Windows Server 2016 interview question

1. What is Server?

Ans- A server is a computer that provides services to other computers. It may

serve data to systems on a local area network (LAN) or a wide area network

(WAN) over the Internet.

2. What are the different Server operating system of Microsoft?

Ans- The different server operating system of Microsoft are Windows NT 4.0,Windows 2000 Advanced Server, Windows Server 2003, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2 and Windows Server 2016 Windows Server 2019 Windows Server 2022.

3. What are the main roles in Windows Server 2016?

1. Active Directory Certificate Services

2. Active Directory Domain Services

3. Active Directory Federation Services

4. Active Directory Lightweight Directory Services

5. Active Directory Rights Management Services

6. Application Server

7. DHCP Server

8. DNS Server

9. Fax Server

10. File and Storage Services

11. Hyper-V

12. Network Policy and Access Services

13. Print and Document Services

14. Remote Access

15. Remote Desktop Services

16. Volume Activation Services

17. Web Server (IIS)

4. Compare Windows Server 2019/2016?

Windows Server 2019 is the latest release of window server that uses the long-term servicing channel or shortened LTSC.
Its comes with the following features:
Windows Subsystem for Linux
Support for Kubernetes
Other GUI new features from Win10 version 1809
Storage Space Direct
Storage Migration Service
Storage Replica
System Insights
Improved Windows Defender

5. What is the minimum hardware requirement for installing Windows Server 2016?

Component	Windows Server 2016
Processor	1.4 Ghz, 64-bit Processor
RAM	Server Core: 512 MB ECC RAM
	Desktop Exp: 2 GB ECC RAM
Disk Space	32 GB
Screen Resolution	1024*768 Pixels

6. Maximum Hardware supported in each edition of Windows Server 2012/2016?

Windows Server Editions	Memory	Physical Processor
Windows Server 2012 Datacenter	4 TB	64
Windows Server 2012 Standard	4 TB	64
Windows Server 2012 Essential	64 GB	2
Windows Server 2012 Foundation	32 GB	1
Windows Server 2016 Datacenter	24 TB	64
Windows Server 2016 Standard	24 TB	64

7. What is Server Core?

Ans- Server Core is a minimal server installation option for the Windows Server 2008 R2 operating system.Server Core provides a low-maintenance environment capable of providing core server

roles.Server Core is designed to provide an environment that reduces: Servicing requirements. Management requirements.

8. Explain the different types of Directory Partitions.

The different types of Directory Partitions include the following:

Application Partition: Application partitions stores various data related to applications in the Active Directory. For instance – ForestDNSZones and DomainDNSZones

Configuration Partition: Configuration Partition stores all necessary data about the Active Directory. The data incorporates Site, site-interface, subnet and so forth. This parcel likewise replicates all domain
controllers that are available in the Forest.

Domain Partitions: Domain Partitions stores the data of the domain that incorporates client, group, computer, printer and so forth. This partition also replicates all domain controllers that might be available
in the domain just like Configuration Partition.

Schema Partition: Schema Partition stores every one of the details of the various items and their respective properties. It additionally replicates other domain controllers that are available in the Forest.

9. What is Nano Server?

Nano Server is a remotely administered server operating system optimized for private clouds and datacenters. The Nano Server installation option is available for Standard and Datacenter editions of Windows Server 2016.

10. What is Active Directory Domain Services?

Ans- Active Directory Domain Services (ADDS) is a directory service developed

by Microsoft and used to store objects like User, Computer, printer, Network information.

11. What is Domain Controller?

Ans- Domain Controller is the server which holds the AD database, All AD

changes get replicated to other DC and vise vase.

12. What is Domain?

Ans- A domain represents the group of network resources that includes

computers, printers, applications and other resources.

13. What is domain Tree?

Ans- Domain tree is a hierarchical arrangement of windows Domain that share

a contiguous name space.

14. What is Forest?

Ans- Forest consists of multiple Domains trees. The Domain trees in a forest do

not form a contiguous name space however share a common schema and global catalog (GC).

15. What is Global Catalog (GC)?

Ans- The Global Catalog is a distributed data repository that contains a

searchable, partial representation of every object in every domain in a multi domain Active Directory forest. The global catalog is stored on domain controllers that have been designated as global catalog servers and is distributed through multi master replication. Searches that are directed to the global catalog are faster because they do not involve referrals to different domain controllers.

16. What is LDAP?

Ans- LDAP (Lightweight Directory Access Protocol) is a software protocol for

enabling anyone to locate organizations, individuals, and other resources such as files and devices in a network, whether on the public Internet or on a corporate intranet.

17. Where is the ADDS database held?

The Active Directory Database is Stored in %SYSTEM ROOT%\NDTS folder. Main

database file for active directory is ntds.dit.

18. What is the SYSVOL folder?

Ans- SYSVOL is a shared folder which contains files which is common for the

domain. This share will be created automatically when set up the DC.

19. What are the AD naming contexts (partitions).

ANS- Every domain controller contains the following four directory partitions:

a. Configuration

b. Schema

c. Domain

d. Application Partition:

20. What is FSMO? What are the FSMO roles?

Ans- Flexible single master operation (FSMO) is a Microsoft Active Directory feature that is a specialized domain controller task used when standard data transfer and update methods are inadequate. Tasks that do not suit multimaster replication are only viable as flexible single-master operations. Following are the FSMO roles in Active Directory

a) Schema Master

b) Domain-Naming-Master

c) Infrastructure Master

d) RID Master

e) PDC Emulator

21. What is site?

Ans- Sites in Active Directory represent the physical structure, or topology, of

your network. Active Directory uses topology information,stored as site and site link objects in the directory, to build the most efficient replication topology.

22. What is Trust relationship ?

Ans- Trust relationship is a logical relationship established between two domains

which allows authentication.

23. What are the type of trust in Windows Server 2016?

Ans- Following are the type of trust in Windows Server2016

Parent-child Trust: Parent-child Trust is an implicitly established, two-way, transitive trust when you add a new child domain to a tree.

Tree-root Trust: Tree-root Trust is an implicitly established, two-way, transitive trust when you add a new tree root domain to a forest.

Shortcut Trust: Shortcut Trust is an explicitly created, transitive trust between two domains in a forest to improve user logon times. Shortcut Trust will make a trust path shorter between two domains in the same forest. The Shortcut Trust can be one-way or two-way.

External Trust: External Trust is explicitly created, non-transitive trust between Windows Server 2003 domains that are in different forests or between a Windows Server 2003 domain and Windows NT 4 domain. The External Trust can be one-way or two-way.

Realm Trust: Realm Trust is explicitly created transitive or non-transitive trust between a non Windows Kerberos realm and a Windows Server 2003 domain. This trust helps to create trust relationship between Windows Server 2003 domain and any Kerberos version 5 realm. The Realm Trust can be and one-way or two-way.

Forest Trust: Forest Trust is explicitly transitive (between two forests) created trust between two forest root domains. The Forest Trust can be one-way or two- way.

24. What is OU?

Ans- An Organizational Unit (OU) is a container within a Microsoft Active Directory domain which can hold users, groups and computers. It is the smallest unit to which an administrator can assign Group Policy settings or account permissions.

25. What are Fine-Grained Passwords?

Ans- Fine-Grained password policies are use to specify multiple password policies in a single domain and apply different restrictions for password and account lockout policies to different sets of users in a domain.

26. What is NTDSUTIL?

Ans- Ntdsutil.exe is a command-line tool for accessing and managing a Windows

Active Directory (AD) database.

27. What are RODCs?

Ans- RODC is a new domain controller (DC) launched with Windows Server 2008. It lets you store an Active Directory (AD) domain database read-only copy on the DC.

28. What is Additional Domain Controller (ADC)?

Ans- An Additional Domain Controller is required for services redundancy and

for domain authentication improvement in remote Site. Additional Domain Controllers avoid business discontinuity in case of server failure for the primary Domain Controller.

29. What is Child Domain Controller?

Ans- A child domain is another domain under a parent one in an active directory

domain hierarchy. A child domain under a parent first root domain form a Tree. All Trees exists within a Forest, a forest is the security boundary.

30. What is DNS Server?

Ans- DNS Server is used to resolve FQDN (Fully Qualified Domain Name) in to IP address and vice versa.

31. What is the post number of DNS?

Ans- The port number of DNS is 53.

32. What is forward lookup?

Ans- Forward lookup is used to resolve FQDN name into IP address.

33. What is reverse lookup?

Ans- Reverse lookup is used to map IP address into FQDN name.

34. What is resource record?

Ans- It is a record provides the information about the recourses available in network infrastructure.

35. What are Primary, Secondary, Stub and AD integrated zones?

Primary Zone- DNS server hosts is a primary zone and it stores the master copy of zone data in a local file or in AD DS

Secondary Zone: Secondary zone is merely a copy of a primary zone that is hosted on another server, it cannot be stored in AD DS.

Stub Zone: A stub zone contains the list of authoritative DNS servers for a zone (domain) and host records that contain their IP addresses (known as glue records). It also contains the IP address of at least one master server for the zone.

Active Directory Integrated Zones- Active Directory integrated zone data is stored as an Active Directory object and is replicated as part of domain replication. This has the following advantages:

a) No single point of failure b) Fault tolerance

c) Single replication topology d) Secure dynamic updates

36. What is the purpose of SRV records?

Ans- SRV records are used in locating host that provides certain network services.

37. What is SOA?

Ans- Start of Authority record (abbreviated as SOA record) is a type of resource

record in the Domain Name System (DNS) containing administrative information about the zone, especially regarding zone transfers.

38. What is cache only DNS?

Ans- Caching-only DNS servers don't actually host any zones and are not

authoritative for any domains but rather just cache results from queries asked them by clients. If a client asks it to resolve.

39. What is DNS Forwarder?

Ans- A forwarder is a Domain Name System (DNS) server on a network used to forward DNS queries for external DNS names to DNS servers outside of that network. You can also forward queries according to specific domain names using conditional forwarders.

40. What is DDNS?

Ans- Dynamic DNS is a method of automatically updating a name server in

the Domain Name System (DNS), often in real time, with the active DDNS

configuration of its configured hostnames, addresses or other information.

41. What is a query and what are the types of query?

Ans- A request made by a DNS client to provide name server information is called

a query. There are 2 types of DNS query

Iterative Query

An iterative name query is one in which a DNS client allows the DNS server to

return the best answer it can give based on its cache or zone data. If the queried DNS server does not have an exact match for the queried name, the best possible information it can return is a referral.

Recursive Query

In Recursive name query, the DNS client requires that the DNS server respond to

the client with either the requested resource record or an error message i.e. the record or domain name doesn't exist.

42. What is DHCP?

Ans- Dynamic Host Configuration Protocol (DHCP) is a network protocol that enables a server to automatically assign an IP address to a computer from a defined range.

43. What is the DHCP Client/Server process?

Ans-

a) The client computer sends a broadcast request (called a DISCOVER or

DHCPDISCOVER), looking for a DHCP server to answer.

b) The router directs the DISCOVER packet to the correct DHCP server.

c) The server receives the DISCOVER packet. Based on availability and usage policies set on the server, the server determines an appropriate address (if any) to give to the client. The server then temporarily reserves that address for the client and sends back to the client an OFFER (or DHCPOFFER) packet, with that address information. The server also configures the client's DNS servers, WINS servers, NTP servers, and sometimes other services as well.

d) The client sends a REQUEST (or DHCPREQUEST) packet, letting the server

know that it intends to use the address.

e) The server sends an ACK (or DHCPACK) packet, confirming that the client

has a been given a lease on the address for a server-specified period of time.

44. What is DHCP Scope?

Ans- DHCP scopes are used to define ranges of addresses from which a DHCP

server can assign IP addresses to clients.

45. What are the DHCP Port number?

Ans- Requests are on UDP port 68, Server replies on UDP 67 .

46. What is DHCP Scope?

Ans- A DHCP scope is a valid range of IP addresses that are available for assignment or lease to client computers on a particular subnet.

47. What is Multi scope?

Ans- A superscope allows a DHCP server to provide leases from more than

one scope to clients on a single physical network.

48. What is reservation in DHCP?

Ans- DHCP reservation is a feature in the DHCP server that allows the DHCP administrators to reserve one or more IP addresses for particular mission-critical computers only.

49. What is exclusion?

Ans- An exclusion removes an IP address or range of IP addresses from the pool

of addresses that are given out by the DHCP server. The server will not give out

excluded addresses.

50. What is DHCP lease?

Ans- A DHCP lease is the amount of time that the DHCP server grants to the DHCP

client permission to use a particular IP address. A typical server allows its administrator to set the lease time.

51. What is DHCP Failover Clustering?

Ans- A failover cluster is a group of servers that work together to maintain high

availability of applications and services. If one of the servers, or nodes, fails, another node in the cluster can take over its workload without any downtime (this process is known as failover).

52. What is DHCP Relay Agent?

Ans- A DHCP relay agent is any host that forwards DHCP packets between clients

and servers. Relay agents are used to forward requests and replies between clients and servers when they are not on the same physical subnet.

53. What is Hyper-V?

Ans- Hyper-V is Microsoft's virtualization platform, or 'hypervisor', which enables

administrators to make better use of their hardware by virtualzing multiple operating systems to run off the same physical server simultaneously.

54. What are the type of network in Hyper-V?

Ans- There are three type of networks in Hyper-V

a) Private Virtual Network:- This type of switch is bound to the physical network cards located in the host.

b) Internal Virtual Network:- This switch is not bound to a physical network card so only allows traffic between VMs and the host.

c) External Virtual Network:- This type of switch is only used for virtual machines to communicate with each other.

55. What is Virtual Machine Snapshots?

Ans- A Virtual Machine snapshot is a copy of the virtual machine's disk file (VMDK) at a given point in time. Snapshots provide a change log for the virtual disk and are used to restore a VM to a particular point in time when a failure or system error occurs.

56. What is Windows Deployment Service (WDS)?

Ans- Windows Deployment Services is a server role that gives administrators the

ability to deploy Windows operating systems remotely. WDS can be used for network-based installations to set up new computers so administrators do not have to directly install each operating system (OS).

57. What is prerequisites for WDS?

Ans- Following are the requirements for WDS

a) Active Directory Domain Services

b) DNS Server

c) DHCP Server

d) NTFS Partition

58. What is WIM?

Ans- The Windows Imaging Format (WIM) is a file-based disk image format. It was

developed by Microsoft to help deploy Windows Vista and subsequent versions of Windows operating system family, as well as Windows Fundamentals for Legacy PCs.

59. What is WSUS?

Ans- Windows Server Update Services (WSUS), previously known as Software

Update Services (SUS),is a computer program developed by Microsoft Corporation that enables administrators to manage the distribution of updates and hot fixes released for Microsoft products to computers in a corporate environment. WSUS downloads these updates from the Microsoft Update website and then distributes them to computers on a network. WSUS is an integral component of Windows Server.

60. What is group policy?

Ans- Group Policy is a hierarchical infrastructure that allows a network administrator in charge of Microsoft's Active Directory to implement specific configurations for users and computers. Group Policy can also be used to define user, security and networking policies at the machine level.

61. What is GPO?

Ans- Group policy object (GPO) is a collection of group policy settings. It can be

created using a Windows utility known as the Group Policy snap-in. GPO affects the user and computer accounts located in sites, domains, and organizational units (OUs).

62. What is Group Policy Template (GPT) and Group Policy Container?

Ans- A GPO is a collection of Group Policy settings, stored at the domain level as a virtual object consisting of a Group Policy container (GPC) and a Group Policy template (GPT). The GPC, which contains information on the properties of a GPO, is stored in Active Directory on each domain controller in the domain.

63. What is RAID?

Ans- Redundant Array of Inexpensive Disks is a data storage virtualization technology that combines multiple physical disk drive components into one or more logical units for the purposes of data redundancy, performance improvement, or both.

64. Define RAID-0, RAID-1, RAID-3, RAID-5, RAID 0 1 and RAID 1 0.

RAID 0, also known as disk striping, is a technique that breaks up a file and

spreads the data across all the disk drives in a RAID group. The benefit of RAID

0 is that it improves performance. If a drive should fail, there is no redundancy and all data would be lost.

RAID 1, also known as disk mirroring, is the replication of data to two or more disks. Disk mirroring is a good choice for applications that require high performance and high availability, such as transactional applications, email and operating

RAID 3, uses striping at the byte level and stores dedicated parity bits on a separate disk drive. RAID 3 requires a special controller that allows for the synchronized spinning of all disks.

RAID 5, is a RAID configuration that uses disk striping with parity. Because data

and parity are striped across all of the disks, no single disk is a bottleneck. Striping also allows users to reconstruct data in case of a disk failure.

RAID 0 1, RAID 0 1, also called RAID 0+1, is a RAID level using a mirror of stripes,achieving both replication and sharing of data between disks. The usable capacity of a RAID 0 1 array is the same as in a RAID 1 array made of the same drives, in which one half of the drives is used to mirror the other half.

RAID 1 0, configuration requires a minimum of four disks, and stripes data across

mirrored pairs. As long as one disk in each mirrored pair is functional, data can be retrieved. If two disks in the same mirrored pair fail, all data will be lost because there is no parity in the striped sets.

65. What is the difference between Linux and Windows?
The major difference between Windows and Linux:
Windows
Source code for windows is not available.
You can modify or redistribute the Window operating system.
In Windows, you are bounded to use one license in One PC only. If you have to install it on other PC you need another License.
Paid to help desk support.
Linux
Linux is open-source; the complete source code for Linux is available.
Linux is the GPL-licensed operating system, you are free to modify that software and use and even republish or sell it.

Download once and install it on as many PC you want.
Online peer support from the community via forums and online search.

66. What is the purpose of deploying local DNS servers?
A local DNS server provides the local mapping of fully qualified domain names to IP addresses. To resolve
remote requests related to the domains names on your network, local DNS servers can provide record
information to remote DNS servers.

67. What is difference between Windows and Windows Server?
Difference between Windows and Windows Server
Windows Server OS
It is mainly released for servers grade systems like blade, Rack, Tower, etc
Multiple users can log in and work simultaneously.
Supports more CPU(64), cores(320) and RAM(24TB)
Windows OS
It's mainly released for user grade systems like desktop, Laptop, Tablet, Mobile, X-box, Halo-lens, etc
You can create multiple user accounts, but, only one user can log in at a time.
Support limited CPU(2), core(256) and RAM(2TB)

68. What are default user interface used in Windows Server ?
Powershell and Windows shell are default available in Windows Server.

69. What is Windows Server?
Windows server is a series of enterprise-class server operating systems which is designed for end-users to share resources/ services with multiple users and provide extensive administrative control of data storage, applications, and corporate networks.
Features of Windows Server
Has a multi-server management facility
Provides deployment of friction-free servers
Has good control over the management of IP address
Delivers great access control
Pros of Windows Server
Provides documentation of patches with exceptional features
The entire community of Windows Server is very strong and with abundant knowledge
Very reliable
Windows server provides great security to different domain operations
Cons of Windows Server
Requires various addition hardware resources
It is a little on the expensive side of the capital