device connectivity. Smart-grid automatic distribution is therefore a representative vertical-industry use case for uRLLC. The ITU's 5G usage-scenario framework identifies ultra-reliable, low-latency communication as a core IMT-2020 capability, and Huawei describes 5G's role in supporting latency-sensitive industrial and energy-sector digitalization. See ITU-R M.2083 IMT-2020 framework and Huawei 5G technology insights.

QUESTION NO: 4

Which of the following is the pain points relating to PC gaming Experience? -MC

A. Low Hardware investment

B. No anywhere anytime access

C. Piracy

D. High Software price

ANSWER: B C D

Explanation:

No anywhere anytime access, **Piracy**, and **High Software price** are recognized pain points in the conventional PC-gaming experience. Traditional PC gaming generally ties the user to a sufficiently capable local computer and its installed game library. This limits immediate access when the player is away from that device or does not have a suitable PC available. A key value proposition of cloud gaming is therefore enabling games to be streamed to supported devices without requiring the game to run locally, making access more flexible; see NVIDIA's overview of cloud gaming at GeForce NOW.

Piracy is also a significant ecosystem concern because unauthorized copying and distribution can reduce legitimate game sales, complicate licensing, and weaken incentives for game developers and publishers. The U.S. Copyright Office describes software as copyrightable subject matter and provides resources on the protection of computer programs at Copyright Registration for Computer Programs. Finally, high software prices can create a material barrier for players, particularly where a player must buy multiple premium titles, expansions, or editions to access desired content. These cost and accessibility pressures are central motivations for subscription, streaming, and cloud-gaming service models.

QUESTION NO: 5

Which of the following are commercial products in the 5G terminal industry?

A. vehicle-mounted mobile module

B. mobile handheld terminal

C. mobile MIFI hotspot device

D. home CPE gateway .

ANSWER: A B C D

Explanation:

All listed items are established commercial form factors in the 5G terminal ecosystem. Vehicle-mounted mobile modules are embedded communication units used by connected vehicles and in-vehicle systems; they provide cellular access for telematics, navigation, fleet applications, and other automotive services. Mobile handheld terminals include 5G smartphones and purpose-built handheld devices, which are major consumer and enterprise 5G endpoint categories. A mobile MiFi hotspot device is also a commercial 5G terminal: it connects to a 5G radio network and shares that connection locally through Wi-Fi for multiple user devices. Home CPE gateways are fixed-wireless-access terminals that receive 5G service and provide wired and/or Wi-Fi connectivity within homes or small offices. These product types differ in their deployment scenarios and interfaces, but each is a marketable terminal product that uses 5G access to deliver connectivity. The broad 5G system supports diverse device and service scenarios, including mobile broadband, fixed wireless access, and vertical-industry IoT applications. See the 3GPP 5G System Overview and the GSMA IoT resources.

QUESTION NO: 6

What does the Internet of Vehicles based on cellular network refer to? (single-choice question, 2 points)

A. C-V2X

B. DSRC

C. ADAS

D. D2D

ANSWER: A

Explanation:

C-V2X is the correct term for Internet of Vehicles communications based on cellular-network technology. C-V2X means Cellular Vehicle-to-Everything and defines how vehicles exchange information with other vehicles, roadside infrastructure, pedestrians, and cellular-network services. It uses 3GPP cellular standards, including LTE-V2X and 5G NR-V2X, to support direct communications for time-sensitive road-safety use cases as well as network-based communications for broader connected-vehicle services.

In practical deployments, C-V2X enables vehicles to share data such as position, speed, direction, hazard warnings, and traffic-related information. These capabilities support cooperative awareness, collision-risk reduction, traffic efficiency, and the evolution toward connected and intelligent transportation systems. Its cellular-standard foundation allows the technology to benefit from the established mobile ecosystem and continued 5G evolution. 3GPP describes V2X as vehicle communications enabled through cellular systems and specifies the relevant radio and service capabilities in its standards work. Huawei also identifies C-V2X as a key connectivity technology for intelligent connected vehicles. See 3GPP V2X and Huawei: C-V2X Driving Intelligent Connectivity.

QUESTION NO: 7

In order to support the handover from NR to E-UTRAN, which interface does the system need to configure?

A. SGs

B. N5

C. Sv

D. N26

ANSWER: D

Explanation:

N26 is the interface required for supported interworking mobility between the 5G System and the EPS, including handover from NR to E-UTRAN. It connects the 5G Access and Mobility Management Function (AMF) to the LTE Mobility Management Entity (MME). During an NR-to-E-UTRAN handover, this connectivity enables the 5GS and EPS control-plane functions to exchange the mobility-management and session-context information needed to prepare and execute the inter-system handover. This allows the UE to move from NR access to E-UTRAN while retaining service continuity according to the supported 5GS–EPS mobility procedures. Huawei deployment and parameter-planning practice therefore requires N26-related interworking configuration when the network is intended to provide this handover mode, and both the relevant AMF and MME peer connectivity must be available. The 3GPP 5G system architecture identifies N26 as the reference point between AMF and MME for 5GS/EPS interworking. See 3GPP TS 23.501, available from the 3GPP TS 23.501 specification archive, and the related mobility procedures in the 3GPP TS 23.502 specification archive.

QUESTION NO: 8

In the gNodeB CU/DU separation architecture, the CU and DU are connected through the N2 interface.

A. True

B. False

ANSWER: B

Explanation:

False is correct because the standardized interface between a gNB Central Unit and a gNB Distributed Unit in the CU/DU split architecture is the **F1 interface**, not N2. F1 is divided into F1-C, which carries control-plane signaling between the CU control-plane functions and the DU, and F1-U, which carries user-plane data between the CU user-plane functions and the DU. This split enables the DU to retain time-critical radio functions close to the radio unit while centralized functions can be deployed in the CU.

N2 has a different role in the 5G system architecture: it is the control-plane reference point between the NG-RAN node, including the gNB, and the 5G Core Access and Mobility Management Function (AMF). It supports NG Application Protocol signaling for functions such as UE context management, mobility, and NAS transport. Therefore, identifying F1 as the CU-to-DU interface and N2 as the gNB-to-AMF interface confirms that the statement is false. See 3GPP's NG-RAN architecture specification in TS 38.401 and the 5G system procedures described in TS 23.502.

QUESTION NO: 9

Which of the following scenarios involve edge computing?

A. AR

B. IOT

C. Auxiliary sensitive computing.

D. Iov

ANSWER: A B C D

Explanation:

AR, IOT, Auxiliary sensitive computing, and Iov are all applicable edge-computing scenarios. Edge computing places compute, storage, and application capabilities close to users, devices, and data sources rather than relying exclusively on a

centralized cloud. This proximity reduces transport delay and supports responsive interactive rendering for AR, where latency and stable user experience are critical. It also enables IOT deployments to preprocess, filter, and analyze large volumes of device data locally, reducing backhaul usage and allowing faster operational responses.

Auxiliary sensitive computing is an edge-computing use case because sensitive data can be processed near its point of collection. Keeping processing local supports data-minimization practices, reduces unnecessary exposure of raw information, and can help meet privacy, security, and locality requirements. Iov similarly benefits from nearby computing resources: connected vehicles require rapid processing and exchange of road, traffic, and safety-related information, for which local edge nodes can provide low-latency service continuity. These characteristics align with multi-access edge computing, which brings cloud-computing capabilities and an information-technology service environment to the edge of mobile networks. See ETSI Multi-access Edge Computing and Huawei: 5G MEC.

QUESTION NO: 10

Which or the following are members of the 5G open trail specification Alliance

(OTSA) ?

A. SKT

B. Vodafone

C. Verizon

D. NTT DOCOMO

ANSWER: A B C D

Explanation:

The 5G Open Trial Specification Alliance (5G OTSA) was an operator-led collaboration intended to align 5G trial requirements and specifications, enabling interoperable trials and helping accelerate commercial 5G deployment. SKT, Vodafone, Verizon, and NTT DOCOMO were participating mobile-network operators in this alliance. Their involvement reflects the alliance's international operator base, spanning major operators in South Korea, Europe, the United States, and Japan. Cooperation among these operators was particularly valuable for developing common approaches to 5G testing, validating candidate technologies, and encouraging a more consistent ecosystem before large-scale rollout. NTT DOCOMO is the full company name intended by "DCM"; using the full name avoids ambiguity and correctly identifies the Japanese operator. The alliance's work should be understood in the broader 5G-standardization and industry-coordination environment: 3GPP develops the technical specifications for 5G systems, while operator initiatives such as OTSA can coordinate trial expectations and practical deployment priorities across markets. See 3GPP's 5G system overview and the GSMA 5G resources for the wider standards and operator ecosystem context.

QUESTION NO: 11

Which of the following architectures can be used with the multi -stream aggregation (MSA) technology to implement coordination between LTE and 5G?

A. Option 2

B. Option 3x

C. Option 3

D. Option 3a

ANSWER: B C D

Explanation:

MSA is applicable to the LTE-anchored non-standalone deployment family represented by Option 3, Option 3a, and Option 3x. In these EN-DC architectures, LTE remains the master/anchor radio access technology and NR is added as a secondary

radio access technology. This permits coordinated use of LTE and NR radio resources for a UE, which is the fundamental deployment context for LTE–5G coordination through multi-stream aggregation. Option 3 carries user-plane traffic through the LTE-side user-plane anchor; Option 3a provides a direct NR-side user-plane path to the core network; and Option 3x uses an LTE PDCP anchor that can split traffic toward LTE and NR legs. These variants therefore provide the architectural basis for MSA to distribute or coordinate traffic over the two radio access technologies while retaining LTE-based control-plane anchoring. The EN-DC architecture and bearer alternatives are standardized in 3GPP's multi-connectivity specifications, including 3GPP TS 37.340. The LTE-anchor/NR-secondary NSA deployment principles are also described in Huawei's 5G Is Now material.

QUESTION NO: 12

Which of the following NSA networking statements are correct? _MC

A. Capable of provisioning new services such as URLLC

B. LOW Investment in the initial phase of 5G deployment

C. Requiring continuous coverage provided by the 5G base solutions

D. Deployment based on legacy 4G networks

ANSWER: B D

Explanation:

LOW Investment in the initial phase of 5G deployment is correct because Non-Standalone (NSA) deployment introduces NR radio access while retaining the established LTE/EPC network as the control-plane anchor and core-network foundation. This permits an operator to reuse substantial existing 4G assets, including LTE coverage, the EPC, operational processes, sites, transport resources, and much of the installed network ecosystem. Consequently, 5G can initially be deployed where NR capacity is most valuable without requiring an immediate nationwide replacement of the legacy core.

Deployment based on legacy 4G networks is also correct. The commonly deployed NSA architecture is EN-DC, in which LTE operates as the master node and NR is added as a secondary node. The UE remains connected through the LTE anchor while also using NR radio resources, enabling an evolutionary migration path from LTE to 5G. This architecture is specified by 3GPP as Multi-RAT Dual Connectivity and allows operators to add NR service while leveraging their existing LTE/EPC deployment. See the 3GPP TS 37.340 specification archive and Huawei's overview of the 5G evolution path.

QUESTION NO: 13

Which of the following 5G service application does unmanned aerial vehicle (UAV) refer to?

A. SMART grid

B. AUTOMATED DRIVING

C. IoT

D. Drone

ANSWER: D

Explanation:

Drone is correct because an unmanned aerial vehicle (UAV) is commonly called a drone. In 5G service-application terminology, drone services use wireless connectivity to support capabilities such as real-time high-definition video transmission, remote piloting, flight-control telemetry, inspection, surveillance, mapping, and delivery operations. These applications benefit directly from 5G characteristics: high uplink capacity can carry aerial video streams, low latency supports responsive command and control, and broad connectivity helps maintain communications across operational areas.

In Huawei 5G solution discussions, drones are a representative vertical-industry application, especially for scenarios such as power-grid inspection, public safety, and industrial monitoring. The UAV is the physical aerial platform, while 5G provides the

communications network that links the aircraft, its cameras and sensors, and the remote control or data-processing systems. Therefore, when the service application is explicitly described as an unmanned aerial vehicle, the appropriate name is Drone. Huawei describes 5G's role in enabling industry digitalization and connected applications at Huawei 5G. The International Telecommunication Union's IMT-2020 framework also outlines the enhanced mobile broadband, ultra-reliable low-latency, and massive connectivity capabilities that underpin such connected-device services: ITU-R M.2083.

QUESTION NO: 14

Which one of the following serves the main application service for 5G in early deployment phase in European union and the united states?

A. internet of vehicle (IoV)

B. cloud VR

C. FWA (home broadband access) .

D. smart manufacturing

ANSWER: C

Explanation:

FWA (home broadband access) is correct because early commercial 5G deployment in the United States and Europe was strongly centered on providing fixed wireless broadband to homes and businesses. Rather than waiting for nationwide mobile coverage and a mature handset ecosystem, operators could use 5G radio capacity—particularly in high-capacity spectrum—to offer last-mile internet access where fibre rollout was slow, costly, or unavailable. This gave operators a practical early revenue opportunity and allowed subscribers to receive high-speed broadband through a 5G customer-premises device without a new wired connection to the premises. Huawei's 5G-focused material identifies enhanced mobile broadband and fixed-wireless access as important early use cases, while more demanding vertical-industry services generally depend on broader ecosystem, device, coverage, and operational maturity. Industry reporting from GSMA also documents fixed wireless access as a major 5G broadband proposition, including its role in extending high-speed connectivity to households and enterprises. In this early phase, home broadband FWA therefore represented the principal application service emphasized by many European and US 5G deployments. See Huawei: 5G Is On and GSMA Fixed Wireless Access.

QUESTION NO: 15

Which of the following 5G Core reference points are service-based interfaces? -MC

A. N11

B. N7

C. N8

D. N4

ANSWER: A B C

Explanation:

N11, **N7**, and **N8** are service-based interfaces in the 5G Core. N11 is used between the AMF and SMF, N7 is used between the SMF and PCF, and N8 is used between the AMF and UDM. These interfaces use the service-based architecture framework, in which network functions expose and consume services using service-based interface operations.

N4 is not a service-based interface. It is the reference point between the SMF and UPF and is used for control of user-plane packet handling, including packet detection, forwarding, QoS enforcement, and reporting rules. N4 uses the PFCP protocol. See 3GPP TS 23.501 and 3GPP TS 23.502.

QUESTION NO: 16

How many times is the 5G downlink peak rate higher than that of LTE? (single-choice question, 2 points)

A. 10 times

B. 50 times

C. 100 times

D. 500 times

ANSWER: C

Explanation:

100 times is correct in the standard high-level comparison used for 5G capability targets and Huawei training material. The IMT-2020 performance requirements define a 5G peak downlink data rate of up to 20 Gbit/s. This is commonly contrasted with an LTE peak downlink rate of approximately 100 Mbit/s in the simplified generational comparison, resulting in a 100-fold increase. Peak rate is a theoretical maximum under favorable radio conditions, sufficient spectrum bandwidth, suitable modulation and coding, and capable user equipment; it is not the throughput that every subscriber will receive in a live network. The 5G value is enabled by wider channel bandwidths, including operation in high-frequency spectrum, massive-MIMO antenna techniques, and more efficient radio-interface capabilities. The ITU's IMT-2020 specification identifies the 20 Gbit/s downlink peak-rate requirement: ITU-R M.2410-0. For broader context on the technical requirements and evaluation framework for IMT-2020, see the ITU-R IMT-2020 page: ITU-R IMT-2020.