



قائمة الاسئلة

تقنية السحابة وانترنت الأشياء (إختياري2)- حاسبات وتحكم - مستوى رابع - درجة هذا الاختبار (50)

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- 1) Which deployment model provides exclusive use by a single organization?
 - 1) - Public Cloud
 - 2) - Hybrid Cloud
 - 3) - Community Cloud
 - 4) + Private Cloud
- 2) What is a disadvantage of public cloud deployment?
 - 1) - Low scalability
 - 2) + Security concerns
 - 3) - High costs
 - 4) - Complex management
- 3) What is a characteristic of SaaS?
 - 1) - Limited accessibility
 - 2) - Developer-focused tools
 - 3) + Pay-per-use model
 - 4) - Requires local installations
- 4) Which cloud deployment model combines both public and private clouds?
 - 1) - Public Cloud
 - 2) + Hybrid Cloud
 - 3) - Private Cloud
 - 4) - Community Cloud
- 5) What is one risk associated with cloud computing?
 - 1) - Enhanced security
 - 2) + Data lock-in
 - 3) - Simplified resource management
 - 4) - Lower flexibility
- 6) Which cloud service model is primarily used for software applications delivered over the internet?
 - 1) - PaaS
 - 2) + SaaS
 - 3) - IaaS
 - 4) - NaaS
- 7) Which cloud model allows collaborative work among multiple organizations?
 - 1) - Private Cloud
 - 2) - Public Cloud
 - 3) - Hybrid Cloud
 - 4) + Community Cloud
- 8) Which cloud service model focuses on providing virtual machines and storage infrastructure?
 - 1) - SaaS
 - 2) + IaaS
 - 3) - PaaS
 - 4) - NaaS
- 9) What is one major risk in cloud computing regarding third-party services?
 - 1) + Vendor lock-in
 - 2) - Data encryption
 - 3) - Enhanced performance
 - 4) - Simplified management





- 10) Which cloud deployment model balances scalability and security?
- 1) - Private Cloud
 - 2) ☒ Hybrid Cloud
 - 3) - Public Cloud
 - 4) - Community Cloud
- 11) What is a benefit of virtualization?
- 1) - Limited scalability
 - 2) - Reduced disaster recovery
 - 3) ☒ Improved resource utilization
 - 4) - Increased hardware requirements
- 12) Which virtualization technique eliminates binary translation overhead?
- 1) - Para-virtualization
 - 2) ☒ Hardware-assisted virtualization
 - 3) - Memory virtualization
 - 4) - Application virtualization
- 13) What is the main function of a hypervisor?
- 1) ☒ Abstract physical hardware into virtual resources
 - 2) - Encrypt data transfers
 - 3) - Manage application layers
 - 4) - Provide high-level analytics
- 14) What is a drawback of full virtualization?
- 1) - Hardware dependency
 - 2) ☒ Overhead of binary translation
 - 3) - Lack of scalability
 - 4) - Reduced security
- 15) What is one advantage of using Type 1 hypervisors?
- 1) ☒ Easy migration of guest OS
 - 2) - Dependency on host OS
 - 3) - Higher risk of failures
 - 4) - Limited hardware access
- 16) Which virtualization technique requires modification of the guest operating system?
- 1) - Full virtualization
 - 2) ☒ Para-virtualization
 - 3) - Application virtualization
 - 4) - Storage virtualization
- 17) What is the main role of I/O virtualization?
- 1) - Encrypting storage devices
 - 2) - Managing data center operations
 - 3) ☒ Routing I/O requests between virtual devices and hardware
 - 4) - Segmenting physical storage
- 18) Which virtualization level aggregates data from different heterogeneous sources?
- 1) - Storage virtualization
 - 2) - Network virtualization
 - 3) ☒ Data virtualization
 - 4) - Application virtualization
- 19) What type of hypervisor is installed on a host operating system?
- 1) - Type 1
 - 2) - Native hypervisor
 - 3) - Embedded hypervisor



- 4) ☒ Type 2
- 20) What does hardware-assisted virtualization primarily reduce?
- 1) - Security risks
 - 2) ☒ Guest OS modifications
 - 3) - Data redundancy
 - 4) - Virtualization overhead
- 21) What is one benefit of network virtualization?
- 1) - Static network management
 - 2) - Simplified hardware architecture
 - 3) ☒ Improved network flexibility
 - 4) - Reduced storage needs
- 22) Which virtualization level improves memory management efficiency?
- 1) - Application virtualization
 - 2) - Data virtualization
 - 3) ☒ Memory virtualization
 - 4) - Storage virtualization
- 23) What is the main purpose of application virtualization?
- 1) - Abstract physical infrastructure
 - 2) ☒ Run applications without installation
 - 3) - Encrypt application data
 - 4) - Simplify resource scaling
- 24) What is the primary goal of encryption in cloud security?
- 1) ☒ Restrict direct data access
 - 2) - Prevent all data breaches
 - 3) - Reduce storage costs
 - 4) - Eliminate third-party risks
- 25) What is a best practice for cloud data security?
- 1) - Use single-factor authentication
 - 2) ☒ Encrypt data at rest and in motion
 - 3) - Disable firewalls
 - 4) - Avoid data backups
- 26) What does multi-tenancy in cloud computing mean?
- 1) - Multiple clouds sharing one physical location
 - 2) ☒ Multiple customers sharing the same infrastructure
 - 3) - Data duplication across servers
 - 4) - Enhanced encryption techniques
- 27) Which cloud security practice ensures unauthorized users cannot access data?
- 1) - Logging and monitoring
 - 2) ☒ Data isolation
 - 3) - Identity management
 - 4) - Risk assessment
- 28) What is a common security issue in the cloud?
- 1) ☒ Data loss
 - 2) - Enhanced encryption
 - 3) - Isolated storage
 - 4) - Automated scaling
- 29) What should organizations do to enhance cloud data security?
- 1) - Avoid encryption
 - 2) - Disable authentication



- 3) ☒ Use multifactor authentication
- 4) ☐ Reduce logging activity
- 30) Which cloud service model allows developers to build applications without managing the underlying infrastructure?
- 1) ☐ IaaS
- 2) ☐ SaaS
- 3) ☒ PaaS
- 4) ☐ DBaaS
- 31) Which cloud deployment model is most suitable for academic institutions collaborating on shared goals?
- 1) ☐ Private Cloud
- 2) ☐ Public Cloud
- 3) ☒ Community Cloud
- 4) ☐ Hybrid Cloud
- 32) Which feature ensures cloud resources are dynamically allocated based on demand?
- 1) ☒ Rapid elasticity
- 2) ☐ Static provisioning
- 3) ☐ Manual scaling
- 4) ☐ Limited accessibility
- 33) Which cloud model requires significant budget considerations but offers high security?
- 1) ☐ Public Cloud
- 2) ☒ Private Cloud
- 3) ☐ Hybrid Cloud
- 4) ☐ Community Cloud
- 34) Which cloud security concern involves customers relying on providers for security enforcement?
- 1) ☒ Loss of control
- 2) ☐ Data redundancy
- 3) ☐ Enhanced access
- 4) ☐ Simplified auditing
- 35) Which practice ensures only authorized users access cloud resources?
- 1) ☐ Data encryption
- 2) ☒ Access control
- 3) ☐ Resource scaling
- 4) ☐ Compliance testing
- 36) What tool acts as a gatekeeper between customers and cloud services?
- 1) ☐ CWPP
- 2) ☒ CASB
- 3) ☐ CSPM
- 4) ☐ ZTNA
- 37) Which cloud security model assumes no user or device is trusted by default?
- 1) ☐ CSPM
- 2) ☐ CASB
- 3) ☒ ZTNA
- 4) ☐ CWPP
- 38) What is an essential best practice for preventing unauthorized cloud access?
- 1) ☐ Disable encryption
- 2) ☐ Avoid multifactor authentication
- 3) ☒ Log and monitor all access
- 4) ☐ Use shared credentials
- 39) What is the key function of actuators in IoT?



- 1) - Data Analysis
 - 2) - Communication with Servers
 - 3) + Enabling interaction with physical objects
 - 4) - User Interface
- 40) Which technology helps in analyzing large datasets in IoT systems?
- 1) - Social Media APIs
 - 2) - Bluetooth
 - 3) + Cloud Computing
 - 4) - Static Websites
- 41) What is the main problem with IPv4 that IPv6 aims to solve?
- 1) - High power consumption
 - 2) + Shortage of address space
 - 3) - Lack of encryption
 - 4) - Incompatibility with wireless networks
- 42) What does 6LoWPAN stand for?
- 1) - 6th Level of Wireless PAN
 - 2) + IPv6 over Low Power Wireless Personal Area Networks
 - 3) - Low Power Wireless Protocols and Networks
 - 4) - Internet Protocol over Long-range Wireless Networks
- 43) What are the three main topologies in a 6LoWPAN network?
- 1) - Star, Ring, Tree
 - 2) - Bus, Hybrid, Cluster
 - 3) + Star, Meshed, Routed
 - 4) - Point-to-Point, Star, Cloud
- 44) Which technology does 6LoWPAN refer to as "route-over" (RO)?
- 1) - Star topology
 - 2) - Ethernet
 - 3) + RPL protocol
 - 4) - Wi-Fi
- 45) Why is IoT security important?
- 1) - To increase the number of IoT devices
 - 2) + To protect personal data and critical infrastructure
 - 3) - To reduce power consumption in IoT networks
 - 4) - To make IoT devices cheaper
- 46) What is a common threat to IoT security?
- 1) - Device acceleration
 - 2) + Data interception
 - 3) - Higher battery consumption
 - 4) - Increased network range
- 47) What is an example of an IoT attack?
- 1) - A device running out of battery
 - 2) + A hacker controlling smart home devices remotely
 - 3) - A device overheating during usage
 - 4) - A smart appliance breaking down
- 48) What does network segmentation help achieve in IoT security?
- 1) - Making IoT devices faster
 - 2) + Limiting the spread of attacks by isolating devices
 - 3) - Connecting more devices to the same network
 - 4) - Reducing power consumption



- 49) Why is encryption important in IoT security?
- 1) - It speeds up data transfer
 - 2) + It protects data from being intercepted and modified
 - 3) - It makes IoT devices work without the internet
 - 4) - It increases network congestion
- 50) How can machine learning improve IoT security?
- 1) - By making IoT devices cheaper
 - 2) + By predicting and stopping cyber threats before they occur
 - 3) - By increasing IoT device range
 - 4) - By improving battery life