MCSE 70-740:

- 1. Installing and Configuring Windows 10
- 2. Windows 10 Editions
- 3. Sharing Resources
- 4. Requirements for Connecting Two or More Systems together
- 5. Access to Shared Files and Folders
- 6. Permission Types
- 7. Printer Sharing on Windows 10, 8 and 7
- 8. Inheriting Permissions
- 9. Ad-hoc on Windows 10, 8 and 7
- 10. Host Sharing and Internet Connection Sharing
- 11. Remote Desktop Configuration
- 12. Telnet
- 13. Managing Disks
- 14. Backup and Restore
- 15. Installing Windows Server 2022
- 16. Installing Active Directory Domain Services
- 17. Forest and Domain Functional Level
- 18. Automating the Creation of User Accounts
- 19. Creating and Deleting an OU Object
- 20. Creating Users with Windows PowerShell and VBScript
- 21. Restarting a DC in DSRM Locally (Directory Service Restore Mode)
- 22. Managing an Enterprise with Groups
- 23. Automating the Creation and Management of Groups
- 24. Administering Groups in an Enterprise
- 25. Automating the Creation of Computer Objects
- 26. Working with Active Directory Snap-ins
- 27. Delegation and Security of Active Directory Objects
- 28. Understanding and Managing Permissions with Inheritance
- 29. Implementing Group Policy
- 30. Managing Group Policy Scope
- 31. Supporting Group Policy
- 32. Delegating the Support of Computers
- 33. Managing Software with Group Policy Software Installation
- 34. Configuring Password and Lockout Policies
- 35. Configuring Read-Only Domain Controllers

MCSE 70-741:

- 1. OSI vs TCP/IP
- 2. Understanding IP Version 4 Addressing
- 3. IP Classes
- 4. IP Addresses
- 5. Network and Host Parts and Default Masks
- 6. RFC 1918 Private Address Space
- 7. Math Operations for Subnetting
- 8. Analyzing Subnet Mask
- 9. Choosing the Subnets of a Classful Network/Subnet Zero
- 10. Designing a Subnetting Scheme Using VLSM
- 11. Finding VLSM Overlaps
- 12. Finding Best Summary
- 13. Choosing a Subnet Mask that Meets Design Requirements
- 14. Understanding IP Version 6 Addressing
- 15. IPV6 Addressing and Summarization Rules
- 16. Common IPV6 Multicast Addresses
- 17. IPv6 Address Configuration Options
- 18. Understanding Name Resolution in Windows Server 2019 Networks
- 19. Name Resolution Methods in Windows
- 20. What Is Link Local Multicast Name Resolution (LLMNR)?
- 21. What Is NetBIOS Name Resolution?
- 22. NetBIOS Name Resolution Methods
- 23. Enabling and Disabling NetBIOS
- 24. What Is DNS Name Resolution?
- 25. DNS Components
- 26. Understanding Recursion and Iteration
- 27. Root Hints
- 28. Deploying a DNS Server
- 29. Deploying a DNS Server on a Domain Controller
- 30. Deploying a DNS Server on a Stand-alone or Member Server
- 31. When to Use Conditional Forwarding
- 32. Creating and Configuring Zones
- 33. DNS Structure
- 34. DNS Zone
- 35. Creating Zones

- 36. Choosing Zone Type
- 37. Choosing a Zone Name
- 38. Configuring Dynamic Update Settings
- 39. Resource Records
 - a. SOA (Start of Authority):
 - b. Host (A or AAAA records):
 - c. Alias (CNAME)
 - d. PTR (Pointer)
 - e. Mail Exchanger (MX)
 - f. SRV (Service Location)
 - g. NS (Name Servers)
- 40. Creating Resource Records
- 41. Configuring Zone Replication and Transfers
- 42. Creating Custom Application Directory Partitions
- 43. Configuring Delegation
- 44. Configuring DNS Client Settings
- 45. Specifying DNS Servers
- 46. Specifying a Computer Name and DNS Suffixes
- 47. Configuring Computer Name and DNS Suffixes for Self-Registration
- 48. Configuring a Connection-Specific DNS Suffix
- 49. Configuring IP Routing
- 50. Routing Overview
- 51. Types of Routing Protocols
- 52. Static Routing Protocol
- 53. Dynamic Routing Protocols
- 54. RRAS (Routing and Remote Access Services)
- 55. Installing Routing and Remote Access Services
- 56. Static and Default Routing
- 57. Configuring Static Routing with Routing and Remote Access
- 58. Configuring RIP
- 59. Installing Domain Controllers
- 60. Installing a Domain Controller with the Windows Interface
- 61. Understanding Single Master Operations
- 62. Forest-Wide Operations Master Roles
- 63. Domain-Wide Operations Master Roles
- 64. Placing Operations Masters
- 65. Identifying Operations Masters With User Interface Tools

- 66. Identifying Operations Masters with Command-Line Tools
- 67. Transferring Operations Master Roles
- 68. Recognizing Operations Master Failures
- 69. Seizing Operations Master Roles
- 70. Returning a Role to Its Original Holder
- 71. Managing Multiple Domains and Trust Relationships
- 72. Dedicated Forest Root Domain (Single-Domain Forest)
- 73. Trust Relationships Within a Domain
- 74. Trust Relationships Between Domains
- 75. Characteristics of Trust Relationships
- 76. Kerberos Authentication Within a Forest
- 77. Manual Trusts
 - a. Shortcut trusts
 - b. External trusts
 - c. Realm trusts
 - d. Forest trusts
- 78. Creating Manual Trust Relationships
- 79. Administering Trusts (Validate)
- 80. Selective Authentication
- 81. Configuring IPSec
- 82. Identifying IPSec Scenarios
- 83. IPSec Policies
- 84. Security Associations (SA)
- 85. Authentication Methods for IPSec
- 86. Assigning a Predefined IPSec Policy
- 87. Cryptography
- 88. Configuring Sites and Subnets
- 89. Understanding Sites
- 90. Replication Traffic
- 91. Planning Sites
- 92. Summarizing Site Planning Criteria
- 93. Defining Subnets
- 94. Configuring the Global Catalog
- 95. Universal Group Membership Caching (UGMC)
- 96. Connection Objects
- 97. Intra-site Replication
- 98. Notification

- 99. Site Link
- 100. Replication Transport Protocols
- 101. Bridgehead Servers
- 102. Preferred Bridgehead Servers
- 103. Site Link Transitivity
- 104. Site Link Bridges
- 105. Site Link Costs
- 106. Configuring Inter-site Replication
- 107. Replication Frequency
- 108. Replication (Site Link) Schedules
- 109. Replication Frequency on Connection Object



MCSE 70-742:

- 1. Installing a DHCP Server
- 2. Understanding DHCP Address Assignment
- 3. Understanding Address Leases
- 4. Understanding DHCP Scopes
- 5. Understanding DHCP Options
- 6. Adding the DHCP Server Role
- 7. Configuring a DHCP Server
- 8. Performing Post-installation Tasks
- 9. Creating Address Exclusions
- 10. Creating Reservations
- 11. Adjusting Lease Durations
- 12. Configuring Additional DHCP Options
- 13. Controlling DHCP Access Through MAC Filtering
- 14. DHCP Delay Configuration
- 15. Using the DHCP Split-Scope Configuration Wizard
- 16. Using the DHCP Failover
- 17. Edit/Remove DHCP Failover
- 18. DHCP Policies
- 19. DHCP Policies Configuration
- 20. Configuring Network Address Translation
- 21. NAT and PAT
- 22. Types of NAT
- 23. Network Address Translation Concepts
- 24. Configuring Internet Connection Sharing
- 25. Configuring Network Address Translation Using Routing And Remote Access
- 26. Connecting to Remote Networks
- 27. Virtual Private Networks (VPN)
- 28. Secure Protocol Characteristics
- 29. VPN Protocols Supported by Windows Server 2019
- 30. Types of Authentication Methods
- 31. Configuring the VPN Server
- 32. Configuring the VPN Client
- 33. Configuring Network Policy Server
- 34. Windows Server 2019 Network Policy Server

- 35. Network Policy Server Usage Scenarios
- 36. Configuring NPS
- 37. Configuring Windows Firewall
- 38. Firewall Profiles
- 39. Firewall Traffics
- 40. Configuring Firewall Settings with Group Policy
- 41. Understanding Windows Server Update Services
- 42. WSUS Overview
- 43. WSUS Architecture (Organizations with One Office)
- 44. WSUS Architecture (Organizations with Multiple Offices)
- 45. Types of WSUS Servers
 - a. Upstream Server
 - b. Downstream Server
- 46. Configuring WSUS
- 47. Managing File Security
- 48. NTFS File Permissions
- 49. Protecting Files and Folders with EFS
- 50. Encrypting File System (EFS)
- 51. EFS Recovery
- 52. Bitlocker
- 53. BitLocker Modes
 - a. TPM with PIN
 - b. TPM with Startup Key
 - c. TPM with PIN and Startup Key
- 54. BitLocker without a TPM
- 55. BitLocker To Go
- 56. BitLocker Command to Lock a Volume
- 57. File Services
- 58. Installing the File Services Server Role
- 59. File Service Features
- 60. Quota Management
- 61. Screen Management
- 62. Report Management
- 63. DFS Management
- 64. Replication Management
- 65. Understanding Active Directory Certificate Services
- 66. Standalone vs. Enterprise Cas

- 67. Creating the CA Hierarchy
- 68. Best Practices for AD CS Deployments
- 69. Additional Planning Requirements
- 70. Preparing for AD CS Installation
- 71. Installing and Configuring Active Directory Certificate Services
- 72. Obtain and Install the Issuing CA Certificate
- 73. Protecting (Backup) AD CS Configuration
- 74. CA Role Services
- 75. DHCP Relay Agent
- 76. Windows Server Backup
- 77. Installing Windows Server Backup Features
- 78. Manually Performing a Backup
- 79. Scheduling Backups
- 80. Recovering Files or Volumes
- 81. Recovering from a Backup When Windows is not Online
- 82. Data Recovery Agent
- 83. Configuring a Data Recovery Agent



MCSE 70-743:

- 1. Deploying a Remote Desktop Session Host
- 2. Remote Desktop Services
- 3. Understanding Remote Desktop Services
- 4. Comparing Remote Desktop Feature and Remote Desktop Services
- 5. Installing Remote Desktop Services
- 6. Uninstalling Applications
- 7. Configuring and Managing Remote Desktop Clients
- 8. Configuring Remote Desktop Client Settings
- 9. Configuring a Remote Desktop Session Host
- 10. Overview of RemoteApp
- 11. Configuring a Server to Host RemoteApp Programs
- 12. Overview of Remote Desktop Gateway
- 13. Remote Desktop Virtualization Host
- 14. Remote Desktop Connection Broker
- 15. Monitoring by CCProxy
- 16. Monitoring by RAdmin
- 17. Understanding Windows Deployment Services
- 18. Understanding WIM Files
- 19. WDS Tool Kits
- 20. Windows Automated Installation Kit (WAIK) Tools
- 21. Sysprep
- 22. Configuring Windows Deployment Services
- 23. Windows Deployment Methods
- 24. Understanding WDS Infrastructure Components
- 25. Understanding WDS Infrastructure Components
- 26. What Is PXE?
- 27. WDS Configuration
- 28. Deploying Virtual Machines
- 29. Why Virtualization?
- 30. Understanding Hyper-V
- 31. Create a Virtual Machine
- 32. Client Naming Policy
- 33. ARM Processor
- 34. OEM
- 35. UEFI

- 36. How to Install Hyper-V on vmware Workstation 12
- 37. Configuring Server Storage
- 38. Understanding Server Storage Technologies
- 39. Direct-Attached Storage (DAS)
- 40. Network-Attached Storage (NAS)
- 41. Storage-Area Networks (SAN)
- 42. Managing Disks, Volumes, and Partitions on Windows Server
- 43. Configuring Server Clusters
- 44. Server Cluster Fundamentals
- 45. Network Load Balancing
- 46. Failover Clustering
- 47. Configuring an NLB Cluster
- 48. Configuring a Failover Cluster
- 49. Advanced Failover Cluster Configuration
- 50. Installing and Configuring the Web Server (IIS) Role
- 51. Web Protocols
- 52. Verifying the IIS Installation by Using Internet Explorer
- 53. Understanding Sites and Site Bindings
- 54. Managing the Default Web Site
- 55. Adding Websites
- 56. Configuring Web Site Limits Settings
- 57. Understanding Web Applications
- 58. Creating Web Applications
- 59. Configuring Recycling Settings
- 60. Working with Virtual Directories
- 61. Creating a Virtual Directory
- 62. Understanding ApplicationHost.config
- 63. Restoring the ApplicationHost.config File
- 64. Using Centralized Configuration for Server Farms
- 65. Configuring IIS Security
- 66. Enabling Remote Management
- 67. Creating IIS Manager Users
- 68. Defining IIS Management Permissions
- 69. Configuring Feature Delegation
- 70. Connecting to a Remote Server by Using IIS Manager
- 71. Controlling Access to Web Services
- 72. Understanding Anonymous Authentication

- 73. Understanding Challenge-Based Authentication
- 74. Configuring Authentication Settings
- 75. Creating URL Authorization Rules
- 76. Understanding Server Certificates
- 77. Creating an Internet Certificate Request
- 78. Completing an Internet Certificate Request
- 79. Creating Other Certificate Types
- 80. Importing and Exporting Certificates
- 81. Enabling Secure Sockets Layer
- 82. Configuring IP Address and Domain Restrictions
- 83. Configuring HTTP Redirect
- 84. Creating a Web Site (Summary)
- 85. Configuring FTP
- 86. Installing the FTP Server
- 87. Creating a New FTP Site
- 88. Creating Application and Virtual Directories
- 89. Managing FTP Site Bindings
- 90. Configuring Authentication Options
- 91. Implementing IP Address and Domain Restrictions
- 92. Managing FTP Messages
- 93. Configuring Simple Mail Transfer Protocol (SMTP)
- 94. Active Directory Right Management Services (ADRMS)
- 95. ADRMS Configuration
- 96. Managing Printers
- 97. Installing the "Print and Document Services" Server Role
- 98. Sharing Printers
- 99. Configuring Print Server and Printer Permissions
- 100. Configuring Printer Pooling
- 101. Managing Internet Printing
- 102. Deploying Printers with Group Policy
- 103. Migrating Printers
- 104. Understanding and Installing AD LDS
- 105. Removing AD LDS
- 106. Preparing for AD LDS Instance Creation
- 107. Creating AD LDS Instances
- 108. Working with AD LDS Instances
- 109. Planning for Migration, Upgrade, and Restructuring