

Huawei Certified Network Associate - Cloud Solutions Architect

Huawei H31-511

Version Demo

Total Demo Questions: 25

Total Premium Questions: 256

Buy Premium PDF

<https://passqueen.com>

support@passqueen.com

Topic Break Down

Topic	No. of Questions
Topic 1, Cloud Computing Basics	89
Topic 2, Cloud Data Center Basics	101
Topic 3, Huawei Cloud Service Solutions	58
Topic 4, Huawei Cloud Service Solution Design	5
Topic 5, Huawei Cloud Service Solution Deployment	2
Topic 6, Huawei Cloud Service Solution O&M	1
Total	256

QUESTION NO: 1

What are the benefits of Digital Library? (Multiple Choice)

- A. High-cost duplication and distribution
- B. Enabling users to access knowledge at any time, in any place, and in different way
- C. Protecting precious documents such as ancient books and rare books
- D. Helping locate desired resources more quickly and accurately, thus enhancing learning efficiency

ANSWER: B C D

Explanation:

Digital libraries make knowledge resources available beyond the physical limits and opening hours of a traditional library. “Enabling users to access knowledge at any time, in any place, and in different way” is therefore a core benefit: digitized content can be accessed through networked devices and can support varied formats and accessibility methods. This improves the reach of educational and cultural resources for remote users as well as on-site users.

“Protecting precious documents such as ancient books and rare books” is also a key benefit. Providing digital surrogates reduces repeated handling of fragile originals while preserving a usable representation for research, education, and long-term cultural access. Digitization and digital preservation are widely recognized as important mechanisms for safeguarding documentary heritage.

“Helping locate desired resources more quickly and accurately, thus enhancing learning efficiency” is correct because digital-library platforms use searchable metadata, full-text retrieval, categorization, and indexes. These capabilities help users discover relevant materials efficiently and support more focused learning and research. The International Federation of Library Associations describes digital libraries as collections that provide coherent access to managed digital content, while UNESCO highlights digitization as a means of improving access to and preservation of documentary heritage. See [IFLA digital-library guidance](#) and [UNESCO digital preservation resources](#).

QUESTION NO: 2

Three Stages of Digital Transformation in the Automotive Industry are Building Digital Platforms Building Digital Ecosystems Building Digital Business Models

- A. TRUE
- B. FALSE

ANSWER: A

Explanation:

TRUE is correct. In Huawei’s automotive-industry digital-transformation approach, transformation progresses from establishing a shared digital platform, through connecting participants in a broader digital ecosystem, to creating sustainable digital business models. The platform stage provides the underlying cloud, connectivity, data, and application capabilities required to integrate enterprise operations and vehicle-related data. Once these common capabilities are in place, automotive companies can collaborate more effectively with suppliers, dealers, service partners, energy providers, and customers in an ecosystem built around shared digital services and data exchange. The final stage uses those connected capabilities and ecosystem relationships to support new value creation, such as intelligent connected-vehicle services, software-enabled features, mobility services, and data-driven operational offerings. This sequence reflects the practical dependency between the stages: business-model innovation becomes scalable when it is supported by digital platforms and ecosystem collaboration rather than isolated systems. Huawei identifies digitalization and intelligent connectivity as key enablers for automotive-industry innovation and provides industry solutions spanning digital infrastructure, cloud, connectivity, and intelligent vehicle capabilities. See Huawei’s [automotive industry insights](#) and [automotive solutions overview](#).

QUESTION NO: 3

Medical and health management services platform including Medical information sharing platform. Drug regulatory and Disease surveillance.

- A. TRUE
- B. FALSE

ANSWER: A

Explanation:

TRUE is correct because a medical and health management services platform in an industry-cloud healthcare architecture is intended to support coordinated public-health and healthcare-administration functions, not merely isolated clinical applications. A medical-information-sharing capability provides the foundation for authorized exchange and use of health information across participating healthcare organizations and management bodies. Drug-regulatory functions support oversight of medicines throughout relevant regulatory processes, while disease-surveillance functions collect and analyze health-event data so that public-health authorities can monitor trends and respond appropriately. These capabilities are complementary: information sharing supplies the governed data foundation, and drug regulation and disease surveillance apply that foundation to healthcare supervision and population-health management. This scope aligns with Huawei's industry solution approach, which combines cloud infrastructure, data sharing, and digital applications to help government and public-service organizations modernize management and service delivery. Huawei also identifies healthcare as an industry in which cloud, data, and intelligent technologies can support connected services and operational transformation. See Huawei's [Government solutions overview](#) and [healthcare industry insights](#) for the relevant industry-cloud context.

QUESTION NO: 4

Which of the following belongs to Automotive Cloud Transformation? (Multiple Choice)

- A. CAD/CAE Cloud
- B. SAP Cloud
- C. IoT
- D. Vehicle e-Commerce Cloud

ANSWER: A B C D

Explanation:

Automotive cloud transformation spans the full value chain rather than being limited to one business department. CAD/CAE Cloud supports research and development by providing elastic high-performance computing and centralized engineering-data resources for computer-aided design and simulation workloads. SAP Cloud supports enterprise-management modernization, including core business processes and integrated operational data. IoT is a foundational part of connected manufacturing and vehicle-related data collection: it enables equipment, production-line, and device connectivity so that telemetry can be collected and used by cloud applications. Vehicle e-Commerce Cloud supports the customer-facing and sales side of the automotive business, enabling online vehicle selection, ordering, marketing, and related digital services. Together, these areas represent the R&D, enterprise-management, manufacturing/connectivity, and marketing/sales dimensions commonly included in an automotive-industry cloud transformation. Huawei describes its automotive digitalization work as covering vehicle, enterprise, and ecosystem scenarios, while its cloud services provide the compute, data, and IoT capabilities needed for these industry workloads. See [Huawei Automotive industry insights](#) and [Huawei Cloud IoT](#).

QUESTION NO: 5

Which of the following security technologies is used to isolate networks of different levels?

- A. Network Gap

B. VPN Access

C. Anti-DDoS

D. Firewall

ANSWER: A

Explanation:

Network Gap is the correct answer because it provides security isolation between networks that belong to different protection levels or security zones. In industry-cloud and operational-technology environments, systems with different criticality levels should not be interconnected through ordinary, directly routable network paths. A network gap establishes a strong separation boundary—commonly implemented through physical separation or a dedicated isolation device—and permits information exchange only through tightly controlled, policy-approved mechanisms when such exchange is required. This approach reduces the attack surface and helps prevent threats or unauthorized access originating in a lower-trust network from reaching higher-trust production, control, or core-service networks. It is therefore appropriate where the primary objective is hierarchical network isolation rather than remote connectivity, volumetric attack mitigation, or general traffic filtering. Huawei's enterprise network-security approach emphasizes segmentation and isolation to protect critical assets and enforce trust boundaries; see [Huawei Campus Network Security](#). The same principle is reflected in industrial-control security guidance, which recommends separating enterprise and operational networks according to risk and criticality; see [NIST SP 800-82 Rev. 3](#).

QUESTION NO: 6

Which of the following descriptions about RAID 2.0 is incorrect?

A. RAID 2.0 divides disks into multiple contiguous storage space of a fixed size. Each storage space is called a chunk (CK).

B. Multiple CKs form a RAID group, that is, a chunk group

C. A CKG is divided into multiple small data blocks (extents)

D. Extents from same CKGs form LUNs

ANSWER: D

Explanation:

"Extents from same CKGs form LUNs

" is the incorrect description. In Huawei RAID 2.0, a LUN is not constructed by collecting extents only from one chunk group (CKG). Instead, RAID 2.0 virtualizes storage capacity and distributes a LUN's extents across multiple CKGs. This distributed layout is fundamental to the architecture: it spreads data and I/O over a broad set of disks and RAID resources rather than concentrating activity in a single chunk group. Consequently, the system can better balance workload, use available capacity more evenly, and reduce the performance impact associated with localized disk or RAID-group hotspots. The placement of extents across CKGs also supports RAID 2.0's virtualization and flexible expansion mechanisms. A statement saying that extents from the same CKG form LUNs reverses this intended cross-CKG distribution model and is therefore inaccurate. Huawei's storage documentation describes RAID 2.0 as a virtualization technology that organizes disk capacity into chunks, chunk groups, and extents for distributed data placement. See Huawei's [OceanStor documentation](#) and the [Huawei Enterprise Storage support portal](#) for RAID 2.0 architecture and terminology.

QUESTION NO: 7

Which of the following are characteristics of virtualization? (Multiple Choice)

A. Resource pooling

B. Isolation between virtual machines

C. Hardware resource sharing

D. Rapid provisioning of virtual machines

E. Each virtual machine must use a dedicated physical server

ANSWER: A B C D

Explanation:

Virtualization abstracts physical computing resources and presents them as logical resources that can be allocated to workloads. **Resource pooling** is correct because CPU, memory, storage, and network resources from physical servers can be consolidated and assigned to multiple virtual machines. **Isolation** is correct because each virtual machine runs in an independent execution environment, helping prevent one VM's operating system or application failure from directly affecting another VM.

Hardware resource sharing is also correct. Multiple VMs can share the same physical server through hypervisor scheduling and resource-control mechanisms. **Rapid provisioning** is a further virtualization benefit because templates, images, and automated management tools allow VMs to be created and deployed more quickly than installing a new physical server. Virtualization does not require every VM to have a dedicated physical server. Huawei FusionCompute provides virtualization capabilities for pooling and managing compute resources. See [Huawei FusionCompute Documentation](#).

QUESTION NO: 8

Cloud Computing can help manufacturing companies enhance process automation, leading to shorter time-to-market, cost reductions, and an increase in efficiency. In this model, the services and infrastructure are provided off-site, over the Internet.

A. TRUE

B. FALSE

ANSWER: A

Explanation:

TRUE is correct. Cloud computing provides on-demand access to shared, configurable computing resources and services through network connectivity, commonly the Internet. This delivery model enables manufacturers to use remotely hosted infrastructure, platforms, analytics, and industrial applications without having to deploy and operate all of the underlying resources in their own facilities.

For manufacturing organizations, cloud-based capabilities can support connected production systems, centralized data collection, industrial Internet of Things workloads, predictive maintenance, supply-chain collaboration, and data analytics. These capabilities help automate and standardize processes across plants and business functions. Elastic resource provisioning also lets an organization scale computing capacity according to production, design, testing, or analytics demand, which can reduce the time required to introduce products and services. Using provider-operated infrastructure can further reduce upfront hardware investment and the operational burden of maintaining local data-center resources, while improving access to modern digital tools.

This description is consistent with the cloud-computing model defined by NIST, which emphasizes ubiquitous network access to a shared pool of configurable resources: [NIST SP 800-145](#). Huawei also describes how cloud services support digital transformation for manufacturing scenarios: [Huawei Cloud Manufacturing](#).

QUESTION NO: 9

When service is busy, some services can be migrated from the private cloud to public cloud.

A. TRUE

B. FALSE

ANSWER: A

Explanation:

TRUE is correct because this describes cloud bursting, a core hybrid-cloud capability. In a hybrid architecture, the private cloud continues to host normal workloads and sensitive services, while compatible workloads can be extended or migrated to public-cloud resources when demand peaks. This provides elastic compute capacity without requiring the organization to permanently purchase enough private-cloud hardware for its highest possible load. During a busy period, public-cloud resources can therefore be used to absorb temporary traffic or processing demand, helping maintain service continuity and user experience. The approach depends on appropriate hybrid connectivity, workload compatibility, consistent networking and security policies, and planning for data synchronization and migration. Huawei positions hybrid cloud as a model that combines on-premises control with public-cloud elasticity, enabling enterprises to use resources across both environments according to workload requirements. Huawei Cloud Stack also supports hybrid-cloud deployment and integration with Huawei Cloud services. See Huawei's [Hybrid Cloud solution overview](#) and the [Huawei Cloud Stack overview](#).

QUESTION NO: 10

Digital transformation drives innovation in the automotive industry. What are the trend of automotive industry drives innovation drives innovation? (Multiple Choice)

- A. Big data
- B. Cloud computing
- C. Industry 4.0
- D. Fixed Internet

ANSWER: A B C

Explanation:

Big data, cloud computing, and Industry 4.0 are important technology trends enabling automotive digital transformation and innovation. Big data lets automotive organizations collect and analyze high-volume information from connected vehicles, manufacturing equipment, customer interactions, supply chains, and vehicle testing. These insights support predictive maintenance, quality improvement, safer driving features, personalized services, and faster engineering decisions. Cloud computing provides scalable computing, storage, data platforms, and AI capabilities that automotive companies can use to process vehicle and enterprise data across geographically distributed research, production, and service environments. It also supports collaboration between manufacturers, suppliers, dealers, and mobility-service partners. Industry 4.0 applies connected, automated, data-driven production concepts to automotive manufacturing. Combining industrial connectivity, intelligent equipment, digitalized processes, and analytics helps plants improve production flexibility, traceability, operational visibility, and efficiency while supporting the manufacture of increasingly software-defined vehicles. Together, these trends connect product innovation with smart manufacturing and lifecycle services, which is central to the automotive industry's digital evolution. Huawei identifies digital technologies and intelligent transformation as major themes across industries in its [Industry Insights](#), while the Industry 4.0 concept is described by Germany's official [Plattform Industrie 4.0](#).

QUESTION NO: 11

LIS(laboratory Information System) combines the laboratory equipment and the computer into a network. Which of the following belong to LIS benefits? (Multiple Choice)

- A. Enable intelligent and standard management on patient samples submission, laboratory data access, report review, report print and distribution, and laboratory statistics
- B. Produce test results timely
- C. Check test results manually
- D. Share test results with doctor timely

ANSWER: A B D

Explanation:

An LIS provides centralized, standardized workflow management across the laboratory life cycle. Therefore, enabling intelligent and standard management of patient-sample submission, laboratory data access, report review, report printing and distribution, and laboratory statistics is a core benefit. By connecting laboratory instruments, laboratory personnel, and clinical information workflows, the system can capture and process test data electronically, apply configured workflow rules, and maintain a traceable record from specimen receipt through result reporting. This improves operational consistency and supports quality management.

Producing test results in a timely manner is also an LIS benefit because automated data exchange and workflow coordination reduce delays associated with manually transcribing results, locating paper records, and transferring information between systems. Timely sharing of test results with doctors is equally important: an LIS can deliver verified reports to authorized clinical users through integration with hospital information systems or electronic medical-record platforms. Faster availability of accurate laboratory information helps clinicians make informed diagnostic and treatment decisions. Huawei's smart-healthcare material describes the use of ICT to connect healthcare services and improve the efficiency of clinical operations, while WHO guidance recognizes laboratory information systems as important tools for laboratory data management and reporting. See [Huawei Healthcare Solutions](#) and [WHO Laboratory Quality Management System handbook](#).

QUESTION NO: 12

Which of the following network security technologies cope with various security threats in the cloud computing data center? (Multiple Choice)

- A. Security domain division
- B. Firewall
- C. Modular design
- D. Flow cleaning
- E. VPN access

ANSWER: A B D E

Explanation:

Security domain division, firewall, flow cleaning, and VPN access are complementary controls for protecting a cloud-computing data center. Security domain division separates systems with different trust levels and business roles, such as Internet-facing services, application workloads, management components, and data services. This segmentation limits lateral movement and enables security policies to be applied at clearly defined boundaries. Firewalls enforce those boundary policies by inspecting and filtering traffic according to configured access-control rules, preventing unauthorized connections between domains.

Flow cleaning refers to traffic scrubbing, a key anti-DDoS capability. Scrubbing systems identify abnormal or attack traffic, filter malicious packets, and forward legitimate service traffic, helping maintain availability during volumetric attacks. VPN access provides encrypted tunnels and authenticated remote connectivity, protecting management or tenant traffic when it traverses untrusted networks. Together, these controls address isolation, access control, availability protection, and secure transmission—the core network-security needs of a cloud data center. Huawei's cloud security guidance describes using network isolation and security controls to protect cloud resources, while Huawei Cloud anti-DDoS services use traffic cleaning to mitigate attacks. See [Huawei Cloud Anti-DDoS documentation](#) and [Huawei Cloud VPC documentation](#).

QUESTION NO: 13

The structure of Linux including hardware. Kernel, Shell and Application.

- A. TRUE

B. FALSE

ANSWER: A

Explanation:

TRUE is correct because it states the standard high-level layered view used to describe a Linux operating system. At the foundation is the physical hardware, such as processors, memory, storage, and network interfaces. The Linux kernel operates directly with this hardware and provides core operating-system functions, including process scheduling, memory management, device-driver operation, file-system access, networking, and security controls. User-space programs do not normally control hardware directly; instead, they request services through interfaces exposed by the kernel.

Above the kernel, the shell provides a command-line environment in which users and administrators can start programs, compose commands, manage files, and automate work with scripts. Bash is a common Linux shell, although Linux can use other shells as well. Applications run in user space above these operating-system components and rely on kernel services to perform useful tasks. This representation is intentionally simplified, since Linux distributions also include system libraries, daemons, desktop environments, and package-management tools, but hardware, kernel, shell, and applications correctly express the fundamental architectural relationship. The Linux kernel documentation describes the kernel as the central software component interfacing with hardware, while the GNU Bash manual documents the shell's command-execution role. See [Linux kernel documentation](#) and [GNU Bash Reference Manual](#).

QUESTION NO: 14

Which of the following descriptions about healthcare collaboration platform is incorrect?

- A.** The healthcare collaboration platform shares medical cases and knowledge bases
- B.** The healthcare collaboration platform interconnects with the EMR-based hospital information platform to provide a complete medical history, such as PACS, EMR, LIS, and electrocardiogram
- C.** The healthcare collaboration platform demonstrates operation videos and provide synchronized patient data query during interactive multimedia education, which improves the educational quality
- D.** The healthcare collaboration platform supports only online study

ANSWER: D

Explanation:

The statement "The healthcare collaboration platform supports only online study" is the incorrect description because a healthcare collaboration platform is designed as a broader clinical and educational collaboration environment, not as a single-purpose online-learning tool. In Huawei healthcare scenarios, the platform supports real-time, multimedia interaction among medical institutions and clinicians. This can include remote consultation, case discussion, medical training, academic exchanges, and teaching activities such as live or recorded surgical demonstrations with interactive communication and access to relevant clinical information. These capabilities enable specialists to share expertise with primary-care organizations and support collaborative diagnosis and treatment across locations. Learning is therefore one use case, but it is integrated with clinical collaboration and remote medical services rather than being the platform's only function. Huawei describes healthcare digitalization as connecting medical resources and supporting collaborative healthcare services through ICT infrastructure and platforms; see [Huawei Healthcare Solutions](#). The World Health Organization likewise recognizes telemedicine as encompassing remote clinical services, education, and professional collaboration, rather than online study alone; see [WHO Telemedicine Report](#).

QUESTION NO: 15

Which of the following descriptions of Oracle instance is incorrect?

- A.** Oracle instance is a combination of background processes and memory structures
- B.** Oracle instance is start at last

C. Each instance's startup will allocate the system global area (SGA)

ANSWER: B

Explanation:

Oracle instance is start at last is the incorrect description. In the standard Oracle database startup sequence, the instance is started before the database is mounted and opened. Starting the instance creates the System Global Area (SGA) and starts the Oracle background processes; this initial state is commonly called *NOMOUNT*. At that point, Oracle has an active instance but has not yet associated it with a specific database through its control files. Oracle then mounts the database by reading the control files, and finally opens the database so that data files and online redo log files can be accessed for normal user operations. Therefore, the instance is not "started last"; it is the foundation required for the later mount and open stages to occur. This ordering is also important operationally because database administrators can start an instance without mounting or opening a database when performing activities such as creating a database or recovering control files. Oracle documents the startup stages and their relationship to the instance in its [Database Administrator's Guide](#). The allocation of memory and creation of background processes as part of instance startup are further described in the [Oracle Database Concepts guide](#).

QUESTION NO: 16

What is the purpose of VLAN? (Multiple Choice)

- A. Increase network security
- B. Increase network efficiency
- C. Increase network access
- D. Increase network encryption

ANSWER: A B

Explanation:

VLANs are used to logically divide a physical Layer 2 network into separate broadcast domains. This segmentation increases network security because devices in different VLANs are isolated at Layer 2; communication between them normally requires Layer 3 routing, where access-control and security policies can be applied. For example, user endpoints, servers, voice devices, and guest devices can be assigned to distinct VLANs even when they connect to the same switching infrastructure.

VLANs also increase network efficiency by limiting the scope of broadcast traffic. A broadcast generated by a device is generally forwarded only within its own VLAN rather than to every device on the same physical switch network. Smaller broadcast domains reduce unnecessary traffic processing on endpoints and switches, improve network organization, and make moves, additions, and changes easier to manage. Huawei switching documentation describes VLANs as a method of dividing a LAN into logical broadcast domains, while IEEE 802.1Q defines the VLAN tagging mechanism used across trunk links. See [Huawei Enterprise documentation](#) and [IEEE 802.1Q standard information](#).

QUESTION NO: 17

What are the technologies for inter-DC layer 2 interconnection? (Multiple Choice)

- A. SDN
- B. VPLS
- C. L2TFV3
- D. OTV

ANSWER: B C D

Explanation:

Inter-data-center Layer 2 interconnection requires technologies that transparently extend Ethernet connectivity over an IP or MPLS transport network while preserving Layer 2 service behavior between sites. **VPLS** provides a multipoint Ethernet VPN service over an MPLS/IP backbone, allowing geographically separated data centers to participate in the same virtual Layer 2 broadcast domain. The IETF VPLS architecture describes how provider-edge devices emulate LAN switching for connected sites: [RFC 4761](#).

L2TFV3 is evidently intended to mean L2TPv3. L2TPv3 supports pseudowires that carry Layer 2 frames across an IP network, making it suitable for point-to-point Layer 2 extension between data-center locations. Its control and encapsulation mechanisms are specified in [RFC 3931](#). **OTV** is also designed specifically for extending Layer 2 networks across a routed Layer 3 transport infrastructure. It encapsulates Ethernet traffic at the data-center edge and uses overlay control-plane mechanisms to provide loop-resistant, site-to-site Layer 2 connectivity. These technologies therefore represent established approaches to inter-DC Layer 2 interconnection.

QUESTION NO: 18

Which Challenges Government Digitization are Facing? (Multiple Choice)

- A. Lack of distinct development policy and plan
- B. Effective information exchange
- C. Complex management and high maintenance costs
- D. Regulatory compliance and Security risks

ANSWER: A C D

Explanation:

Government digitization requires coordinated policy, technology, operations, and risk governance across many agencies. "Lack of distinct development policy and plan" is a core challenge because a clear top-level strategy, architecture, implementation roadmap, and common standards are needed to align departmental initiatives and prevent fragmented construction. Huawei identifies unified planning and cross-departmental coordination as important foundations for digital government development.

"Complex management and high maintenance costs" is also a practical challenge. Government services frequently span legacy applications, multiple infrastructure environments, and a growing number of digital services. Without consolidated cloud and operations capabilities, agencies must manage duplicated resources and operational processes, increasing lifecycle administration and maintenance expenditure. Centralized government-cloud approaches are intended to simplify this operating model.

"Regulatory compliance and Security risks" is equally fundamental because government platforms process sensitive public, enterprise, and citizen information. Digitization must therefore incorporate security controls, data governance, resilience, identity management, and compliance requirements throughout planning, deployment, and operations. Huawei's digital-government and government-cloud materials emphasize secure, reliable platforms and protection of government data as key requirements. See [Huawei Government](#) and [Huawei Cloud](#).

QUESTION NO: 19

What's the benefits of ESI open CAE cloud can help automakers? (Multiple Choice)

- A. Enhance efficiency
- B. Reduce data analysis
- C. Optimize cost

D. Save energy

ANSWER: A C D

Explanation:

“Enhance efficiency,” “Optimize cost,” and “Save energy” are benefits of an open CAE cloud for automotive engineering. CAE workloads, such as crash, durability, computational-fluid-dynamics, and electromagnetic simulations, can require substantial compute capacity for short periods. Cloud-based CAE makes scalable resources available when simulation jobs need them, enabling parallel execution and reducing waiting time for engineers; this enhances the efficiency of the development and verification cycle. A shared, elastic platform also avoids maintaining enough permanently installed infrastructure for peak demand. Paying for resources according to workload requirements, together with centralized operations and resource utilization, helps optimize simulation-platform costs. In addition, consolidating workloads onto efficiently utilized cloud infrastructure can reduce the energy consumed by underutilized on-premises servers and supporting facilities. These capabilities support automakers’ goals of accelerating digital R&D while using computing resources more efficiently. Huawei Cloud describes elastic computing as a way to obtain scalable resources as needed, and its automotive solutions emphasize cloud-enabled digital transformation: [Huawei Cloud Elastic Cloud Server](#) and [Huawei Cloud Automotive Solution](#).

QUESTION NO: 20

The bus bandwidth (that is, the volume of data that can be transmitted in a unit time) is calculated using the following equation: Bus bandwidth (bytes/sec) = Frequency x Width

A. TRUE

B. FALSE

ANSWER: B

Explanation:

FALSE is correct because the stated equation does not consistently produce a result in bytes per second when bus width is expressed in its customary unit, bits. Frequency is measured in cycles (or transfers) per second, while bus width commonly denotes the number of bits transferred in each cycle or transfer. Therefore, the byte-rate calculation must convert bits to bytes: bus bandwidth = frequency × width ÷ 8. For example, a 64-bit-wide bus operating at 100 MHz can theoretically transfer $100,000,000 \times 64 \div 8 = 800,000,000$ bytes per second, before protocol overhead and efficiency factors are considered. In synchronous double-data-rate designs, the transfer rate can additionally be greater than the clock frequency because transfers occur on more than one clock edge; the effective transfer rate, rather than merely the clock frequency, should be used. The principle that data-path width is specified in bits and bandwidth derives from transfers per second multiplied by bits per transfer is reflected in memory-interface standards such as [JEDEC JESD79-5](#) and in the technical overview of [JEDEC memory standards](#).

QUESTION NO: 21

Which three layers data center network is divided into? (Multiple Choice)

A. data network

B. management network

C. storage network

D. signaling network

ANSWER: A B C

Explanation:

A data center network is commonly separated into a **data network**, **management network**, and **storage network** so that service traffic, operations traffic, and storage traffic can be designed and controlled according to their different requirements. The data network carries application and tenant service communication, including traffic between virtual machines, physical servers, and external users. The management network provides a dedicated communication path for platform administration, device management, monitoring, deployment, and maintenance activities. The storage network supports communication between compute resources and storage systems; it is designed for reliable, high-performance access to data volumes and storage services. This separation is a core data-center best practice because it enables independent traffic engineering, security boundaries, quality-of-service policies, and fault isolation for these distinct traffic classes. Huawei cloud-data-center solution material similarly identifies service/data, management, and storage networking as key network planes in a cloud infrastructure. See Huawei's [Virtual Private Cloud overview](#) for the role of service networking and the [Elastic Volume Service overview](#) for storage connectivity concepts.

QUESTION NO: 22

For non-local communication, the host will automatically search for the default gateway, and send the messages to the default gateway for transferring instead of directly sending to the destination host.

- A. TRUE
- B. FALSE

ANSWER: A

Explanation:

TRUE is correct. A host first compares the destination IPv4 address with its own IP address and subnet mask to determine whether the destination is on the local network. For a destination outside that local subnet, the host cannot deliver the Ethernet frame directly to the remote host because Layer 2 delivery is limited to the local broadcast domain. Instead, the host uses its configured default gateway as the next-hop router. It resolves the gateway's MAC address, normally using ARP, and encapsulates the packet in a frame addressed to that gateway. The IP packet still retains the final remote destination address; the gateway then routes the packet toward that destination. In this sense, the host sends non-local traffic to the default gateway rather than directly to the remote destination host. This is the fundamental purpose of a default gateway in IPv4 networking. RFC 1812 describes the router's role in forwarding IP datagrams, while RFC 826 defines the Address Resolution Protocol used to obtain a local next hop's hardware address. See [RFC 1812](#) and [RFC 826](#).

QUESTION NO: 23

cloud computing and IT service resource should charged like water and electricity resource, providing user on-demand service.

- A. TRUE
- B. FALSE

ANSWER: A

Explanation:

TRUE is correct because cloud computing is designed to deliver IT resources as an on-demand service, in a manner analogous to public utilities such as electricity or water. Instead of purchasing, installing, and maintaining all infrastructure in advance, consumers can obtain computing capabilities—such as processing, storage, networking, and software services—when needed. This utility-oriented model enables resources to be rapidly provisioned and released according to changing workload requirements.

A central characteristic of cloud computing is measured service: resource consumption can be monitored, controlled, reported, and billed based on usage. This supports pay-as-you-go charging, so customers are charged according to the capacity or service they consume rather than making a large upfront investment in fixed infrastructure. On-demand self-service further means that users can provision resources themselves without requiring direct interaction with the provider's personnel for each request. These principles improve flexibility, scalability, and cost alignment for IT services. The NIST

cloud-computing definition identifies both on-demand self-service and measured service as essential characteristics: [NIST SP 800-145](#). Huawei Cloud also presents cloud services as elastic, on-demand resources: [Huawei Cloud](#).

QUESTION NO: 24

For industrial automation companies, which type of cloud model can offer the best compromise for manufacturers between the benefits and challenges of public and private cloud deployments?

- A. Public cloud
- B. Private cloud
- C. Hybrid cloud

ANSWER: C

Explanation:

Hybrid cloud is the appropriate model because it combines public-cloud scalability, elasticity, and access to a broad range of managed services with the control, security, and predictable performance available from private-cloud infrastructure. Manufacturers can retain sensitive industrial data, production-control workloads, and latency-sensitive applications in private environments or at the edge, while using public-cloud resources for activities such as large-scale analytics, historical data retention, collaboration, and noncritical business applications. This flexible placement of workloads is particularly valuable in industrial automation, where operational technology systems often have strict availability, data-governance, and real-time response requirements, but organizations also benefit from cloud-scale computing and innovation. Huawei describes hybrid cloud as a model that enables coordinated use of private and public cloud resources, supporting consistent management and workload deployment across environments. The cloud model therefore provides the practical balance requested: manufacturers do not have to choose exclusively between the operational control of private cloud and the service breadth and scalability of public cloud. See Huawei Cloud's [hybrid cloud solution overview](#) and the NIST [cloud computing definition](#) for the hybrid-cloud deployment model.

QUESTION NO: 25

Which of the following services belong to Cloud service? (Multiple Choice)

- A. SaaS
- B. PaaS
- C. IaaS
- D. DaaS

ANSWER: A B C

Explanation:

SaaS, PaaS, and IaaS are the three standard cloud-service models. Software as a Service delivers complete, ready-to-use applications over a network, with the provider operating the underlying infrastructure and application platform. Platform as a Service supplies a managed environment for developing, deploying, and running applications, allowing customers to focus on their application code and data. Infrastructure as a Service provides fundamental virtualized computing resources, including processing, storage, and networking, while giving customers greater control over operating systems and deployed software. These models represent the commonly recognized cloud service layers used to describe how responsibility is shared between a cloud provider and a cloud customer. Huawei Cloud similarly organizes offerings around infrastructure, platform, and software/application service capabilities. The U.S. National Institute of Standards and Technology identifies SaaS, PaaS, and IaaS as the cloud computing service models in its cloud-computing definition. See [NIST SP 800-145](#) and [Huawei Cloud products](#).