

WORLD MISSION HIGH SCHOOL

L4SOD

WINDOWS SERVER ADMINISTRATION

HOMEWORK: PREPARING A WINDOWS SERVER AND CLIENT BEFORE AD DS

A medium-sized company called **ABC Company** is planning to establish a centralized network system for its employees. The company has decided to use **Windows Server** to manage users, computers, security policies, and other network resources.

You have been assigned as the junior network administrator. Using **VMware Workstation**, you have already created two virtual machines:

- **Virtual Machine 1:** Windows Server
- **Virtual Machine 2:** Windows Client

The company wants the Windows Server to become the **Domain Controller** after installing **Active Directory Domain Services (AD DS)**. However, the IT manager has instructed you **not to install AD DS immediately**. First, you must make sure that the Server and Client are correctly prepared and that the network between them is working properly.

The server should have a **static IP address**, while the client should have an appropriate IP configuration that allows it to communicate with the server. Both virtual machines must be connected to the appropriate VMware virtual network.

The administrator also wants the server to have a meaningful computer name before it is promoted to a Domain Controller. After configuring the machines, you must verify that they can communicate with each other and identify any problems that could prevent AD DS from working correctly.

The company has provided the following network information:

- Network: **192.168.1.0/24**
- Server IP address: **192.168.1.10**
- Client IP address: **192.168.1.20**
- Subnet Mask: **255.255.255.0**
- Server Name: **DC-SERVER**

- Planned domain name: **company.local**

Questions

Answer the following questions in your own words.

1. Identify the important requirements that must be checked in **VMware Workstation** before configuring the Server and Client.
2. Explain how you would configure the network adapter of the Server and Client in VMware Workstation so that the two virtual machines can communicate.
3. Explain why the Server and Client must belong to the same IP network in this scenario.
4. Describe the steps you would follow to change the computer name of the Windows Server to **DC-SERVER**.
5. After configuring the IP addresses, which command can you use to test communication between the Client and Server?
6. If the Client cannot ping the Server, mention **four possible causes** that you would investigate.
7. Explain how you would determine whether the Server and Client are using the correct IP addresses.
8. Explain the purpose of the **subnet mask** in this network.
9. What is the difference between configuring a computer with **DHCP** and configuring it with a **static IP address**?
10. Why is it important to restart the Server after changing certain system settings, such as the computer name?