**Member ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Rank: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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Description automatically generated

**Server Administration using Microsoft**

(310)

**Regional 2024**

**CONCEPT KNOWLEDGE:**

Multiple Choice (50 @ 2 points each) \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (100 points)

**Test Time: 60 minutes**

**GENERAL GUIDELINES:**

*Failure to adhere to any of the following rules will result in disqualification:*

1. Contestant must hand in this test booklet and all printouts if any. Failure to do so will result in disqualification.
2. No equipment, supplies, or materials other than those specified for this event are allowed in the testing area.  No previous BPA tests and/or sample tests (handwritten, photocopied, or keyed) are allowed in the testing area.
3. Electronic devices will be monitored according to ACT standards.
4. For any interest calculations, assume a 360-day year.
5. Unless otherwise stated, assume that all plant assets were purchased on January 1.
6. Unless otherwise stated, assume that the overtime rate is 1.5 regular time pay for any hours worked in excess of 40 hours per week.

**Multiple Choice Questions**

*Directions:* Identify the letter of the choice that best completes the statement or answers the question.

1. Which of the following is considered a strong password?
2. Password123
3. P@$$w0rd!
4. 123456789
5. MyDog'sName
6. Which of the following password lengths is generally recommended for strong passwords?
7. 4 characters
8. 8 characters
9. 12 characters
10. 16 characters
11. Which of the following is a primary function of the Windows DNS server?
12. Authenticating user credentials
13. Translating domain names into IP addresses
14. Managing network firewalls
15. Controlling access to shared folders
16. Which of the following DNS record types is used to identify the mail server for a domain?
17. A
18. MX
19. CNAME
20. PTR
21. In Windows DNS, what is the purpose of a forwarder?
22. To resolve external DNS queries
23. To replicate DNS zones between servers
24. To configure conditional forwarding rules
25. To cache DNS responses locally
26. When troubleshooting network connectivity issues, which of the following commands can be used to check if a remote host is reachable?

A. ping

B. ipconfig

C. nslookup

D. tracert

1. Which of the following commands is used to display the IP configuration information of a Windows computer?

A. ifconfig

B. ipconfig

C. netstat

D. ping

1. What is the term for the process where data is distributed across multiple physical disks to increase performance and redundancy?

A. Striping

B. Mirroring

C. Parity

D. Chunking

1. Which RAID level uses parity for data redundancy and distributes it across all disks?

A. RAID 0

B. RAID 1

C. RAID 5

D. RAID 10

1. Which RAID level offers no data redundancy and simply concatenates the storage space of multiple disks?

A. RAID 0

B. RAID 1

C. RAID 5

D. RAID 6

1. In the context of RAID technology, what does the acronym RAID stand for?

A. Rapid Array of Inexpensive Disks

B. Redundant Array of Independent Drives

C. Redundant Array of Inexpensive Disks

D. Rapid Array of Independent Drives

1. Which of the following is a characteristic of cloud computing?

A. Reduced control over data

B. Decreased scalability

C. Inability to access data remotely

D. Low initial investment cost

1. What is the primary purpose of a VLAN?

A. To provide a single broadcast domain across multiple physical networks

B. To reduce the size of broadcast domains

C. To increase the number of IP addresses available on a network

D. To increase network security by encrypting all data

1. What shortcut key can be used to open the Task Manager in Windows?
2. Ctrl + Shift + Esc
3. Ctrl + Alt + T
4. Alt + F4
5. Windows key + R
6. What tab in Task Manager shows the overall performance of system components such as CPU, memory, and disk usage?
7. Applications
8. Services
9. Performance
10. Details
11. The Task Manager can be used to end:
12. Running applications only
13. Background processes only
14. Both running applications and background processes
15. Neither running applications nor background processes
16. Which of the following would not typically be found in the Processes tab of the Task Manager?
17. CPU usage
18. Network usage
19. GPU temperature
20. Memory usage
21. Which of the following is not a type of Group Policy setting?
22. Administrative Templates
23. Security settings
24. Software settings
25. Privacy settings
26. What command-line tool can be used to update Group Policy settings?
27. gpupdate
28. gprefresh
29. gpmodify
30. gpchange
31. What's the purpose of the "gpresult" command?
32. To manually update Group Policy
33. To display the Resultant Set of Policy information
34. To check the status of a specific GPO
35. To restart the Group Policy service
36. In the context of Active Directory, what does "OU" stand for?
37. Operating Unit
38. Organizational Unit
39. Operation Unit
40. Organization User
41. In Windows, what does the command 'sfc /scannow' do?
42. It scans for and fixes problems with system files
43. It scans for malware and removes them
44. It checks the hard drive for errors and fixes them
45. It removes unnecessary files to free up disk space
46. Which of the following tools in Windows Server is commonly used for monitoring server performance?
47. Task Manager
48. Windows Admin Center
49. Performance Monitor
50. Command Prompt
51. What is the primary role of the IIS (Internet Information Services) on a Windows Server?
52. It is used for file sharing
53. It serves as an email server
54. It is used to host websites and web applications
55. It acts as a firewall
56. Which Windows Server feature allows you to manage permissions for accessing websites?
57. Network Policy and Access Services
58. Active Directory
59. Remote Desktop Services
60. DNS Server
61. If a website hosted on a Windows Server is not accessible, which tool can be used to check if the server's network connection is up?
62. Performance Monitor
63. Event Viewer
64. Command Prompt using the 'ping' command
65. Active Directory
66. What component in IIS is used to prevent unauthorized access to certain areas of your website?
67. Authentication
68. Directory Browsing
69. Compression
70. HTTP Redirect
71. In Windows Server, which service would you configure to translate domain names into IP addresses?
72. Internet Information Services (IIS)
73. Active Directory
74. DHCP Server
75. DNS Server
76. Which of the following Windows Server roles enables you to manage digital certificates
77. Remote Desktop Services
78. Active Directory Certificate Services
79. Web Server (IIS)
80. Network Policy and Access Services
81. Which of the following is responsible for managing hardware devices in an operating system?
82. Device Manager
83. Control Panel
84. Task Manager
85. Registry Editor
86. What is the purpose of a device driver?
87. To connect hardware devices physically
88. To configure network settings
89. To allow communication between the operating system and hardware devices
90. To manage power settings of devices
91. Which Windows utility can be used to install and update device drivers?
92. Windows Update
93. Device Manager
94. Control Panel
95. Task Manager
96. Which of the following can be a common cause of hardware device conflicts in a computer system?
97. Incompatible drivers
98. High network traffic
99. Low disk space
100. Insufficient RAM
101. You have just installed a new graphics card in your computer, but the screen remains blank. What should you check first?
102. Monitor cable connections
103. Network settings
104. Power supply unit
105. Sound card drivers
106. Which deployment method is commonly used for deploying Windows Server to multiple physical servers simultaneously?
107. Windows Deployment Services (WDS)
108. Windows Server Update Services (WSUS)
109. System Center Configuration Manager (SCCM)
110. Windows Automated Deployment Kit (ADK)
111. Which deployment option allows administrators to perform an in-place upgrade of an existing Windows Server installation?
112. Clean installation
113. Side-by-side installation
114. Upgrade installation
115. Rollback installation
116. Which PowerShell cmdlet is used to add a new Windows Server role or feature?
117. Install-WindowsFeature
118. Add-WindowsFeature
119. Enable-WindowsFeature
120. Import-WindowsFeature
121. If a Windows computer is unable to obtain an IP address automatically, which of the following could be the cause?
122. Faulty network cable
123. Incorrect DNS server address
124. Disabled network adapter
125. DHCP server outage
126. Which Windows utility can be used to modify local security policy settings?
127. System Configuration
128. Task Manager
129. Group Policy Editor
130. Device Manager
131. Which security policy can be configured to enforce password complexity requirements?
132. Account Lockout Policy
133. Password Policy
134. Security Options
135. Audit Policy
136. Which policy determines the password history requirements?
137. Account Lockout Policy
138. Password Policy
139. User Rights Assignment
140. Security Options
141. Which policy controls the ability to modify file and folder permissions?
142. Account Lockout Policy
143. Password Policy
144. User Rights Assignment
145. Security Options
146. A client is unable to connect to the Domain Controller. What Windows command would you use to verify if the Domain Controller is accessible over the network?
147. ping
148. netstat
149. nslookup
150. ipconfig
151. Which protocol does Active Directory use for directory services?
152. HTTP
153. HTTPS
154. LDAP
155. SNMP
156. A user is unable to log into their account. You check and their account is not locked out. What is another common cause for this issue?
157. The user's password has expired.
158. The user's computer is turned off.
159. The user's home folder is full.
160. The user's screen is broken.
161. What could be the reason if a Domain Controller is unable to replicate with its partners?
162. The server has run out of storage
163. The server's clock is not synchronized
164. The server has been demoted
165. The server is not a global catalog server
166. Which service in Windows Server is responsible for time synchronization within a domain?
167. Windows Time service
168. Network Time Protocol service
169. Kerberos
170. Active Directory Domain Service
171. What utility can you use to check the health of a domain controller?
172. ntdsutil
173. netdom
174. dcdiag
175. dsquery
176. You want to encrypt a folder on a Windows Server. Which of the following methods can be used to apply EFS encryption to the folder?
177. Right-click the folder, select Properties, and enable the "Encrypt contents to secure data" option.
178. Open Command Prompt and use the "encrypt-folder" command.
179. Access the Local Group Policy Editor and enable the "EFS Encryption" policy for the folder.
180. Use the Disk Management utility to encrypt the entire disk containing the folder.
181. What is the recommended way to configure a printer for multiple departments, ensuring each department can only print to their designated printer?
182. Configure access control lists (ACLs) on the printers.
183. Use printer pooling to assign printers to each department.
184. Create separate printer shares for each department.
185. Install virtual printers for each department.