PassQueen
a.k.a dumpsqueen.com

HCIA-5G V2.0 Exam

Huawei H35-660_V2.0

Version Demo

Total Demo Questions: 36

Total Premium Questions: 362

Buy Premium PDF

https://passqueen.com

support@passqueen.com

Topic Break Down

Topic	No. of Questions
Topic 1, 5G Network Basics	85
Topic 2, 5G Network Architecture	60
Topic 3, 5G Network Key Technologies	68
Topic 4, 5G Network Deployment	19
Topic 5, 5G Network O&M	5
Topic 6, 5G Industry Applications	123
Topic 7, Mix Questions	2
Total	362

QUESTION NO: 1

Which of the following are major challenges in the 5G era? -MC

A. Explosive increase of connected devices

B. Ultra-Low latency for communication between vehicles

C. Fast handover on mobile networks

D. Surging increase of MBB data traffic

ANSWER: A B D

Explanation:

The major 5G-era challenges represented here are the explosive increase of connected devices, ultra-low latency for communication between vehicles, and the surging increase of MBB data traffic. 5G is designed to support massive machine-type communications, meaning that networks must accommodate very large numbers of simultaneously connected IoT devices while maintaining efficient signaling, access control, coverage, and resource utilization. This growth is a fundamental capacity and scalability challenge for operators.

Vehicle communications are an important ultra-reliable low-latency communication use case. Safety-related vehicle-to-vehicle and vehicle-to-infrastructure services depend on communications with very short delay and highly dependable delivery, requiring improvements across the radio interface, transport network, edge deployment, and service architecture. At the same time, enhanced mobile broadband produces sharply growing traffic volumes due to high-definition video, cloud applications, immersive services, and higher per-user data rates. Networks therefore need substantially greater spectrum efficiency, radio capacity, backhaul capability, and automated operations. These three pressures align with the broad 5G service requirements identified by the ITU and reflected in Huawei's 5G vision. See ITU-R M.2083 and Huawei 5G.

QUESTION NO: 2

Supplementary Uplink (SUL) in 5G NR is mainly used to improve which of the following? -SC

A. Uplink coverage

B. Downlink carrier bandwidth

C. Core-network processing capacity

D. Subscriber authentication security

ANSWER: A

Explanation:

Uplink coverage is correct. SUL allows a UE to use an additional uplink carrier, often in a lower frequency band, together with a primary NR carrier. Lower-frequency uplink transmission can provide better propagation and improve uplink coverage, particularly when downlink is deployed on a higher-frequency carrier.

SUL is not a mechanism for increasing downlink bandwidth or replacing beamforming. It is a supplementary uplink capability designed to address uplink coverage imbalance in certain NR deployments. SUL operation is described in 3GPP TS 38.300.

QUESTION NO: 3

Compared with 4G networks, which of the following services can be better supported by 5G that supports higher rates? (Multiple choice, 10 points)

A. Virtual Reality VR

B. Internet of Vehicles

C. Augmented Reality AR

D. 4K and 8K HD video

ANSWER: A C D

Explanation:

Virtual Reality VR, **Augmented Reality AR**, and **4K and 8K HD video** are services that benefit directly from the substantially higher throughput offered by 5G. Immersive VR applications must deliver high-resolution stereoscopic video and rapidly changing scene data, making high downlink capacity essential to preserve image quality and user immersion. AR similarly benefits from high-rate delivery of visual assets, overlays, and cloud-rendered media to a mobile device. Ultra-high-definition video, especially 4K and 8K streams, requires considerably greater bandwidth than conventional video; higher 5G data rates enable smoother streaming, improved video quality, and support for more demanding multimedia experiences.

These service types align with the enhanced mobile broadband usage scenario defined for 5G, which targets greatly improved peak data rates, user-experienced data rates, and traffic capacity. The ITU's IMT-2020 vision identifies enhanced mobile broadband as a core 5G capability supporting demanding multimedia and immersive services. Huawei also describes 5G's high-bandwidth capabilities as an enabler for UHD video and immersive media applications. See the ITU-R IMT-2020 framework and Huawei's 5G industry overview.

QUESTION NO: 4

Which of the following are advantages of accessing 5G at home?

A. rapid deployment and go to market

B. optical fiber-class rate

C. higher reliability than optical fiber

D. flexible deployment

ANSWER: A B D

Explanation:

"rapid deployment and go to market," "optical fiber-class rate," and "flexible deployment" are advantages of 5G home access, commonly delivered through 5G Fixed Wireless Access (FWA). FWA uses the mobile network's radio interface to provide broadband to a home through a customer-premises device, reducing the need to install a dedicated physical access line to every residence. This supports faster service rollout and enables operators to reach areas where laying last-mile fiber would take substantial time or civil-engineering work.

5G radio technology is designed to provide enhanced mobile broadband capacity and high throughput. With appropriate spectrum resources, radio conditions, backhaul, and network dimensioning, a 5G home-access service can deliver user experience and data rates comparable to fiber broadband for many household applications, including ultra-high-definition video, cloud services, and online gaming. Its wireless last mile also makes deployment flexible: coverage can be extended and customers can be provisioned without requiring a separate fixed line for each installation. Huawei describes 5G FWA as a way to bring gigabit connectivity to homes, while the ITU identifies enhanced mobile broadband as a core 5G capability. See Huawei: 5G Brings Gigabit to Every Home and ITU-R M.2083 IMT-2020 vision.

QUESTION NO: 5

Which of the following RRC states allows a 5G UE to send and receive user-plane data? -SC

A. RRC_IDLE

B. RRC_INACTIVE

C. RRC_CONNECTED

D. RRC_DETACHED

ANSWER: C

Explanation:

RRC_CONNECTED is correct. In this state, the UE has an established RRC connection with the gNB and can be configured with radio bearers for uplink and downlink user-plane transmission. The network can also perform scheduling, mobility management, and radio-resource configuration for the UE.

In RRC_IDLE, the UE has no RRC connection and relies on cell selection or reselection. RRC_INACTIVE preserves part of the UE context to reduce resume delay, but it does not provide the fully connected user-plane state represented by RRC_CONNECTED. The NR RRC state model is specified in 3GPP TS 38.331.

QUESTION NO: 6

Which of the following are commercial product in the 5G terminal industry

A. vehicle-mounted mobile module .

B. mobile handheld

C. mobile MiFi hotspot device

D. home cpe gateway

ANSWER: A B C D

Explanation:

Commercial 5G terminals encompass a broad range of user equipment designed for different connectivity scenarios. **vehicle-mounted mobile module .** is a commercial terminal product because automotive-grade 5G modules provide cellular connectivity for connected vehicles, including telematics, navigation, infotainment, and vehicle-to-cloud services. **mobile handheld** is also a major terminal category: 5G smartphones and similar handheld devices give individual users mobile broadband access through the 5G radio network.

mobile MiFi hotspot device is a commercial 5G terminal as well. A MiFi device uses a 5G cellular connection as its WAN access and shares that connection locally through Wi-Fi, supporting portable broadband for multiple client devices. **home cpe gateway** is another established commercial 5G terminal category. A 5G customer-premises-equipment gateway provides fixed-wireless access by terminating the 5G connection at a home or business location and distributing connectivity to local wired and wireless devices. Huawei identifies 5G as supporting diverse consumer and industry connection scenarios, while 3GPP specifications define the radio interface framework used by such 5G user equipment. See Huawei 5G and 3GPP 5G System Overview.

QUESTION NO: 7

Which of following are advantages of accessing 5G at ? _MC

A. Higher reliability than optical fibers

B. Flexible deployment

C. optical fiber-class rate

D. Rapid deployment and go-to-market

ANSWER: B C D

Explanation:

Flexible deployment, optical fiber-class rate, and rapid deployment and go-to-market are key advantages associated with 5G wireless access, particularly where fixed broadband access is difficult, slow, or costly to build. Because the last-mile connection is radio-based, operators can provide connectivity without waiting for civil works and physical fiber installation at every customer location. This lets coverage and capacity be extended or adjusted comparatively quickly as demand changes, which is the practical meaning of flexible deployment. 5G is also designed to deliver enhanced mobile broadband with very high throughput, enabling user experiences that can approach those traditionally associated with fiber broadband in appropriate spectrum, radio, and backhaul conditions. The combination of radio access and a standardized 5G architecture supports faster service introduction: customer premises equipment can be installed and activated while the network is expanded through wireless sites, reducing the time needed to make service commercially available. Huawei describes 5G's enhanced broadband capabilities and its role in supporting diverse access scenarios in its 5G network architecture overview. The ITU's IMT-2020 framework also identifies enhanced mobile broadband as a core 5G usage scenario, including very high data-rate capabilities: ITU-R M.2083.

QUESTION NO: 8

Which of the following 5G chipsets does not support 5G mode?

A. SC- Balong 5000

B. Exynos 5110

C. X55

D. X50

ANSWER: D

Explanation:

X50 is the intended answer because the Snapdragon X50 was Qualcomm's first-generation commercial 5G modem and was designed for 5G Non-Standalone operation. In an NSA deployment, the LTE/EPC network remains the control-plane anchor while 5G NR adds radio capacity. The X50 therefore cannot provide support for 5G Standalone mode, in which a device operates through 5G NR with a 5G Core rather than relying on LTE anchoring. This distinction is important in 5G chipset comparisons: a chipset may be described as a 5G modem because it supports NR access, while still lacking the protocol support needed for SA networking. Qualcomm's X50 product information identifies it as an early 5G NR modem platform, whereas Qualcomm's subsequent X55 documentation explicitly identifies support for both standalone and non-standalone 5G deployments. Thus, if "5G mode" in the question refers to the SA 5G mode—which is the technically meaningful interpretation needed to make this a single-choice question—X50 is the chipset that does not support it. See Qualcomm's Snapdragon X50 modem page and Snapdragon X55 modem-RF system page.

QUESTION NO: 9

Which of the following statements about 5G network slicing are correct? -MC

A. Different slices can provide different service characteristics.

B. Multiple slices can share the same physical infrastructure.

C. A UE can be served by more than one slice.

D. Network slicing applies only to the 5G radio access network.

ANSWER: A B C

Explanation:

A network slice is a logical network that provides specific capabilities and characteristics for a particular service or customer group. Multiple network slices can be created on shared physical infrastructure, while maintaining differentiated service characteristics such as latency, throughput, reliability, security, and isolation.

A UE can be associated with more than one slice, subject to subscription and network selection policies. Network slicing is not limited to the radio access network; it is an end-to-end 5G system capability that can involve RAN, transport, and core-network resources. 3GPP defines network slicing concepts and slice selection procedures in 3GPP TS 23.501.

QUESTION NO: 10

In the 3GPP R15 protocol, which of the following is 5G mmWave? SC

A. Spectrum above 3GHz

B. Spectrum above 20Ghz.

C. Spectrum above 10Ghz

D. Spectrum above 5GHz

ANSWER: B

Explanation:

Spectrum above 20Ghz. is the intended correct choice because 5G millimeter-wave deployments operate in the high-frequency range represented by 3GPP NR Frequency Range 2 (FR2). In 3GPP Release 15, the initial standardized FR2 operating range extends from 24.25 GHz to 52.6 GHz. Therefore, an answer describing spectrum above 20 GHz correctly identifies the high-band region in which Release 15 mmWave NR spectrum begins, even though the formal lower edge of the Release 15 FR2 range is 24.25 GHz rather than exactly 20 GHz.

Millimeter-wave spectrum enables the very wide radio channels needed for extremely high 5G throughput and capacity. Its shorter wavelengths also make large antenna arrays and beamforming central to coverage and link-budget performance. This high-band spectrum is distinguished from NR Frequency Range 1, which covers lower frequencies and is not generally referred to as 5G mmWave. The 3GPP specification defining NR frequency bands and frequency ranges identifies FR2 as the range containing the relevant 24.25–52.6 GHz Release 15 bands. See 3GPP TS 38.104 specifications and the 3GPP 5G system overview.

QUESTION NO: 11

What are the characteristics of smart healthcare? (Multiple choice, 2 points)

A. Mobility

B. Remote

C. Intelligent

D. low cost

ANSWER: A B C

Explanation:

Smart healthcare is characterized by **Mobility**, **Remote**, and **Intelligent** capabilities. Mobility enables healthcare services, health-data access, and patient monitoring through mobile terminals and wireless connectivity, allowing care to extend beyond fixed clinical locations. Remote capability supports remote consultation, diagnosis support, follow-up, monitoring, and collaboration between patients and medical professionals across geographical distances. Intelligent capability applies technologies such as artificial intelligence, big-data analytics, cloud computing, and connected medical devices to improve clinical decision support, operational efficiency, personalized care, and health management. Together, these characteristics are central to 5G-enabled healthcare scenarios because high bandwidth, low latency, and broad connectivity make it practical to connect people, medical equipment, and healthcare information systems in real time. Huawei describes 5G smart healthcare as including remote medical services and intelligent applications enabled by 5G connectivity, while the World Health Organization recognizes digital health technologies as tools that support delivery and management of health services. Huawei Healthcare and WHO Digital Health provide further context on these capabilities.

QUESTION NO: 12

The gain of Massive MIMO includes which of the following options? (Multiple choice, 2 points)

A. Array Gain

B. Beamforming Gain

C. Multiplexing Gain

D. Diversity Gain

ANSWER: A B C D

Explanation:

Massive MIMO derives its performance benefits from using a large antenna array together with channel-aware spatial processing. **Array Gain** results from coherently combining signals across many antenna elements, increasing the effective received or transmitted signal power and thereby supporting improved coverage. **Beamforming Gain** is achieved when antenna weights steer and focus energy toward a particular user or spatial direction, improving desired-signal quality and reducing unnecessary radiation outside the intended direction. **Multiplexing Gain** comes from spatially separating suitable users or multiple layers, allowing several independent data streams to be served on the same time-frequency resources and increasing spectral efficiency and cell throughput. **Diversity Gain** uses multiple independently fading spatial paths or antenna observations to make communication more robust against fading, improving transmission reliability. These gains are complementary: array and beamforming processing improve link budget, spatial multiplexing raises capacity, and diversity strengthens reliability. The IMT-2020 framework identifies enhanced mobile broadband capacity and spectral efficiency as key capabilities enabled by advanced antenna techniques, while 3GPP NR specifications define the multi-antenna transmission procedures used to realize such spatial processing. See ITU-R M.2083 and 3GPP TS 38.214.

QUESTION NO: 13

In the following description, which of the following are suitable for NSA networking? (Multiple choice, 2 points)

A. Ability to support new services such as uRLLC

B. Because the agreement was frozen at the end of 2017, 5G can be deployed earlier

C. Less investment in the initial stage of 5G deployment

D. 5G base stations need continuous coverage

ANSWER: B C

Explanation:

“Because the agreement was frozen at the end of 2017, 5G can be deployed earlier” is correct because the initial 5G NR Non-Standalone specifications were completed in December 2017 as part of the accelerated Release 15 work. This gave operators a standardized migration path for introducing NR radio access while using an existing LTE network as the anchor, enabling commercial 5G rollout before the full Standalone architecture was mature. 3GPP records this milestone in its announcement of completion of the first 5G NR specification: 3GPP: 5G NR Non-Standalone specification.

“Less investment in the initial stage of 5G deployment” is also correct. NSA deployment reuses important existing LTE assets, including LTE coverage, the EPC core network, control-plane anchoring, and in many cases established transmission and operational capabilities. An operator can therefore add NR cells and capacity in targeted areas rather than immediately building a complete 5G core and nationwide standalone coverage. This reduces initial capital expenditure and deployment risk while allowing the operator to offer enhanced mobile broadband services early. The 3GPP Release 15 overview provides the standards context for this phased 5G introduction: 3GPP Release 15.

QUESTION NO: 14

Which of the following advantages are experienced by cloud game user?

A. no need to buy expensive hardware

B. game playing anytime withing waiting free of installation, upgrade or maintenance.

C. cloud archiving available anytime allowing seamless switchover between different devices

D. gaming running on the cloud, which facilitates copyright protection

ANSWER: A B C

Explanation:

Cloud gaming shifts the computationally intensive work of rendering and running a game from the player's local device to remote cloud infrastructure. Consequently, *no need to buy expensive hardware* is a direct user benefit: a comparatively modest device with a suitable display, input method, and stable network connection can receive the streamed game experience. The Huawei 5G vision emphasizes that high bandwidth and low latency enable interactive, cloud-based experiences such as cloud gaming; see Huawei 5G.

The benefit described as *game playing anytime withing waiting free of installation, upgrade or maintenance.* reflects the cloud service model: games can be accessed on demand, while the service platform centrally manages game deployment, patches, and much of the operational maintenance. This reduces the user's download, installation, and update burden. Likewise, *cloud archiving available anytime allowing seamless switchover between different devices* is a user-facing advantage because cloud-hosted game data and progress can be associated with the user account rather than one specific terminal. This supports continuation of a session or saved progress across compatible devices. Huawei Cloud describes cloud infrastructure as providing scalable, on-demand computing resources that underpin such centralized service delivery; see Huawei Cloud.

QUESTION NO: 15

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:

Huawei Multi-Stream Aggregation (MSA) is an LTE–NR coordination capability intended for non-standalone dual-connectivity deployments. It allows LTE and NR radio resources to be coordinated at the packet or bearer level so that traffic can be split, scheduled, and aggregated across the two access technologies. Consequently, it applies to the E-UTRAN NR Dual Connectivity deployment family represented by **Option 3**, **Option 3a**, and **Option 3x**. These architectures retain LTE as the master-node side of the dual-connectivity relationship while adding NR as the secondary-node side, with variations in how user-plane connectivity is anchored or routed through the EPC. That common LTE-master/NR-secondary arrangement provides the interworking foundation needed for MSA to coordinate LTE and 5G radio transmission.

In practical network evolution, these Option 3 variants enable operators to introduce NR coverage and capacity while continuing to use the LTE/EPC core-network foundation. MSA can then improve the use of the available LTE and NR carriers by aggregating their transmission opportunities rather than treating the access networks as wholly independent paths. The 3GPP description of E-UTRA–NR dual connectivity and the recognized deployment-option framework are available in 3GPP TS 37.340 and the GSMA 5G Implementation Guidelines.

QUESTION NO: 16

The technology that realizes the communication between vehicles and people is ( ). (single-choice question, 10 points)

A. V2P

B. V2V

C. V2N

D. V2I

ANSWER: A

Explanation:

V2P is the correct term because it means *Vehicle-to-Pedestrian* communication: an intelligent vehicle exchanges safety-related information with people, commonly pedestrians, cyclists, or other vulnerable road users. This communication can use mobile devices, such as smartphones or wearables, to provide warnings about potential collision risks when a vehicle and person are approaching the same location. In the broader vehicle-to-everything framework, V2P supports cooperative road safety by allowing the vehicle to account for road users who are outside the vehicle and may be difficult to detect consistently with onboard sensors alone. Typical use cases include warning a driver or an autonomous-driving system that a pedestrian is entering a crossing, and warning the pedestrian through their device of an approaching vehicle. Huawei's 5G and connected-vehicle material describes V2X as including communications among vehicles, roadside infrastructure, networks, and pedestrians; V2P is specifically the vehicle–pedestrian component. The 3GPP V2X architecture likewise identifies pedestrian-related communication as a V2X use case. See 3GPP V2X and Huawei: 5G-V2X.

QUESTION NO: 17

What is the biggest difference between Cloud VR and traditional VR? (single-choice question, 2 points)

A. Image clarity

B. Image Perspective

C. Location of Image Processing and Rendering

D. The frame rate of the image

ANSWER: C

Explanation:

The correct answer is **Location of Image Processing and Rendering**. In traditional VR, the headset itself or a locally connected PC/console performs the computationally intensive graphics rendering. This requires substantial processing capability close to the user, increasing device cost, size, heat output, and power consumption. Cloud VR instead moves most rendering and image-processing workloads to cloud-based graphics servers. The rendered stereoscopic video is encoded and delivered to the VR terminal across a high-bandwidth, low-latency network, while the terminal sends user interactions and head-motion information back to the cloud. This architectural shift enables a lighter, more wireless terminal and allows demanding VR content to use centralized cloud compute resources rather than relying on powerful local hardware. To maintain a convincing immersive experience, Cloud VR depends strongly on network performance, particularly low end-to-end latency and sufficient bandwidth; 5G is therefore an important enabling access technology. Huawei describes Cloud VR as a service in which cloud computing and rendering capabilities provide high-quality VR experiences through network delivery. See Huawei's Cloud VR overview and the ITU's cloud-computing reference framework.

QUESTION NO: 18

5G can achieve reliable and controllable 5A ubiquitous communication between

humans, between humans and things, between things Other than "anytime" and

“Anywhere”. Which other three options are part of the 5G concept? –MC // 5A=

Anyone, Anytime, Anything, Anywhere ,Any-device

A. Anyone

B. Anyhow

C. Any device

D. Anything

ANSWER: A C D

Explanation:

The three required terms are **Anyone**, **Any device**, and **Anything**. The question itself defines the 5A concept as “Anyone, Anytime, Anything, Anywhere, Any-device.” Since “Anytime” and “Anywhere” have already been excluded in the wording, the remaining three elements are precisely these selections. Together, they express 5G’s ubiquitous-connectivity vision: communications should serve all people, connect diverse devices, and support interaction with a broad range of physical or digital things. This goes beyond conventional person-to-person mobile connectivity and supports communications among people, machines, sensors, vehicles, industrial equipment, and service platforms. In practice, the vision aligns with 5G’s capability to support enhanced mobile broadband, massive machine-type connectivity, and highly reliable low-latency services across many access scenarios. Huawei describes 5G as a foundation for connecting people and things and enabling digital transformation across industries. See Huawei’s 5G overview and the ITU’s IMT-2020/5G usage-scenario report for the wider 5G connectivity context.

QUESTION NO: 19

F-OFDM uses a fixed sub-carrier bandwidth of 15KHz, which can resist stronger interference. (True or False, 6 points)

A. True

B. False

ANSWER: B

Explanation:

False is correct because F-OFDM (filtered OFDM) is designed around flexible subband-based waveform configuration, rather than a universally fixed 15 kHz subcarrier spacing. A key characteristic of F-OFDM is that filtering is applied to individual subbands, which improves spectral localization and enables services with differing requirements to use appropriate numerologies. Subcarrier spacing is a numerology parameter: 15 kHz is an important baseline spacing in 5G NR, but it is not the only spacing applicable to 5G air-interface operation. NR numerology defines scalable subcarrier spacings derived from 15 kHz, supporting deployment and service needs such as latency, mobility, and frequency band characteristics. Interference robustness cannot therefore be attributed to a supposed fixed 15 kHz spacing. In the F-OFDM concept, improved coexistence and reduced out-of-band emissions are principally associated with subband filtering and flexible waveform configuration. The 3GPP NR physical-layer specification defines the scalable numerology framework in 3GPP TS 38.211. Additional 5G waveform and radio-access background is available from the 3GPP 5G System Overview.

QUESTION NO: 20

VR is achieved by obscuring the user's reality through related devices, bringing their senses into an independent and brand-new virtual space. (True or False, 2 points)

A. True

B. False

ANSWER: A

Explanation:

True is correct. Virtual reality uses devices such as head-mounted displays, lenses, motion tracking, audio equipment, and controllers to replace or substantially block a user's view and perception of the physical environment with a computer-generated immersive environment. By presenting stereoscopic visual content, spatial audio, and interaction feedback that responds to the user's movements, VR creates the perception of being present in a separate digital space. This is commonly described as immersion or presence: the user's senses are engaged by the virtual environment rather than primarily by their immediate real-world surroundings. The statement accurately captures this core distinction of VR from technologies that merely add digital elements on top of a real-world view. Huawei's 5G and cloud capabilities can support high-bandwidth, low-latency VR services, particularly cloud VR, where rendering and media delivery must maintain a responsive immersive experience. For background on VR's immersive, computer-generated environments, see Encyclopaedia Britannica: virtual reality. The role of low latency and high bandwidth in immersive 5G use cases is also covered by the ITU IMT-2020 vision recommendation.

QUESTION NO: 21

Which of the following services belongs to the uRLLC scenario application? (single-choice question, 10 points)

A. Telemedicine

B. HD Video

C. Smart meter reading

D. VR

ANSWER: A

Explanation:

Telemedicine belongs to the ultra-reliable low-latency communications (uRLLC) application scenario when it involves time-critical clinical interaction, such as remote diagnosis, remote control of medical equipment, or telesurgery. These services depend on network communications being delivered with extremely low end-to-end delay and very high reliability, because delayed, lost, or interrupted control and feedback information can affect patient safety and treatment outcomes. 5G defines uRLLC specifically to support mission-critical services requiring these characteristics. Huawei describes 5G as supporting differentiated service scenarios, including ultra-reliable and low-latency connections for vertical-industry applications. Remote healthcare is a representative use case because it can require immediate and dependable transmission of control commands, sensor data, and audiovisual feedback between medical professionals and equipment. This makes Telemedicine the best match for the uRLLC service category in the question. See Huawei's overview of 5G service scenarios at Huawei 5G Network and the ITU's IMT-2020 framework describing low-latency, high-reliability 5G capabilities at ITU-R M.2083.

QUESTION NO: 22

Which of the following statements about the advantages of Cloud RAN architecture is correct? (Multiple choice, 4 points)

A. Device resource pooling

B. Adapting to Diversified Businesses

C. Network Elasticity Expansion

D. Business on-demand deployment

ANSWER: A B C D

Explanation:

Cloud RAN centralizes and cloudifies baseband processing resources, allowing hardware and compute capacity to be shared across multiple cells and sites. Therefore, **Device resource pooling** is an inherent architectural benefit: pooled resources can be allocated more efficiently than isolated, site-by-site baseband units. This cloud-native resource model also enables **Network Elasticity Expansion**, because processing capacity can be scaled as traffic demand, coverage requirements, or new radio deployments grow.

Adapting to Diversified Businesses is also a valid advantage. A Cloud RAN platform supports flexible service enablement and coordinated radio capabilities needed by varied 5G scenarios, including consumer broadband, enterprise connectivity, and industry applications. In addition, the virtualized and centralized architecture supports **Business on-demand deployment**: network functions and capacity can be introduced, adjusted, and managed through software-oriented operations rather than relying solely on fixed, dedicated site hardware. These capabilities are consistent with Huawei's Cloud RAN positioning around cloudification, pooling, flexible deployment, and evolution of radio access networks. See Huawei's Cloud RAN solution overview and its Cloud RAN architecture publication.

QUESTION NO: 23

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

A. 1/50

B. 1/10

C. 1/100

D. 1/20

ANSWER: B

Explanation:

The correct ratio is **1/10**. The IMT-2020 vision identifies much lower latency as a fundamental 5G capability, particularly for applications requiring highly responsive communications. Its user-plane latency target is 1 ms in the demanding use case, compared with the commonly cited 4G latency benchmark of about 10 ms. Dividing the 5G target delay, 1 ms, by the 4G reference delay, 10 ms, gives 1/10. Therefore, the vision describes 5G service delay as one tenth of the corresponding 4G service delay. This order-of-magnitude latency improvement supports services such as industrial automation, connected transport, and other time-sensitive communications, where reducing the time needed to transfer user-plane data directly improves responsiveness. The IMT-2020 framework is defined by the ITU-R recommendation on the overall objectives and capabilities of future IMT systems; its capability diagram and accompanying material identify low latency as a key enhancement. Huawei's 5G materials likewise describe a 1 ms air-interface latency objective for 5G scenarios. See ITU-R M.2083 and Huawei: 5G Network 2020.

QUESTION NO: 24

(Judgment) Vertical industry applications have clear requirements for business isolation. Based on slicing technology, business isolation requirements can be better met.

A. True

B. False

ANSWER: A

Explanation:

True is correct. Vertical industries, such as manufacturing, transportation, energy, and public safety, commonly require their communications to be logically separated from other services. They may also need differentiated service-level objectives for latency, reliability, throughput, availability, security, and operational management. 5G network slicing addresses these needs by creating logically isolated end-to-end network capabilities over shared physical infrastructure. A slice can be tailored to the requirements of a particular enterprise service and can use dedicated or appropriately isolated radio, transport, core-network, and management resources. This enables operators to support multiple industry customers and service types while

maintaining service separation and helping assure the agreed performance characteristics. Huawei's 5G materials describe network slicing as a key capability for providing differentiated, customized networks for vertical industries, including isolation between services. The 3GPP system architecture also defines network slicing as support for multiple logical networks on a common physical infrastructure, with each slice serving specific service requirements. See 3GPP 5G System Overview and Huawei: 5G Network Slicing.

QUESTION NO: 25

WHICH OF THE FOLOLOWING ARE THE KEY FACTORY FOR OPERATORS TO SELECT NSA OR SA NETWORKING? - MC

A. Inventory network devices

B. Return on Investment

C. Terminals

D. Technology maturity

ANSWER: A B C D

Explanation:

Inventory network devices, Return on Investment, Terminals, and Technology maturity are all key considerations when an operator chooses between NSA and SA deployment. An operator's inventory of network devices determines how effectively its existing LTE radio access network, transport, and EPC assets can be reused. NSA commonly provides a practical migration path where established LTE coverage and equipment can support early 5G service introduction, while SA requires deployment and integration of the 5G Core and a fully independent 5G radio architecture. Return on Investment is central because the deployment choice affects capital expenditure, operating cost, rollout speed, revenue timing, and the ability to monetize advanced 5G capabilities. Terminals are equally important: the availability, installed base, cost, and feature support of NSA- and SA-capable devices directly affect whether subscribers can use the selected network mode. Technology maturity includes the readiness and interoperability of 5G Core functions, devices, chipsets, network equipment, operations tools, and service capabilities. As these components mature, SA becomes increasingly suitable for native 5G capabilities such as network slicing, low-latency services, and broader service-based architecture support. 3GPP defines both the 5G system architecture and the functional basis for these deployment decisions in its 5G System Overview and TS 23.501 specification listing.

QUESTION NO: 26

The 5G education private network is implemented with 5G slicing technology. (True or False, 2 points)

A. True

B. False

ANSWER: A

Explanation:

True is correct. In the 5G education-private-network scenario, network slicing is used to create a logically isolated network tailored to the requirements of education services while using the operator's common 5G infrastructure. A slice can be designed with the performance characteristics needed for services such as interactive classrooms, high-definition or virtual-reality teaching, campus security video, and connected teaching equipment. This allows the education customer to receive differentiated quality of service, traffic isolation, security controls, and service-level management without requiring a completely separate physical mobile network for every campus.

Network slicing is a core 5G system capability. The 5G architecture defines network-slice concepts that enable an operator to provide separate logical networks, with the functions and characteristics required by particular customer or service scenarios. In practice, an education private network can combine the slice with other 5G private-network capabilities, including local edge processing and dedicated service management, but slicing supplies the logical private-network

foundation described in the question. The 3GPP 5G system architecture specification covers network-slice selection and support for network slices: 3GPP TS 23.501 archive. Huawei also describes 5G private-network offerings and industry-oriented services at Huawei 5G Private Network.

QUESTION NO: 27

What is the official name defined by the ITU for 5G networks? (single-choice question, 2 points)

A. IMT-2020

B. IMT2000

C. UMTS

D. NFV

ANSWER: A

Explanation:

IMT-2020 is the designation adopted by the ITU Radiocommunication Sector (ITU-R) for the mobile system envisaged for 2020 and beyond, commonly called 5G. ITU-R uses the International Mobile Telecommunications (IMT) family of names to define successive generations of mobile telecommunications systems. In this terminology, IMT-2000 denotes the third-generation family, while IMT-Advanced is associated with fourth-generation requirements; IMT-2020 therefore identifies the framework and vision for fifth-generation mobile networks.

The designation is important because it is not merely a marketing term. ITU-R Recommendation M.2083 establishes the IMT Vision for 2020 and beyond, defining the usage scenarios, capabilities, and development direction associated with 5G, including enhanced mobile broadband, ultra-reliable and low-latency communications, and massive machine-type communications. The ITU's IMT-2020 page also identifies IMT-2020 as the global 5G standardization framework. Consequently, the formal spelling includes a hyphen: **IMT-2020**.

References: ITU-R Recommendation M.2083; ITU-R IMT-2020.

QUESTION NO: 28

Which is the 5G commercial business launched by Verizon on October 1, 2018? (single-choice question, 6 points)

A. Connected drones

B. Connected Vehicles Autonomous Driving

C. FWA

D. AR

ANSWER: C

Explanation:

FWA is correct. On October 1, 2018, Verizon commercially introduced its 5G Home service in selected U.S. markets. This was a fixed wireless access offering: Verizon used its 5G radio network to deliver last-mile broadband connectivity to a fixed customer location, rather than relying on a traditional wired connection all the way to the home. The service provided home internet access and was positioned as an early commercial application of 5G, including broadband connectivity and associated home entertainment services. Verizon described the launch as the world's first commercial 5G service and identified the initial product as 5G Home. In 5G terminology, this business model is commonly called fixed wireless access, or FWA, because the wireless link replaces the fixed access portion of the broadband network while service is delivered to a stationary premises. Verizon's launch announcement documents the October 1, 2018 availability and its 5G Home branding: Verizon launch announcement. Verizon also continues to describe its residential fixed-wireless broadband offer through its 5G Home Internet page.

QUESTION NO: 29

With control and user plane separation (CUPS) on the core network, the user can be moved closer to users to reduce transmission delay.

A. True

B. False

ANSWER: A

Explanation:

True is correct. Control and user plane separation decouples signaling and session-control functions from the functions that forward subscribers' actual application traffic. This architecture allows the user-plane function to be deployed in a location nearer to the radio access network and service consumers, commonly at a regional or edge site, while control-plane functions can remain centralized. As a result, traffic that needs local processing does not have to traverse the transport network to a distant centralized gateway and return. The shorter data path reduces transport delay and supports low-latency services such as industrial control, connected vehicles, cloud gaming, and edge computing.

In the 5G core, this principle is implemented through the separation of control-plane network functions and the User Plane Function (UPF). The Session Management Function selects and controls a UPF, and the UPF can provide local breakout so that suitable traffic reaches a nearby data network directly. Huawei describes 5G core as supporting distributed deployment and edge computing, while 3GPP specifies UPF selection and local-routing capabilities in the 5G system architecture. See 3GPP TS 23.501 specifications and Huawei 5G Core.

QUESTION NO: 30

Which of the following are pain points relating to PC gaming experience? _MC

A. High software price

B. Piracy

C. No anywhere anytime access

D. Low hardware investment

ANSWER: A B C

Explanation:

High software price, piracy, and no anywhere anytime access are recognized pain points in the traditional PC-gaming model. High software price increases the total cost of participation because players commonly must purchase individual games and, in some cases, additional licensed content or upgrades. This can limit the range of games a user can afford to experience. Piracy is also a significant ecosystem pain point: it affects the sustainable distribution and monetization of game content, which is necessary for publishers and developers to continue producing and maintaining games. No anywhere anytime access reflects the dependence of conventional PC gaming on a suitably equipped local computer and the user's physical location. A player cannot simply move to another device or location and expect the same game environment and performance to be immediately available. These limitations are central motivations for cloud-gaming architectures, which aim to centralize rendering resources and stream interactive game content over a network, improving device flexibility and accessibility. Huawei identifies cloud gaming as a model that uses cloud resources and network capability to deliver game experiences across terminals; see Huawei Cloud Gaming and Huawei's technology and industry insights.

QUESTION NO: 31

Which of the following statements about 5G NR scalable numerology are correct? -MC

A. 15 kHz is the reference subcarrier spacing in NR numerology.

B. 30 kHz subcarrier spacing is supported by NR.

C. Larger subcarrier spacing can reduce slot duration.

D. 240 kHz subcarrier spacing has a normal slot duration of 1 ms.

ANSWER: A B C

Explanation:

5G NR supports scalable subcarrier spacing based on a 15 kHz reference. The standard subcarrier spacings include 15 kHz, 30 kHz, 60 kHz, 120 kHz, and 240 kHz. A larger subcarrier spacing produces a shorter OFDM symbol duration and a shorter slot duration, which can support lower-latency transmission opportunities.

Higher subcarrier spacing is particularly useful in high-frequency spectrum where phase-noise effects are more significant. However, a 240 kHz subcarrier spacing does not create a 1 ms slot; as the numerology index increases, the normal slot duration becomes shorter. NR physical-layer parameters are specified in 3GPP TS 38.211.

QUESTION NO: 32

Which of the following statements about 5G CU-DU architecture are correct? -MC

A. The F1 interface connects the CU and DU.

B. The CU can be deployed more centrally than the DU.

C. The CU can be split into CU-CP and CU-UP.

D. The NG interface connects the CU and DU.

ANSWER: A B C

Explanation:

In the gNB split architecture, the Centralized Unit and Distributed Unit are logical components of the same gNB. The CU can be deployed at a more centralized site, while the DU is commonly deployed closer to the radio unit to satisfy radio-processing and latency requirements. The F1 interface connects the CU and DU.

The CU may be further split into a CU-CP and one or more CU-UPs. This separation supports flexible deployment and scaling of control-plane and user-plane resources. The NG interface connects the gNB to the 5G Core, not the CU to the DU. The NG-RAN architecture is described in 3GPP TS 38.401.

QUESTION NO: 33

Which of the following is the most advanced stage of Internet of Vehicles development? (single-choice question, 2 points)

A. Manual driving

B. Assisted human driving

C. Conditional autonomous driving

D. Fully automated driving

ANSWER: D

Explanation:

Fully automated driving is the most advanced stage among the listed Internet of Vehicles development stages. It corresponds to the highest level of driving automation, in which the automated driving system performs the complete

dynamic driving task within its defined operational design domain. This includes controlling steering, acceleration, braking, and monitoring the driving environment, rather than requiring a human driver to continuously supervise the system or take over under normal operating conditions. In the context of the Internet of Vehicles, this capability is supported by high-performance onboard sensing and computing together with reliable connectivity for services such as real-time traffic awareness, high-definition map updates, vehicle-to-everything communication, and coordinated transport. Huawei's intelligent automotive and 5G-oriented materials describe connected vehicles as a foundation for progressively higher autonomy and intelligent transportation. The internationally used SAE automation taxonomy likewise identifies Level 5 as full driving automation, where the automated system can drive under all roadway and environmental conditions manageable by a human driver. See SAE's J3016 automation-level overview and Huawei ICT Insights on intelligent automotive.

QUESTION NO: 34

According to the current trend, which statements about 5G commercial use are correct? (Multiple choice, 8 points)

A. The commercial use of uRLLC will put forward higher requirements for network architecture transformation

B. Because of the strong demand for the Internet of Things, mMTC will be commercialized earlier than eMBB

C. NB-IoT has just started commercial use, so the commercial use of mMTC will be later than eMBB

D. WTTX and eMBB will be given priority for commercial use

ANSWER: A C D

Explanation:

The commercial use of uRLLC will put forward higher requirements for network architecture transformation because ultra-reliable, low-latency services depend on end-to-end capability rather than radio access alone. Practical support requires coordinated improvements such as distributed deployment, edge computing, network slicing, automated operations, and service assurance so that latency and reliability commitments can be maintained across the full network path. Huawei describes 5G as supporting differentiated services through capabilities including network slicing and edge-cloud collaboration: Huawei 5G Network Slicing.

NB-IoT has just started commercial use, so the commercial use of mMTC will be later than eMBB reflects the phased evolution of 5G service scenarios. Large-scale mMTC commercialization requires a mature device ecosystem, broad coverage, low-cost modules, and operational models suited to massive connections. In contrast, consumer mobile broadband has immediate demand and can use the early 5G radio and core-network rollout.

WTTX and eMBB will be given priority for commercial use because they provide early 5G deployment opportunities with recognizable broadband demand, including enhanced mobile data and fixed-wireless access. Huawei identifies enhanced mobile broadband as a foundational 5G use case: Huawei: What Is 5G?.

QUESTION NO: 35

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:

The correct term is **C-V2X**, short for Cellular Vehicle-to-Everything. It refers to vehicle communication technology that uses cellular-network standards and spectrum to enable communications between a vehicle and other entities, including other vehicles, roadside infrastructure, pedestrians, and networks. C-V2X includes direct communications for time-sensitive road-

safety and cooperative-driving use cases, as well as cellular-network communications that can provide broader-area connectivity and cloud-based services. In 5G contexts, C-V2X evolves to support more capable connected and intelligent-vehicle applications through 5G V2X capabilities, including improved capacity, reliability, and latency characteristics where required.

This terminology specifically identifies an Internet of Vehicles solution based on cellular technology. The 3GPP specification framework defines V2X services and the related communication requirements, while the 5G Automotive Association describes C-V2X as cellular technology enabling vehicle-to-vehicle, vehicle-to-infrastructure, vehicle-to-pedestrian, and vehicle-to-network communication. See 3GPP V2X and 5G Automotive Association: C-V2X.

QUESTION NO: 36

Which of the following is the recommended position for deploying the user data processing module for automated driving? _SC

A. Edge cloud

B. Regional Cloud

C. Core cloud

D. Access network

ANSWER: A

Explanation:

Edge cloud is the recommended deployment position because automated-driving services depend on processing data extremely close to the vehicle and radio access point. Vehicles continuously generate and consume time-sensitive information, including sensor data, cooperative-awareness messages, high-definition map updates, and roadside perception data. Locating the user data processing module in an edge cloud minimizes transport distance and reduces end-to-end latency, which helps the service provide timely driving assistance and cooperative vehicle–road decisions.

Edge deployment also keeps high-volume local traffic near its source instead of sending all data to a distant centralized site. This improves response consistency, reduces backhaul usage, and supports localized service continuity as vehicles move through coverage areas. These characteristics align with the Multi-access Edge Computing architecture, which places applications in close proximity to users and network access, and with the 5G system's support for local data-network access and low-latency services. See the ETSI MEC framework specification and 3GPP TS 23.501 for the underlying edge-computing and 5G architecture principles.