Module: 13- Networking with Windows Server

1. Discuss the role of Windows Firewall in Windows Server and how to configure it.

Ans-> There are some role of windows firewall in windows server are as follow:-

a. Traffic control

b. Security Enforcement

c. Server role specific configuration

d. Logging and auditing

-> Configuring Windows Firewall in windows server :-

a. Accessing windows firewall settings

b. Creating firewall rules

c. Configuring default settings

d. Configuring advanced security features

e. Enabling or disabling windows firewall

f. Monitoring and logging

2. What is Network Address Translation (NAT) in Windows Server, and how do you configure it?

Ans-> Network Address Translation (NAT) in Windows server allows multiple devices on a private network.

* Configuring NAT in windows server :-

Step 1:- Install and configure the routing and remote access service (RRAS)

1. Install the Remote access role

2. Enable the RRAS role

Step 2:- Configure NAT on the network interface

1. Configure NAT settings

2. Configure internal interfaces

3. Additional configuration

Step 3:- Test the NAT configuration

1. Verify external connectivity

2. Check logs

3. Explain the concept of Dynamic Host Configuration Protocol (DHCP) and how to configure it in windows server 2016.

Ans-> DHCP is a network management protocol used to automatically assign IP addresses and other network configuration parameters devices on a network.

* Configuring DHCP ON Windows server 2016

1. Open the server manager and click on the “Tools” menu, then select “DHCP”.

2. In the DHCP console, right-click the server name and click "Install".

3. In the "Install DHCP Server" wizard, click "Next" to accept the default settings.

4. Select the appropriate scope and click "Next".

5. Configure the scope settings, such as the IP address range, subnet mask, default gateway, DNS server, and lease duration.

6. Click "Next" to accept the default settings for the "Exclusions" and "Reservations" tabs.

4. Describe the process of configuring DNS (Domain Name System) in Windows Server.

1. Ans-> Open the Server Manager and click on the "Tools" menu, then select "DNS".
2. In the DNS Manager console, right-click the server name and click "New Zone".
3. Select the "Primary Zone" option and click "Next".
4. Enter the domain name (e.g., example.com) and click "Next".
5. Select the zone type (e.g., "Internet" for public zones) and click "Next".
6. Configure the zone settings, such as the zone file name and zone transfer settings.
7. Click "Next" to accept the default settings on the "Forwarders" and "Zone File" tabs.
8. Click "Next" to accept the default settings on the "Summary" and "Confirmation" pages.

5. What is Server Manager, and how do you use it to manage servers in Windows Server?

Ans-> Server Manager is a management console in Windows Server that allows you to manage and configure server roles, features, and services. It provides a centralized interface for managing servers, networks, and storage.

* Manage Servers in windows Server:-

1. 1. Open the Server Manager by clicking on the "Server Manager" icon in the Start menu or by typing "Server Manager" in the search box.
2. In the Server Manager, you can view the server roles and features that are currently installed on the server. You can add or remove roles and features using the "Manage" menu.
3. To manage services, click on the "Services" menu and select the service you want to manage. You can start, stop, or restart services using the "Actions" pane.
4. To manage server resources, click on the "Server Manager" menu and select the "Storage" or "Network" option to view the available storage and network resources.
5. To manage server settings, click on the "Server Manager" menu and select the "Server Settings" option. This allows you to configure server-wide settings such as security policies, event logs, and performance counters.
6. To manage user accounts and groups, click on the "Server Manager" menu and select the "Users and Groups" option. This allows you to create and manage user accounts and groups.

6. Discuss the role of Remote Desktop Services (RDS) in Windows Server 2016 or 2019 and how to configure it.

Ans-> Remote Desktop Services (RDS) in Windows Server 2016/2019 is a key server role that allows users to remotely access centralized applications, virtual desktops, or the full Windows desktop experience over a network.

* Configure RDS on windows server 2016/2019:-

1. Prepare Your Environment.

2. Install the Remote Desktop Services Role.

3. Deploy RDS Roles.

4. Set Up Licensing

5. Publish Applications or Desktops.

6. Enable User Access.

7. Test and Access.