



# Azure services

## 1. Compute Services

VM ya application run karne ke liye

- Azure Virtual Machine (VM)
- Virtual Machine Scale Set (VMSS)
- Azure App Service (Web App, API App)
- Azure Functions (Serverless)
- Azure Container Instances (ACI)
- Azure Kubernetes Service (AKS)

## 2. Networking Services

Connectivity, security & traffic control

- Virtual Network (VNet)
- Subnet
- Network Security Group (NSG)
- Application Security Group (ASG)
- Azure Load Balancer
- Application Gateway
- Azure Firewall
- Azure Bastion
- VNet Peering
- VPN Gateway
- ExpressRoute
- Private Endpoint / Private Link
- Traffic Manager
- Azure DNS
- NAT Gateway

## 3. Storage Services

Data store karne ke liye

- Storage Account
  - Blob Storage
  - File Storage
  - Queue Storage
  - Table Storage

## 4. Database Services

Structured & unstructured data

### Relational

- Azure SQL Database
- SQL Managed Instance
- SQL Server on VM
- Azure Database for:
  - MySQL
  - PostgreSQL
  - MariaDB

### NoSQL

- Azure Cosmos DB
  - Core (SQL) API
  - MongoDB API
  - Cassandra API
  - Table API

## 5. Identity & Access (IAM)

Security & access control

- Azure Active Directory (Entra ID)
- Users & Groups
- Service Principal
- Managed Identity (System / User Assigned)
- Role Based Access Control (RBAC)

## 6. Security Services

Infrastructure & app protection

- Microsoft Defender for Cloud
- Azure Key Vault
- Azure Policy
- Azure DDoS Protection
- Web Application Firewall (WAF)

## 7. DevOps & CI/CD

Automation & pipelines

- Azure DevOps
  - Repos
  - Pipelines
  - Boards
  - Artifacts
- GitHub Actions
- Azure Container Registry (ACR)
- Terraform (IaC – commonly used with Azure)

## 8. Monitoring & Management

Logs, metrics & health

- Azure Monitor
- Log Analytics Workspace
- Application Insights
- Azure Alerts
- Network Watcher
- Azure Advisor

## 9. Integration & Messaging

Service-to-service communication

- Azure Service Bus
- Event Grid
- Event Hub
- Logic Apps
- Azure API Management

## 10. Data & Analytics

Big data & reporting

- Azure Data Factory
- Azure Synapse Analytics
- Azure Data Lake Storage
- Azure Stream Analytics
- Azure Databricks
- Power BI

## 11. Backup & DR

Data safety & recovery

- Azure Backup
- Azure Site Recovery (ASR)

## 12. Governance & Cost

Control & optimization

- Management Groups
- Subscriptions
- Resource Groups
- Azure Policy
- Cost Management + Billing
- Tags

## 13. AI & ML (Basic awareness)

- Azure Machine Learning
- Azure Cognitive Services
- Azure OpenAI Service