1. What two options are provided during Windows Server 2016 installation?

- **Server Core**

- **Server with Desktop Experience (GUI)**

---

2. Steps to configure server (short):

1. **Set computer name**

2. **Configure IP address**

3. **Set time/date**

4. **Install roles & features**

5. **Update system**

6. **Join domain (optional)**

---

3. Pre-installation tasks:

- **Check hardware requirements**

- **Backup data**

- **Plan IP scheme**

- **Choose edition & installation type**

- **Verify compatibility**

---

4. Post-installation tasks:

- **Install updates**

- **Configure network**

- **Rename server**

- **Assign static IP**

- **Install roles (AD DS, DNS, DHCP)**

- **Enable firewall settings**

---

5. Standard upgrade path:

Windows Server 2012/2012 R2 → 2016 (direct upgrade).

---

6. Physical structure of AD:

- **Sites**
- **Domain Controllers**
- **Subnets**

---

7. Logical components of AD:

- **Domains**
- **Trees**
- **Forest**
- **OUs**
- **Objects**

---

8. Full form of LDAP:

Lightweight Directory Access Protocol

---

9. Location of AD database:

C:\Windows\NTDS\NTDS.dit

---

10. What is a child DC?

A domain controller in a child domain under a parent domain.

---

11. Explain forest in AD:

A forest is the top-level AD structure containing multiple domain trees sharing a common schema and global catalog.

---

12. What is Active Directory? (Select all that apply)

✔ A Windows-only implementation of a directory server
✔ Microsoft's implementation of a directory server
✔ An LDAP-compatible directory server

---

13. Default user account after creating AD domain:

✔ Administrator

---

14. Advantages of an AD domain:

✔ **Centralized authentication**
✔ **Centralized management with GPOs**
✔ **More detailed logging**

---

15. Minimum hardware for Server 2016:

- **1.4 GHz 64-bit CPU**

- **512 MB RAM (Core) / 2 GB (GUI)**

- **32 GB disk space**

---

16. Editions of Windows Server 2016 (short):

- **Datacenter – unlimited virtualization**

- **Standard – limited virtualization**

- **Essentials – small businesses (up to 25 users)**

- **Hyper-V Server – virtualization only**

---

17. Steps to install Windows Server 2016 (GUI):

1. **Boot from DVD/USB**

2. **Select language**

3. **Choose Desktop Experience**

4. **Partition disk**

5. **Install**

6. **Set admin password**

---

18. Steps to install Windows Server 2016 in Server Core:

- **Same as GUI, but choose Server Core option (no GUI).**

---

19. Configure network settings during installation:

- **Open Network Settings → Ethernet → Properties**

- **Assign static IP, subnet, gateway, DNS**

---

20. Promote server to domain controller:

1. **Install AD DS role**

2. **Run Promote this server to DC**

3. **Create new forest/domain**

4. **Set DSRM password**

5. **Reboot**

---

21. Upgrade to Windows Server 2016 steps:

1. **Check compatibility**

2. **Backup server**

3. **Run installer**

4. **Choose Upgrade**

5. **Select edition**

6. **Complete setup**

---

22. What is AD DS & its components?

Active Directory Domain Services manages users, computers, and authentication.
Components: Domain, Tree, Forest, OU, GC, Schema, Sites

---

23. Create a new AD user (short):

AD Users & Computers → OU → Right-click → New → User → Set password

---

24. Creating & managing GPOs (short):

- **Open Group Policy Management**

- **Create GPO under domain/OU**

- **Edit settings**

- **Link GPO**

- **Update clients using gpupdate /force**

---

25. What are OUs?

Organizational Units are containers used to group users/computers for easier management & GPO application.

26. Delegating administrative privileges:

- **Right-click OU → Delegate Control → Add user → Select tasks → Finish**