

## EX.5

## LAN CONFIGURATION

DATE: 26/7/17

**AIM:** To perform configure a LAN connection between 2 PC's and crimping of network cable.

### PROCEDURE:

#### Connecting 2 PC's to a LAN:

**Step 1:** Connecting the network hardware and cables to set up a local network

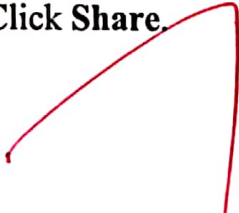
- Set up and turn on the power for the network hub or other networking device.
- Connect the computers to the networking device. If a crossover cable is used, connect the cable to the RJ45 network ports on each computer.

**Step 2:** Turning on Network discovery and file sharing in Windows 7

- Turn on Network discovery and file sharing on each computer that you want to access on the network.
- Click **Start**, and then click **Control Panel**.
- Under Network and Internet, click **Choose Homegroup and sharing options**.
- In the Homegroup settings window, click **Change advanced sharing settings**.
- Click **Save changes**.

**Step 3:** Sharing drives, folders, and files in a Windows 7 network

To share non-public folders with other computers on a local network:

- Click **Start**, and then click **Computer**.
  - Browse to the folder you want to share.
  - Right-click the folder, select **Share with**, and then click **Homegroup (Read)**, **Homegroup (Read/Write)**, or **Specific people**.
  - If you chose **Specific people**, the **File Sharing** window displays.
  - Click the down arrow and select the account you want to share with, and then click **Add**.
  - Click an arrow under **Permission Level** to set the permission level for each account or group.
  - Click **Share**.
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#### Step 4: Testing a local network in Windows 7

- Open the Windows 7 network window and browse through the shared folders in each computer on the network. If the computer is able to read and access files from a remote computer, the remote computer is set up correctly. Browse to every available computer from each computer on the network. If there are any issues, go back through these steps and verify that the settings are correct.
- When all computers are able to network to each other on the network, continue with the next step to enable Internet access and the firewall.

#### Step 5: Accessing shared files and directories in Windows 7

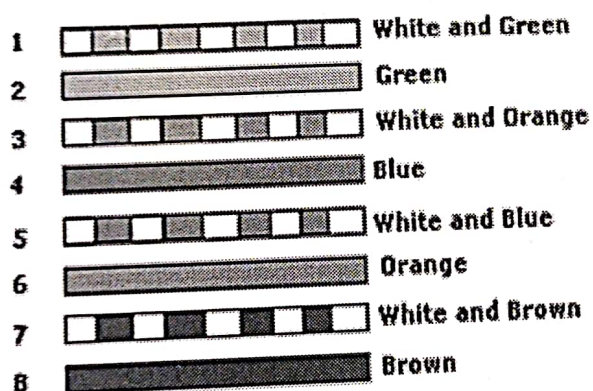
- Ensure **Network Discovery and File Sharing** is turned On.
- Click **Start**, click **Control Panel**, click **Network and Internet**, and then click **Network and Sharing Center**.
- Double-click **Network**.
- The Network window opens and displays computers with shared folders that are detected on local networks.
- Double-click the computer you want to access.



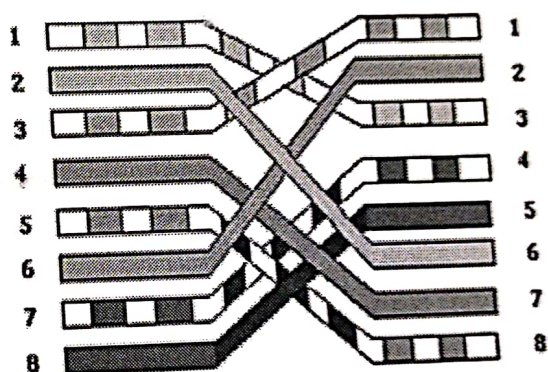
## Crimping a Cat5-RJ45 network cable:

1. Using the stripper, cut off one inch of the sheath on the cable.
2. Cut the separator in between the twisted pairs.
3. Unwind the twisted pairs.
4. Arrange the wires in the required color-code order.
5. Hold the wires tightly and cut the edges to an even line.
6. Insert the wires into the RJ45 connector.
7. Insert into the crimping tool and press until the cable is crimped.
8. Repeat steps 1-8 on the other end with the desired color-code arrangement.
9. Use a LAN tester to ensure that the cable is working.

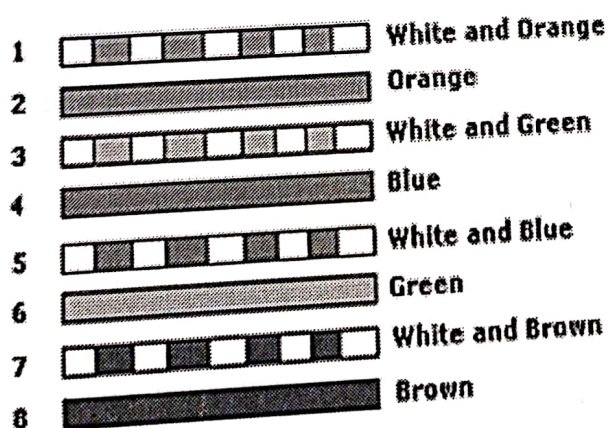
### TIA/EIA 568A Wiring



### TIA/EIA 568A Crossed Wiring



### TIA/EIA 568B Wiring



### TIA/EIA 568B Crossed Wiring

