

Windows OS Administration

Active Directory (AD)

ADDS, Domain Controller, ADC , User & Group Management , OU, GPO basics , AD security issues

Q1. What is the main purpose of Active Directory?

Options: A) File storage B) Centralized authentication C) Backup management D) Web hosting

Answer: **B – Centralized authentication**

Q2. Which service stores directory information in AD?

Options: A) DNS B) DHCP C) ADDS D) IIS

Answer: **C – Active Directory Domain Services**

Q3. A Domain Controller is responsible for:

Options: A) File sharing B) User authentication C) Backup D) Printing

Answer: **B – User authentication**

Q4. What is the role of an Additional Domain Controller (ADC)?

Options: A) Load testing B) Redundancy C) Web hosting D) Monitoring

Answer: **B – Redundancy**

Q5. Which AD object is used to manage users collectively?

Options: A) Policy B) Group C) OU D) Domain

Answer: **B – Group**

Q6. What does OU stand for in Active Directory?

Options: A) Operational Unit B) Office User C) Organizational Unit D) Object Unit

Answer: **C – Organizational Unit**

Q7. Which feature applies security rules centrally?

Options: A) NTFS B) GPO C) ACL D) DNS

Answer: **B – Group Policy Object**

Q8. Which protocol is used by AD for authentication?

Options: A) FTP B) HTTP C) Kerberos D) SMTP

Answer: **C – Kerberos**

Q9. Where are AD users stored physically?

Options: A) Client PC B) Domain Controller C) Router D) Firewall

Answer: **B – Domain Controller**

Q10. Which tool is used to manage AD users?

Options: A) Server Manager B) Task Manager C) ADUC D) Event Viewer

Answer: C – Active Directory Users and Computers

Q11. Which AD object allows logical separation of departments?

Options: A) Group B) OU C) Domain D) Forest

Answer: B – Organizational Unit

Q12. Which group has full control over the entire domain?

Options: A) Administrators B) Power Users C) Domain Admins D) Backup Operators

Answer: C – Domain Admins

Q13. Which policy enforces password complexity across the domain?

Options: A) Local Policy B) NTFS C) GPO D) DNS

Answer: C – Group Policy Object

Q14. Which AD component processes login requests?

Options: A) DNS B) ADDS C) DHCP D) IIS

Answer: B – Active Directory Domain Services

Q15. What happens if SYSVOL replication fails?

Options: A) Login failure B) GPO not applied C) DNS failure D) DHCP stops

Answer: B – GPO not applied

Q16. Which AD feature controls access to resources?

Options: A) ACL B) DNS C) DHCP D) IIS

Answer: A – Access Control List

Q17. Which group type is used for assigning permissions?

Options: A) Distribution Group B) Security Group C) OU D) Domain

Answer: B – Security Group

Q18. Which scope applies GPO closest to users?

Options: A) Site B) Domain C) OU D) Forest

Answer: C – Organizational Unit

Q19. What is a common Active Directory security mistake?

Options: A) Strong passwords B) Excessive admin rights C) GPO usage D) OU structure

Answer: B – Excessive admin rights

Q20. Which service is mandatory for AD functionality?

Options: A) DNS B) DHCP C) IIS D) FTP

Answer: A – DNS

Q21. Which attack abuses Kerberos tickets in Active Directory?

Options: A) SQL Injection B) Pass-the-Ticket C) ARP Spoofing D) Phishing

Answer: B – Pass-the-Ticket

Q22. Which FSMO role handles authentication time synchronization?

Options: A) RID Master B) Schema Master C) PDC Emulator D) Infrastructure Master

Answer: **C – PDC Emulator**

Q23. What is the biggest risk of too many Domain Admins?

Options: A) Performance issue B) Security breach C) DNS failure D) GPO conflict

Answer: **B – Security breach**

Q24. Which AD attack uses hashed credentials?

Options: A) XSS B) Pass-the-Hash C) Spoofing D) DDoS

Answer: **B – Pass-the-Hash**

Q25. Which feature ensures AD replication consistency?

Options: A) DFS B) SYSVOL C) NTFS D) DHCP

Answer: **B – SYSVOL**

Q26. Delegation of administrative control is best done using:

Options: A) Groups B) OU C) GPO D) Trust

Answer: **B – Organizational Unit**

Q27. Which log helps detect AD security attacks?

Options: A) Application B) Security C) Setup D) DNS

Answer: **B – Security log**

Q28. Which design improves Active Directory security?

Options: A) Flat structure B) OU-based hierarchy C) Single admin D) No GPO

Answer: **B – OU-based hierarchy**

Q29. What happens if all Domain Controllers go offline?

Options: A) Normal login B) Authentication fails C) DNS resolves D) DHCP works

Answer: **B – Authentication fails**

Q30. Which AD misconfiguration leads to privilege escalation?

Options: A) Strong passwords B) Incorrect group membership C) DNS errors D) OU creation

Answer: **B – Incorrect group membership**

Scenario 1:

A company has only one DC and it fails, causing login failure. What should have been implemented?

Options: A) File Server B) ADC C) IIS D) DHCP

Answer: **B – Additional Domain Controller**

Scenario 2:

HR and IT departments require different security policies. What is the BEST solution?

Options: A) Different domains B) Separate OUs with GPOs C) Local policies D) Multiple

forests

Answer: **B – Separate OUs with GPOs**

Scenario 3:

A normal user gains admin privileges accidentally. What is the most likely cause?

Options: A) DNS failure B) GPO error C) Incorrect group membership D) DHCP issue

Answer: **C – Incorrect group membership**

Scenario 4:

Password complexity must apply to all domain users. Which tool should be used?

Options: A) NTFS B) ACL C) GPO D) DNS

Answer: **C – Group Policy Object**

Scenario 5:

An attacker reuses Kerberos tickets to access resources. Which attack is this?

Options: A) Phishing B) Pass-the-Ticket C) DDoS D) ARP Spoofing

Answer: **B – Pass-the-Ticket**

DNS

- Forward & Reverse lookup, Role of DNS in AD, Linux + Windows DNS difference

Q1. What is the primary function of DNS?

Options: A) File sharing B) Name to IP resolution C) Authentication D) Backup

Answer: **B – Name to IP resolution**

Q2. Which DNS lookup resolves domain name to IP address?

Options: A) Reverse lookup B) Forward lookup C) Recursive lookup D) Iterative lookup

Answer: **B – Forward lookup**

Q3. Which lookup resolves IP address to hostname?

Options: A) Forward lookup B) Static lookup C) Reverse lookup D) Recursive lookup

Answer: **C – Reverse lookup**

Q4. Which DNS record is used for forward lookup?

Options: A) PTR B) MX C) A D) SOA

Answer: **C – A record**

Q5. Which DNS record is used for reverse lookup?

Options: A) A B) CNAME C) PTR D) NS

Answer: **C – PTR record**

Q6. Which service is mandatory for Active Directory?

Options: A) DHCP B) DNS C) IIS D) FTP

Answer: **B – DNS**

Q7. DNS mainly works on which protocol?

Options: A) TCP B) UDP C) ICMP D) HTTP

Answer: **B – UDP**

Q8. Default DNS port number is:

Options: A) 21 B) 53 C) 80 D) 443

Answer: **B – Port 53**

Q9. Which command tests DNS resolution in Windows?

Options: A) ping B) nslookup C) ipconfig D) tracert

Answer: **B – nslookup**

Q10. Which command is commonly used for DNS testing in Linux?

Options: A) ifconfig B) dig C) route D) arp

Answer: **B – dig**

Q11. What is the role of DNS in Active Directory?

Options: A) File storage B) Service discovery C) Backup D) Printing

Answer: **B – Service discovery**

Q12. Which DNS zone stores reverse lookup records?

Options: A) Forward zone B) Primary zone C) Reverse lookup zone D) Stub zone

Answer: **C – Reverse lookup zone**

Q13. Which AD component registers SRV records in DNS?

Options: A) DHCP B) ADDS C) IIS D) NTP

Answer: **B – Active Directory Domain Services**

Q14. Which DNS record helps locate domain controllers?

Options: A) A B) MX C) SRV D) PTR

Answer: **C – SRV record**

Q15. What happens if DNS is not working in AD?

Options: A) Slow login B) Authentication fails C) Backup fails D) Printing stops

Answer: **B – Authentication fails**

Q16. Which file stores DNS configuration in Linux?

Options: A) /etc/passwd B) /etc/hosts C) /etc/resolv.conf D) /var/log

Answer: **C – /etc/resolv.conf**

Q17. Windows DNS is primarily managed using:

Options: A) Text files B) Registry only C) DNS Manager GUI D) Bash

Answer: **C – DNS Manager GUI**

Q18. Which type of zone allows read-only DNS data?

Options: A) Primary B) Secondary C) Stub D) Reverse

Answer: **B – Secondary zone**

Q19. Which DNS lookup is mainly used in email troubleshooting?

Options: A) PTR B) A C) MX D) SRV

Answer: **C – MX record**

Q20. Which DNS feature increases fault tolerance?

Options: A) Forward lookup B) Reverse lookup C) Secondary zone D) Hosts file

Answer: **C – Secondary zone**

Q21. Which DNS record is critical for AD replication?

Options: A) MX B) PTR C) SRV D) TXT

Answer: **C – SRV record**

Q22. Which attack targets DNS name resolution?

Options: A) Phishing B) DNS Spoofing C) SQL Injection D) XSS

Answer: **B – DNS Spoofing**

Q23. What is a major difference between Linux and Windows DNS?

Options: A) Linux uses UDP only B) Windows integrates with AD C) Linux has GUI D) Windows uses text files

Answer: **B – Windows integrates with Active Directory**

Q24. Which Linux DNS server software is most commonly used?

Options: A) Apache B) Postfix C) BIND D) Samba

Answer: **C – BIND**

Q25. Which Windows DNS feature allows secure updates?

Options: A) Recursive query B) Secure dynamic update C) Forwarder D) Stub zone

Answer: **B – Secure dynamic update**

Q26. Reverse lookup zones are mainly used for:

Options: A) Web hosting B) Security validation C) File sharing D) Load balancing

Answer: **B – Security validation**

Q27. Which command flushes DNS cache in Windows?

Options: A) flushdns B) ipconfig /flushdns C) dnsflush D) clearcache

Answer: **B – ipconfig /flushdns**

Q28. Which file maps IP to hostname locally in Linux?

Options: A) /etc/shadow B) /etc/hosts C) /etc/resolv.conf D) /var/named

Answer: **B – /etc/hosts**

Q29. Which DNS misconfiguration can break AD login?

Options: A) Missing PTR record B) Incorrect SRV records C) Extra MX record D) Disabled

recursion

Answer: **B – Incorrect SRV records**

Q30. Which DNS design is BEST for enterprise AD?

Options: A) Public DNS only B) AD-integrated DNS C) Hosts file D) Standalone DNS

Answer: **B – AD-integrated DNS**

Scenario 1:

Users cannot log in to the domain although the DC is running. What is the MOST likely cause?

Options: A) DHCP failure B) DNS service down C) NTFS issue D) GPO conflict

Answer: **B – DNS service down**

Scenario 2:

Admin wants hostname resolution from IP addresses for security audits. What should be configured?

Options: A) Forward lookup zone B) Reverse lookup zone C) Stub zone D) Cache-only DNS

Answer: **B – Reverse lookup zone**

Scenario 3:

Linux client cannot resolve domain names but Windows clients work fine. What should be checked first?

Options: A) Firewall B) /etc/resolv.conf C) GPO D) ADUC

Answer: **B – /etc/resolv.conf**

Scenario 4:

Active Directory clients cannot locate Domain Controllers. Which DNS record is missing?

Options: A) A B) PTR C) SRV D) MX

Answer: **C – SRV record**

Scenario 5:

An attacker redirects users to fake websites by manipulating DNS responses. What is this attack called?

Options: A) Phishing B) DNS Spoofing C) MITM D) Brute force

Answer: **B – DNS Spoofing**

DHCP

- Scope, Lease, Reservation , DHCP vs Static IP , DHCP security risks

Q1. What is the primary function of DHCP?

Options: A) Name resolution B) Automatic IP assignment C) Authentication D) Encryption

Answer: **B – Automatic IP assignment**

Q2. Which DHCP component defines the IP address range?

Options: A) Lease B) Reservation C) Scope D) Option

Answer: **C – Scope**

Q3. What does a DHCP lease represent?

Options: A) Permanent IP B) Temporary IP assignment C) MAC address D) Subnet mask

Answer: **B – Temporary IP assignment**

Q4. DHCP reservation is based on which identifier?

Options: A) IP address B) Hostname C) MAC address D) Subnet

Answer: **C – MAC address**

Q5. Which protocol does DHCP use?

Options: A) TCP B) UDP C) ICMP D) HTTP

Answer: **B – UDP**

Q6. Which ports are used by DHCP?

Options: A) 53, 53 B) 67, 68 C) 80, 443 D) 21, 22

Answer: **B – Ports 67 and 68**

Q7. Which DHCP message starts the IP assignment process?

Options: A) DHCPACK B) DHCPOFFER C) DHCPDISCOVER D) DHCPREQUEST

Answer: **C – DHCPDISCOVER**

Q8. Which DHCP option provides default gateway?

Options: A) Option 3 B) Option 6 C) Option 15 D) Option 66

Answer: **A – Option 3**

Q9. Static IP configuration means:

Options: A) IP assigned automatically B) IP changes frequently C) IP set manually D) IP is encrypted

Answer: **C – IP set manually**

Q10. DHCP reduces:

Options: A) Network security B) Manual configuration errors C) Bandwidth D) Authentication

Answer: **B – Manual configuration errors**

Q11. Which DHCP component ensures a device always gets the same IP automatically?

Options: A) Lease B) Scope C) Reservation D) Relay

Answer: **C – Reservation**

Q12. DHCP lease renewal occurs at what time by default?

Options: A) 25% B) 50% C) 75% D) 100%

Answer: **B – 50%**

Q13. DHCP vs Static IP – which is easier to manage in large networks?

Options: A) Static IP B) Manual IP C) DHCP D) APIPA

Answer: **C – DHCP**

Q14. Which device is best suited for static IP?

Options: A) Laptop B) Mobile C) Printer D) Guest device

Answer: **C – Printer**

Q15. What is the role of DHCP relay agent?

Options: A) Assign IP locally B) Forward DHCP requests across networks C) Encrypt traffic D)
Filter packets

Answer: **B – Forward DHCP requests across networks**

Q16. Which DHCP message confirms IP allocation?

Options: A) DHCPDISCOVER B) DHCPOFFER C) DHCPREQUEST D) DHCPACK

Answer: **D – DHCPACK**

Q17. What happens if DHCP server is unavailable?

Options: A) Client shuts down B) Client gets APIPA address C) DNS fails D) AD fails

Answer: **B – Client gets APIPA address**

Q18. Which IP range is used by APIPA?

Options: A) 10.0.0.0/8 B) 172.16.0.0/12 C) 192.168.0.0/16 D) 169.254.0.0/16

Answer: **D – 169.254.0.0/16**

Q19. Which DHCP option provides DNS server address?

Options: A) Option 3 B) Option 6 C) Option 15 D) Option 66

Answer: **B – Option 6**

Q20. DHCP scope must be:

Options: A) Overlapping B) Unique per subnet C) Same for all networks D) Static

Answer: **B – Unique per subnet**

Q21. Which attack involves a fake DHCP server?

Options: A) ARP poisoning B) DHCP starvation C) Rogue DHCP D) DNS spoofing

Answer: **C – Rogue DHCP**

Q22. DHCP starvation attack aims to:

Options: A) Steal passwords B) Exhaust IP pool C) Block DNS D) Flood network

Answer: **B – Exhaust IP pool**

Q23. Which feature prevents unauthorized DHCP servers?

Options: A) DHCP scope B) DHCP authorization C) DHCP relay D) APIPA

Answer: **B – DHCP authorization**

Q24. In Windows AD environment, DHCP server must be:

Options: A) Standalone B) Authorized in AD C) Linux-based D) Public

Answer: **B – Authorized in Active Directory**

Q25. Which DHCP option defines domain name?

Options: A) Option 6 B) Option 15 C) Option 3 D) Option 51

Answer: **B – Option 15**

Q26. Static IP vs DHCP – which is more secure by default?

Options: A) DHCP B) Static IP C) Both equal D) APIPA

Answer: **B – Static IP**

Q27. Which DHCP security feature blocks unknown devices?

Options: A) Scope B) Reservation C) MAC filtering D) Lease

Answer: **C – MAC filtering**

Q28. DHCP lease database corruption affects:

Options: A) DNS only B) IP allocation C) AD login D) GPO

Answer: **B – IP allocation**

Q29. Which protocol is vulnerable in DHCP communication?

Options: A) TCP B) UDP C) HTTPS D) ICMP

Answer: **B – UDP**

Q30. Best practice to reduce DHCP attacks is:

Options: A) Increase lease time B) Enable DHCP snooping C) Disable DNS D) Use APIPA

Answer: **B – Enable DHCP snooping**

Scenario 1:

Multiple devices fail to obtain IP addresses after joining the network. What is the MOST likely cause?

Options: A) DNS failure B) DHCP scope exhausted C) GPO issue D) NTFS error

Answer: **B – DHCP scope exhausted**

Scenario 2:

A printer must always receive the same IP without manual configuration. What should be used?

Options: A) Static IP B) DHCP Reservation C) APIPA D) DHCP Relay

Answer: **B – DHCP Reservation**

Scenario 3:

Users receive wrong gateway and DNS settings. What is the cause?

Options: A) Wrong scope options B) Lease renewal C) Static IP D) APIPA

Answer: **A – Wrong scope options**

Scenario 4:

An unauthorized server assigns IPs causing network disruption. What attack is this?

Options: A) DHCP starvation B) Rogue DHCP C) ARP poisoning D) DNS spoofing

Answer: **B – Rogue DHCP**

Scenario 5:

Clients frequently lose network connectivity after short intervals. What is the BEST fix?

Options: A) Disable DHCP B) Increase lease time C) Use static IPs D) Change DNS

Answer: **B – Increase lease time**

Group Policy (GPO)

- Local vs Domain Policy , Common policy use cases

Q1. What is Group Policy mainly used for?

Options: A) Backup B) Centralized policy management C) File sharing D) Virtualization

Answer: **B – Centralized policy management**

Q2. Which policy applies only to a single computer?

Options: A) Domain policy B) Site policy C) Local policy D) Forest policy

Answer: **C – Local policy**

Q3. Domain Group Policy is stored on which server?

Options: A) Client PC B) Domain Controller C) File server D) Router

Answer: **B – Domain Controller**

Q4. Which tool is used to manage GPOs?

Options: A) Server Manager B) GPEDIT C) GPMC D) ADUC

Answer: **C – Group Policy Management Console**

Q5. Which policy controls password complexity?

Options: A) NTFS B) GPO C) DNS D) DHCP

Answer: **B – Group Policy Object**

Q6. Which policy refresh command updates GPO immediately?

Options: A) gpupdate B) gpmc C) policyrefresh D) net policy

Answer: **A – gpupdate**

Q7. Which policy scope is closest to the user?

Options: A) Domain B) Site C) OU D) Forest

Answer: **C – Organizational Unit**

Q8. Which policy disables USB storage devices?

Options: A) NTFS B) GPO C) DNS D) ACL

Answer: **B – Group Policy Object**

Q9. Local policies are applied using:

Options: A) GPMC B) gpedit.msc C) ADUC D) PowerShell

Answer: **B – gpedit.msc**

Q10. Which policy type applies to all domain users by default?

Options: A) Local policy B) Default Domain Policy C) Site policy D) Custom policy

Answer: **B – Default Domain Policy**

Q11. Which policy has higher priority: Local or Domain?

Options: A) Local B) Domain C) Both equal D) Depends on admin

Answer: **B – Domain**

Q12. What happens if Local and Domain policies conflict?

Options: A) Local wins B) Domain wins C) Both apply D) System ignores

Answer: **B – Domain wins**

Q13. Which policy is best for enforcing screen lock timeout?

Options: A) NTFS B) DNS C) GPO D) DHCP

Answer: **C – Group Policy Object**

Q14. Which GPO setting prevents users from accessing Control Panel?

Options: A) Account policy B) User configuration C) Computer configuration D) DNS policy

Answer: **B – User configuration**

Q15. Which policy type is applied during system startup?

Options: A) User policy B) Computer policy C) Local policy D) Security policy

Answer: **B – Computer policy**

Q16. Which GPO feature allows policy application to specific users or groups?

Options: A) Inheritance B) Loopback C) Security Filtering D) Trust

Answer: **C – Security Filtering**

Q17. Which command checks applied GPOs?

Options: A) gpedit B) gpreresult C) gpmc D) net policy

Answer: **B – gpreresult**

Q18. Which GPO use case is BEST for software deployment?

Options: A) DNS policy B) GPO software installation C) NTFS D) DHCP

Answer: **B – GPO software installation**

Q19. Which policy is applied last in order of processing?

Options: A) Local B) Site C) Domain D) OU

Answer: **D – Organizational Unit**

Q20. What does LSDOU stand for?

Options: A) Local-Site-Domain-OU B) Local-System-Domain-OU C) Login-Site-Domain-User-OU D) Local-Server-Domain-User

Answer: **A – Local-Site-Domain-OU**

Q21. Which GPO feature enforces policies even if inheritance is blocked?

Options: A) Loopback B) Enforced C) Security filtering D) WMI filter

Answer: **B – Enforced**

Q22. Which mode applies user policies based on computer location?

Options: A) Replace loopback B) Merge loopback C) Both D) Inheritance

Answer: **C – Both (Replace and Merge)**

Q23. Which GPO filter uses system attributes like OS version?

Options: A) Security filter B) Loopback C) WMI filter D) ACL

Answer: **C – WMI filter**

Q24. Which GPO misconfiguration can cause slow logins?

Options: A) DNS failure B) Large login scripts C) DHCP issue D) OU design

Answer: **B – Large login scripts**

Q25. Which policy setting blocks removable storage devices?

Options: A) NTFS B) Device Installation Restrictions C) DNS D) ACL

Answer: **B – Device Installation Restrictions**

Q26. Which GPO applies regardless of OU inheritance blocking?

Options: A) Local policy B) Enforced GPO C) Domain policy D) Site policy

Answer: **B – Enforced GPO**

Q27. Which GPO setting hardens user desktops?

Options: A) Account policy B) User configuration C) DNS policy D) DHCP option

Answer: **B – User configuration**

Q28. Which policy prevents users from installing unauthorized software?

Options: A) NTFS B) AppLocker C) DHCP D) DNS

Answer: **B – AppLocker**

Q29. Which GPO component controls firewall rules?

Options: A) NTFS B) Windows Defender Firewall policy C) DNS D) DHCP

Answer: **B – Windows Defender Firewall policy**

Q30. Best practice for GPO management is:

Options: A) Single GPO for all B) Multiple targeted GPOs C) No GPO D) Local policy only

Answer: **B – Multiple targeted GPOs**

Scenario 1:

An admin wants to block USB drives on all domain systems. What should be used?

Options: A) NTFS B) GPO C) DHCP D) DNS

Answer: **B – Group Policy Object**

Scenario 2:

Local policy allows Control Panel but domain policy blocks it. What is the result?

Options: A) Control Panel accessible B) Domain policy overrides local C) Both apply D) System error

Answer: **B – Domain policy overrides local**

Scenario 3:

Different policies are required for lab computers regardless of user. Which GPO feature should be used?

Options: A) Security filtering B) WMI filtering C) Loopback processing D) Inheritance

Answer: **C – Loopback processing**

Scenario 4:

Admin wants a GPO to apply even when inheritance is blocked. What setting is required?

Options: A) Loopback B) Enforced C) Security filter D) WMI filter

Answer: **B – Enforced**

Scenario 5:

Users complain of slow login times after GPO changes. What is the most likely cause?

Options: A) DNS error B) Large login scripts C) DHCP failure D) Firewall rules

Answer: **B – Large login scripts**

Windows Server Backup (WSB)

- Full, incremental backup ,Restore scenarios , NTFS Permissions & Security , Share vs NTFS permissions , Inheritance concepts

Q1. What is Windows Server Backup (WSB) used for?

Options: A) Antivirus B) Backup and restore C) Monitoring D) Authentication

Answer: **B – Backup and restore**

Q2. A full backup means:

Options: A) Only changed files B) Entire data backup C) OS only D) Logs only

Answer: **B – Entire data backup**

Q3. Incremental backup includes:

Options: A) All files B) Only changed data since last backup C) OS files D) Logs

Answer: **B – Only changed data since last backup**

Q4. Which file system supports permissions?

Options: A) FAT32 B) exFAT C) NTFS D) EXT4

Answer: **C – NTFS**

Q5. NTFS permissions are applied to:

Options: A) Users only B) Files and folders C) Network shares only D) Registry

Answer: **B – Files and folders**

Q6. Which permission allows reading file content?

Options: A) Full Control B) Modify C) Read D) Write

Answer: **C – Read**

Q7. Which permission allows deleting files?

Options: A) Read B) Write C) Modify D) Execute

Answer: **C – Modify**

Q8. Share permissions apply when accessing files:

Options: A) Locally B) Over the network C) During boot D) In safe mode

Answer: **B – Over the network**

Q9. NTFS permissions apply when accessing files:

Options: A) Locally and over network B) Only over network C) Only locally D) Never

Answer: **A – Locally and over network**

Q10. Default NTFS permission inheritance is:

Options: A) Disabled B) Enabled C) Manual D) Deny

Answer: **B – Enabled**

Q11. Which backup type is fastest after a full backup?

Options: A) Full B) Incremental C) Differential D) Mirror

Answer: **B – Incremental**

Q12. Which backup is required for bare-metal recovery?

Options: A) File backup B) System state backup C) Full server backup D) Incremental backup

Answer: **C – Full server backup**

Q13. Which NTFS permission grants maximum rights?

Options: A) Modify B) Read C) Write D) Full Control

Answer: **D – Full Control**

Q14. Which permission overrides Allow permissions?

Options: A) Read B) Write C) Modify D) Deny

Answer: **D – Deny**

Q15. When both Share and NTFS permissions exist, which is applied?

Options: A) Share only B) NTFS only C) Most restrictive D) Least restrictive

Answer: **C – Most restrictive**

Q16. NTFS inheritance means:

Options: A) Manual permissions B) Permissions copied from parent C) Permissions deleted D)
Permissions denied

Answer: **B – Permissions copied from parent**

Q17. Which permission allows changing file permissions?

Options: A) Read B) Write C) Modify D) Full Control

Answer: **D – Full Control**

Q18. Which backup stores changes since last full backup?

Options: A) Incremental B) Differential C) Mirror D) Snapshot

Answer: **B – Differential**

Q19. Which permission is BEST for normal users?

Options: A) Full Control B) Modify C) Read D) Deny

Answer: **B – Modify**

Q20. Which tool is used to restore backups in Windows Server?

Options: A) Event Viewer B) WSB Console C) Task Manager D) Disk Management

Answer: **B – WSB Console**

Q21. Which backup combination is required to restore incremental backups?

Options: A) Last incremental only B) Full + all incrementals C) Differential only D) Snapshot

Answer: **B – Full + all incrementals**

Q22. What happens if NTFS inheritance is disabled?

Options: A) Permissions deleted B) Parent permissions not inherited C) Access denied D)

System crash

Answer: **B – Parent permissions not inherited**

Q23. Which restore scenario recovers entire OS after disk failure?

Options: A) File restore B) System state restore C) Bare-metal restore D) Incremental restore

Answer: **C – Bare-metal restore**

Q24. Which NTFS permission allows taking ownership?

Options: A) Read B) Modify C) Full Control D) Execute

Answer: **C – Full Control**

Q25. Which is more secure: Share or NTFS permissions?

Options: A) Share B) NTFS C) Both equal D) Depends on network

Answer: **B – NTFS**

Q26. NTFS permissions are cumulative except:

Options: A) Allow B) Modify C) Deny D) Read

Answer: **C – Deny**

Q27. Which restore option is used after ransomware attack?

Options: A) Incremental restore B) Differential restore C) Full restore D) Snapshot restore

Answer: **C – Full restore**

Q28. Which permission allows listing folder contents only?

Options: A) Read B) Write C) Modify D) Full Control

Answer: **A – Read**

Q29. Which NTFS concept prevents accidental permission changes?

Options: A) Inheritance blocking B) Deny C) Auditing D) Compression

Answer: **A – Inheritance blocking**

Q30. Best practice for securing shared folders is:

Options: A) Full control to Everyone B) Restrictive NTFS + simple Share permissions C) Share permissions only D) Disable NTFS

Answer: **B – Restrictive NTFS + simple Share permissions**

Scenario 1:

A server crashes completely and OS must be restored on new hardware. Which restore is required?

Options: A) File restore B) System state restore C) Bare-metal restore D) Incremental restore

Answer: **C – Bare-metal restore**

Scenario 2:

A user has NTFS Read permission but Share permission is Full Control. What access will the user have?

Options: A) Full Control B) Modify C) Read D) No access

Answer: **C – Read (most restrictive)**

Scenario 3:

An admin wants a folder not to inherit permissions from parent. What should be done?

Options: A) Deny permissions B) Disable inheritance C) Change owner D) Remove NTFS

Answer: **B – Disable inheritance**

Scenario 4:

Only files changed since yesterday should be backed up daily. Which backup type is BEST?

Options: A) Full B) Differential C) Incremental D) Snapshot

Answer: **C – Incremental**

Scenario 5:

A user cannot delete files despite having Write permission. What is missing?

Options: A) Read B) Execute C) Modify D) Full Control

Answer: **C – Modify**

 **Windows**

PowerShell , Cmdlets , Automation basics , Remote administration , Hyper-V , Virtualization basics , VM types , Virtual switches , IIS Web Server , Website hosting basics , IIS vs Apache , IP Addressing , IPv4 vs IPv6 , CIDR basics , NPS (RADlUS basics)

Q1. What is PowerShell mainly used for?

Options: A) Web design B) Automation C) Gaming D) Backup

Answer: **B – Automation**

Q2. PowerShell commands are called:

Options: A) Scripts B) Services C) Cmdlets D) Policies

Answer: **C – Cmdlets**

Q3. Cmdlets follow which naming format?

Options: A) Verb-Noun B) Noun-Verb C) Task-Name D) Action-Object

Answer: **A – Verb-Noun**

Q4. Which symbol is used to pipe output in PowerShell?

Options: A) > B) | C) & D) #

Answer: **B – |**

Q5. Which cmdlet lists files and folders?

Options: A) Get-Item B) Get-File C) Get-ChildItem D) List-Files

Answer: **C – Get-ChildItem**

Q6. Hyper-V is a:

Options: A) Backup tool B) Hypervisor C) Firewall D) Web server

Answer: **B – Hypervisor**

Q7. Virtualization means:

Options: A) Cloud computing B) Running multiple OS on one system C) Network sharing D)

Backup

Answer: **B – Running multiple OS on one system**

Q8. IIS is mainly used for:

Options: A) DNS B) Website hosting C) Email D) Backup

Answer: **B – Website hosting**

Q9. Default protocol used by IIS is:

Options: A) FTP B) SMTP C) HTTP/HTTPS D) SNMP

Answer: **C – HTTP/HTTPS**

Q10. IPv4 address size is:

Options: A) 16-bit B) 32-bit C) 64-bit D) 128-bit

Answer: **B – 32-bit**

Q11. IPv6 address size is:

Options: A) 32-bit B) 64-bit C) 128-bit D) 256-bit

Answer: **C – 128-bit**

Q12. CIDR is used for:

Options: A) Encryption B) Subnetting C) Routing protocol D) DNS

Answer: **B – Subnetting**

Q13. IPv4 loopback address is:

Options: A) 0.0.0.0 B) 127.0.0.1 C) 255.255.255.255 D) 169.254.x.x

Answer: **B – 127.0.0.1**

Q14. NPS is Microsoft implementation of:

Options: A) LDAP B) Kerberos C) RADIUS D) TACACS

Answer: **C – RADIUS**

Q15. RADIUS mainly provides:

Options: A) Routing B) Authentication C) Storage D) Backup

Answer: **B – Authentication**

Q16. RADIUS uses which transport protocol?

Options: A) TCP B) UDP C) ICMP D) HTTPS

Answer: **B – UDP**

Q17. IIS is native to:

Options: A) Linux B) Unix C) Windows D) macOS

Answer: **C – Windows**

Q18. Apache web server is commonly used on:

Options: A) Windows only B) Linux/Unix C) Routers D) Switches

Answer: **B – Linux/Unix**

Q19. PowerShell script file extension is:

Options: A) .bat B) .cmd C) .ps1 D) .exe

Answer: **C – .ps1**

Q20. Automation helps reduce:

Options: A) Accuracy B) Manual effort C) Security D) Speed

Answer: **B – Manual effort**

Q21. Which cmdlet executes commands on remote systems?

Options: A) Get-Service B) Invoke-Command C) Run-Remote D) Enter-Console

Answer: **B – Invoke-Command**

Q22. PowerShell remoting uses:

Options: A) FTP B) Telnet C) WinRM D) SNMP

Answer: **C – WinRM**

Q23. Hyper-V is which type of hypervisor?

Options: A) Type-1 B) Type-2 C) Hosted D) Desktop

Answer: **A – Type-1**

Q24. Which VM type runs directly on hardware?

Options: A) Type-1 B) Type-2 C) Hosted D) Desktop

Answer: A – Type-1

Q25. Which Hyper-V switch allows internet access?

Options: A) Private B) Internal C) External D) Loopback

Answer: C – External

Q26. Private virtual switch allows:

Options: A) VM to internet B) VM to host C) VM to VM only D) Full access

Answer: C – VM to VM only

Q27. Internal virtual switch allows communication between:

Options: A) VM and internet B) VM and host C) VM only D) Host only

Answer: B – VM and host

Q28. IIS websites run inside:

Options: A) Service B) Application Pool C) Kernel D) Scheduler

Answer: B – Application Pool

Q29. Default IIS home page is:

Options: A) index.php B) home.html C) default.aspx D) index.html

Answer: D – index.html

Q30. IIS primarily supports:

Options: A) Bash B) Python C) ASP.NET D) Perl

Answer: C – ASP.NET

Q31. IPv6 eliminates the need for:

Options: A) DNS B) NAT C) Routing D) Firewall

Answer: B – NAT

Q32. CIDR /24 represents:

Options: A) 255.0.0.0 B) 255.255.0.0 C) 255.255.255.0 D) 255.255.255.255

Answer: C – 255.255.255.0

Q33. IPv6 replaces broadcast with:

Options: A) Anycast B) Multicast C) Unicast D) Loopback

Answer: B – Multicast

Q34. NPS provides which AAA services?

Options: A) Authentication B) Authorization C) Accounting D) All

Answer: D – All

Q35. Which device sends RADIUS requests to NPS?

Options: A) Client B) NAS C) Server D) Router

Answer: B – NAS

Q36. Cmdlet used to list services:

Options: A) Get-Process B) Get-Service C) Show-Service D) List-Service

Answer: **B – Get-Service**

Q37. Automation is mainly achieved using:

Options: A) Cmdlets B) Scripts C) Services D) Policies

Answer: **B – Scripts**

Q38. IIS security feature for encryption:

Options: A) HTTP B) FTP C) SSL D) Telnet

Answer: **C – SSL**

Q39. Which is a private IPv4 address?

Options: A) 8.8.8.8 B) 192.168.1.1 C) 1.1.1.1 D) 11.0.0.1

Answer: **B – 192.168.1.1**

Q40. Cmdlet used to stop a service:

Options: A) End-Service B) Kill-Service C) Stop-Service D) Halt-Service

Answer: **C – Stop-Service**

Q41. Persistent PowerShell remote session uses:

Options: A) Invoke-Command B) Enter-PSSession C) Script D) Task Scheduler

Answer: **B – Enter-PSSession**

Q42. Hyper-V resource control is managed by:

Options: A) VHD B) Hypervisor C) Virtual Switch D) Host OS

Answer: **B – Hypervisor**

Q43. Best environment for testing applications is:

Options: A) Physical server B) Virtual machine C) Router D) Switch

Answer: **B – Virtual machine**

Q44. Apache web server is:

Options: A) Closed source B) Windows-only C) Open source D) GUI-based

Answer: **C – Open source**

Q45. APIPA address range is:

Options: A) 192.168.x.x B) 169.254.x.x C) 10.x.x.x D) 127.x.x.x

Answer: **B – 169.254.x.x**

Q46. CIDR helps reduce:

Options: A) Bandwidth B) Routing table size C) Security D) Latency

Answer: **B – Routing table size**

Q47. RADIUS authentication is:

Options: A) Centralized B) Manual C) Offline D) Local

Answer: **A – Centralized**

Q48. Secure IIS traffic uses:

Options: A) HTTP B) FTP C) HTTPS D) SMTP

Answer: **C – HTTPS**

Q49. PowerShell module used to manage IIS:

Options: A) WebAdmin B) IISAdministration C) NetAdmin D) PSWeb

Answer: **B – IISAdministration**

Q50. IPv6 loopback address is:

Options: A) ::1 B) fe80::1 C) ff02::1 D) 2001::1

Answer: **A – ::1**

Q51. Best practice for secure remote administration:

Options: A) Telnet B) FTP C) PowerShell over HTTPS D) HTTP

Answer: **C – PowerShell over HTTPS**

Q52. Hyper-V switch allowing VM-to-VM only communication:

Options: A) External B) Internal C) Private D) NAT

Answer: **C – Private**

Q53. IIS application isolation is achieved using:

Options: A) Site B) Application Pool C) Kernel D) Port

Answer: **B – Application Pool**

Q54. Cmdlet used to install Windows roles/features:

Options: A) Add-Feature B) Install-WindowsFeature C) Enable-Role D) Setup-Role

Answer: **B – Install-WindowsFeature**

Q55. PowerShell output is stored as:

Options: A) Text B) Variable C) Object D) File

Answer: **C – Object**

Q56. Default RADIUS authentication port number is:

Options: A) 80 B) 1812 C) 443 D) 53

Answer: **B – 1812**

Q57. IIS worker process name is:

Options: A) iis.exe B) w3wp.exe C) httpd.exe D) svchost.exe

Answer: **B – w3wp.exe**

Q58. IPv6 automatic address configuration uses:

Options: A) DHCP B) SLAAC C) APIPA D) NAT

Answer: **B – SLAAC**

Q59. Cmdlet used to get help in PowerShell:

Options: A) Help B) Get-Help C) Show-Help D) Info

Answer: **B – Get-Help**

Q60. Tool used to manage Hyper-V:

Options: A) Server Manager B) Hyper-V Manager C) Task Manager D) Control Panel

Answer: **B – Hyper-V Manager**

S1. Admin wants to run one command on 100 servers.

Options: A) Local cmdlet B) Invoke-Command C) IIS D) Hyper-V

Answer: **B – Invoke-Command**

S2. Two VMs must communicate but not access internet.

Options: A) External B) Internal C) Private D) NAT

Answer: **C – Private**

S3. Organization needs centralized VPN authentication.

Options: A) DNS B) DHCP C) NPS D) IIS

Answer: **C – NPS**

S4. Secure a website hosted on IIS.

Options: A) FTP B) SSL Certificate C) NAT D) DHCP

Answer: **B – SSL Certificate**

S5. VM needs access to physical network.

Options: A) Private B) Internal C) External D) Loopback

Answer: **C – External**

S6. Daily administrative tasks must run automatically.

Options: A) Cmdlets B) Scripts C) Services D) Policies

Answer: **B – Scripts**

S7. Linux-based web hosting is required.

Options: A) IIS B) Apache C) FTP D) DNS

Answer: **B – Apache**

S8. Network requires more IPs and no NAT.

Options: A) IPv4 B) CIDR C) IPv6 D) APIPA

Answer: **C – IPv6**

S9. Secure PowerShell remote access is required.

Options: A) Telnet B) HTTP C) HTTPS D) FTP

Answer: **C – HTTPS**

S10. Fast testing environment is required.

Options: A) Physical server B) Virtual machine C) Router D) Switch

Answer: **B – Virtual machine**

S11. Two IIS websites must be isolated.

Options: A) Ports B) Application Pools C) DNS D) FTP

Answer: **B – Application Pools**

S12. System gets 169.254.x.x IP address.

Options: A) DNS failure B) DHCP failure C) Routing issue D) Firewall issue

Answer: **B – DHCP failure**

S13. Persistent remote admin session is required.

Options: A) Invoke-Command B) Enter-PSSession C) Script D) Task

Answer: **B – Enter-PSSession**

S14. RADIUS logs are needed for compliance.

Options: A) Authentication B) Authorization C) Accounting D) DHCP

Answer: **C – Accounting**

S15. VM should communicate only with host.

Options: A) External B) Internal C) Private D) NAT

Answer: **B – Internal**