

📖 EASY LEVEL (10 QUESTIONS)

Q1. Data center architecture primarily defines:

- A. Application source code
- B. Physical and logical layout of IT infrastructure
- C. Internet security policies
- D. End-user access rights

Q2. Why is unoccupied (white) space important in a data center?

- A. For decoration
- B. For future expansion and airflow
- C. To reduce power usage
- D. To store spare cables

Q3. Which component provides short-term backup power?

- A. Generator
- B. HVAC
- C. UPS
- D. PDU

Q4. The main purpose of HVAC in a data center is to:

- A. Reduce noise
- B. Maintain temperature and humidity
- C. Improve network speed
- D. Control physical access

Q5. Raised floors in data centers are mainly used for:

- A. Fire suppression
- B. Cable routing and airflow
- C. Weight distribution
- D. Security monitoring

Q6. Which factor directly affects server rack load capacity?

- A. Network bandwidth
- B. Floor weight tolerance
- C. Internet latency
- D. HVAC efficiency

Q7. Modular cabling design primarily improves:

- A. Application performance
- B. Scalability and manageability
- C. Security compliance
- D. Power efficiency

Q8. The main role of a Network Operations Center (NOC) is to:

- A. Develop applications

- B. Monitor and manage infrastructure
- C. Approve budgets
- D. Design data centers

Q9. Data center consolidation mainly aims to:

- A. Increase the number of servers
- B. Reduce operational complexity and cost
- C. Improve physical security only
- D. Increase internet bandwidth

Q10. Server capacity planning ensures:

- A. Minimum hardware purchase
- B. Adequate resources for current and future workloads
- C. Reduced staffing needs
- D. Faster internet access

☐ **MEDIUM LEVEL (15 QUESTIONS)**

Q11. A key prerequisite before designing a data center is:

- A. Selecting cabling standards
- B. Business workload analysis
- C. Hiring system administrators
- D. Installing security cameras

Q12. Network bandwidth planning must consider:

- A. Only average traffic
- B. Peak traffic and redundancy
- C. User passwords
- D. Server operating systems

Q13. Budget constraints influence data center design mainly by affecting:

- A. Security policies
- B. Trade-offs between cost, reliability, and scalability
- C. Programming languages used
- D. Backup schedules

Q14. Selecting a geographic location safe from floods and earthquakes supports:

- A. Cost optimization
- B. Business continuity
- C. User satisfaction
- D. Automation

Q15. Availability of local technical talent is important because it:

- A. Reduces internet dependency

- B. Enables faster incident resolution
- C. Improves cooling efficiency
- D. Eliminates automation needs

Q16. Using an existing building for a data center requires special attention to:

- A. Website design
- B. Structural load and power capacity
- C. Software licensing
- D. User training

Q17. An outstanding data center design emphasizes:

- A. Maximum hardware density only
- B. Scalability, redundancy, and efficiency
- C. Low initial cost only
- D. Manual operations

Q18. Points of Distribution (PoDs) help in:

- A. Reducing application bugs
- B. Centralized power and network distribution
- C. Internet filtering
- D. Backup scheduling

Q19. Multiple ISP and WAN links are implemented mainly to:

- A. Increase cabling complexity
- B. Ensure redundancy and high availability
- C. Reduce monitoring effort
- D. Improve cooling efficiency

Q20. Logical security in a data center includes:

- A. CCTV and guards
- B. Firewalls and access controls
- C. Raised floors
- D. Power generators

Q21. Cleaning in data centers is important because dust can:

- A. Increase bandwidth
- B. Cause overheating and hardware failure
- C. Improve airflow
- D. Reduce energy usage

Q22. A major opportunity for consolidation is through:

- A. Physical expansion
- B. Server virtualization
- C. Increased staffing
- D. Manual configuration

Q23. Blade servers are preferred in data centers mainly due to:

- A. Low performance
- B. High density and shared resources
- C. Simple cabling
- D. Higher noise levels

Q24. Disaster Recovery (DR) planning focuses on:

- A. Preventing cyber attacks only
- B. Restoring services after major failures
- C. Daily system monitoring
- D. Capacity forecasting

Q25. System administration best practices emphasize:

- A. Ad-hoc configuration
- B. Standardization and documentation
- C. Manual updates
- D. Minimal monitoring

HARD LEVEL (15 QUESTIONS)

Q26. Data center architecture that supports modular growth primarily improves:

- A. Network latency
- B. Scalability and investment protection
- C. Security auditing
- D. Manual control

Q27. Overlooking floor load calculations can lead to:

- A. Network congestion
- B. Structural failure and safety risks
- C. Software crashes
- D. Backup failure

Q28. Designing power infrastructure using N+1 redundancy ensures:

- A. Maximum cost savings
- B. No single point of failure
- C. Reduced cooling needs
- D. Faster deployment

Q29. Hot aisle–cold aisle design primarily addresses:

- A. Security zoning
- B. Efficient cooling and airflow management
- C. Cable organization
- D. Weight distribution

Q30. Selecting a location with abundant water resources benefits data centers mainly by:

- A. Reducing internet costs
- B. Supporting efficient cooling systems
- C. Improving network speed
- D. Enhancing physical security

Q31. A key guideline for data center planning is to:

- A. Ignore future growth
- B. Design for peak load and scalability
- C. Avoid redundancy
- D. Centralize all risks

Q32. Containerized data centers are best suited for:

- A. Permanent large-scale enterprises
- B. Rapid deployment and scalability
- C. Manual operations
- D. Legacy applications only

Q33. Designing against vandalism involves primarily:

- A. Software encryption
- B. Physical security and access controls
- C. Network segmentation
- D. Backup automation

Q34. Improper cabling design most directly impacts:

- A. CPU utilization
- B. Troubleshooting time and airflow
- C. Internet security
- D. Server licensing

Q35. WAN redundancy is critical for data centers supporting:

- A. Standalone systems
- B. Mission-critical distributed applications
- C. Offline workloads
- D. Local backups only

Q36. Data center consolidation can introduce which risk if poorly planned?

- A. Increased floor space
- B. Single points of failure
- C. Higher staffing levels
- D. Lower energy efficiency

Q37. Accurate server capacity planning relies heavily on:

- A. Vendor marketing data
- B. Historical usage trends and growth projections

- C. Manual estimation
- D. User complaints

Q38. A hot site disaster recovery solution provides:

- A. No infrastructure
- B. Fully operational systems for immediate failover
- C. Only backup storage
- D. Manual recovery procedures

Q39. Internet security guidelines in data centers emphasize:

- A. Physical access only
- B. Layered defense and secure communication
- C. Manual monitoring
- D. Hardware isolation

Q40. System administration automation delivers the greatest benefit by:

- A. Eliminating administrators
- B. Reducing human error and increasing consistency
- C. Increasing hardware costs
- D. Limiting scalability