**Windows Server Basic & Installation**

Windows Server is a **Powerful Operating System** designed for **Enterprise-Level Networking, Data Storage, Security, and Application Hosting.** It is used in organizations to manage resource, host applications, and provide network services.

**1. Windows Server Basics**

**A. Key Feature of Windows Server :**

* **Active Directory (AD DS) -** Managers users, groups, and authentication.
* **DNS & DHCP Services -** Provides domain name resolution and automatic IP addressing.
* **File & Print Services -** Centralized Storage and Network Printing.
* **Hyper-V -** Built-in Virtualization platform for running virtual machines.
* **Group Policy (GPOs) -** Centralized management of security settings and configurations.
* **Remote Desktop Services (RDS) -** Enables remote access to applications and desktops.
* **Windows Admin Center -** A web-based tool for managing Windows Server.

**B. Step-by-Step Installation Guide.**

**1. Download and Prepare Installation Media**

. Get the ISO file from the Microsoft website.

. Create a bootable USB using Rufus or burns the ISO to a DVD.

**2. Boot form Installation Media.**

. Insert the USB/DVD into the server and boot from it.

. Select Language, time, and keyboard settings - Click Next.

. Click Install Now.

**3. Select Windows Server Edition**

. Choose the edition (Standard, Datacenter, Core, or Desktop Experience)

. Accept the license agreement and click Next.

**4. Choose Installation Type**

. **Upgrade :-** Keeps files and applications (for upgrading existing Windows Server).

. **Customs :-** Fresh Installation (Recommended for new deployments).

**5. Partition the Hard Drive**

.Choose the disk where Windows Server will be installed.

. Click Next (Or Create Partitions if Needed).

**6. Installation Process.**

. Windows Server will copy files and install Components.

. The system will restart automatically after installation.

**7. Configure Initial Settings**

. Set Administrator Password and log in.

. Configure basic settings like Network, time zone, and updates.