Module 14: Identity with Windows Server

31. Installing and Configuring Hyper-V in Windows Server 2016

Open Server Manager → Click Manage → Select Add Roles and Features.

Choose Role-based or feature-based installation → Select the server.

Check Hyper-V → Click Next and Install.

Restart the server if required.

Open Hyper-V Manager → Create Virtual Switches and Virtual Machines as needed.

32. Monitoring Server Performance & Managing Event Logs

Use Performance Monitor to track CPU, RAM, Disk, and Network usage.

Use Task Manager for real-time monitoring.

Open Event Viewer (eventvwr.msc) to check logs for system, security, and application events.

Use Reliability Monitor for system health analysis.

33. Storage Options in Windows Server

Local Storage – Direct-attached drives.

Network-Attached Storage (NAS) – Shared storage over a network.

Storage Area Network (SAN) – High-performance storage with block-level access.

Storage Spaces – Software-based RAID solution.

ReFS & NTFS – File systems with different benefits.

34. Role & Configuration of File Server

Role: Stores and manages shared files across the network.

Configuration Steps:

Install File and Storage Services via Server Manager.

Create shared folders using Shared Folders MMC or File Explorer.

Set NTFS and Share permissions for access control.

Enable Shadow Copies for file recovery.

35. Implementing & Managing Distributed File System (DFS)

Install DFS Namespaces and DFS Replication via Server Manager.

Open DFS Management → Create a Namespace.

Add DFS folders and targets.

Configure DFS Replication to sync files between servers.

Set replication schedules and priorities.

36. Built-in Backup & Recovery Options in Windows Server

Windows Server Backup – Used for full, incremental, and scheduled backups.

Volume Shadow Copy Service (VSS) – Allows point-in-time snapshots.

System Restore & Recovery Drive – Restores critical system files.

Active Directory Recycle Bin – Restores deleted AD objects.

37. Configuring Windows Server Backup

Install Windows Server Backup (wbadmin).

Open Backup Console → Select Backup Schedule.

Choose Full Server, Custom, or System State.

Select Backup Storage (Disk, Network, or Volume).

Set backup frequency and enable retention policies.

38. Restoring Files and Folders Using Windows Server Backup

Open Windows Server Backup.

Click Recover → Select the backup source.

Choose Files and Folders or System State Recovery.

Select the version and destination to restore.

Complete the restoration process.

39. Common Troubleshooting for Windows Server Startup Issues

Use Safe Mode (F8 or Shift+Restart).

Check Event Viewer for boot errors.

Use Startup Repair from recovery options.

Run sfc /scannow and chkdsk.

Check Boot Configuration Data (BCD) using bcdedit.

40. Troubleshooting Network Connectivity Issues

Run ipconfig /all to check IP settings.

Use ping, tracert, nslookup for network tests.

Check firewall settings and logs.

Restart DNS, DHCP, and network adapters.

Verify Group Policy and Network Policies.

41. Common Active Directory Issues & Troubleshooting

Replication Errors → Use repadmin /replsummary.

User Login Issues → Check event logs and reset passwords.

Group Policy Not Applying → Run gpupdate /force and check gpresult.

Account Lockouts → Use netlogon.log and AD Lockout tools.

42. Troubleshooting Performance Problems

Use Task Manager & Resource Monitor for real-time analysis.

Run Performance Monitor (perfmon.msc) to analyze bottlenecks.

Check disk performance using chkdsk and Defragmentation.

Optimize services by disabling unnecessary ones.

Monitor Memory, CPU, and Network usage.

Let me know if you need more details!