ASSIGNMENT

MODULE 4: TROUBLESHOOTING AND HELPDESK

SECTION 1: MULTIPLE CHOICE

- 1. What is the first step in the troubleshooting process?
- a) Implementing a solution
- b) Identifying the problem
- c) Testing the solution
- d) Documenting the solution
- **2**. Which of the following tools is commonly used to diagnose hardware issues by testing electrical connections?
- a) Loopback plug
- b) Toner probe
- c) Multimeter
- d) Cable tester
- **3**. Which Windows utility can be used to view system logs, monitor performance, and diagnose hardware and software issues?
- a) Task Manager
- b) Device Manager
- c) Event Viewer
- d) Control Panel

SECTION 2: TRUE OR FALSE

4. Safe Mode is a diagnostic mode in Windows that loads only essential system services and drivers, allowing users to troubleshoot and fix problems with the operating system.

TRUE

5. A system restore point is a snapshot of the computer's system files, registry, and configuration settings at a specific point in time, which can be used to revert the system to a previous state if problems occur.

TRUE

6. Ping is a command-line utility used to test network connectivity by sending ICMP echo requests to a target device and waiting for ICMP echo replies.

TRUE

SECTION 3: SHORT ANSWER

- 7. Describe the steps involved in troubleshooting a computer that fails to boot into the operating system.
 - If a computer is not starting into the operating system, you can follow these steps to troubleshoot:
 - 1. Cheak the power- Make sure the computer is properly plugged in and the power supply is working.
 - **2. Look at the cables and hardware** Cheak if the monitor, keyboard, and all internal parts like RAM and hard drive are connected properly.
 - **3. Enter BIOS/UEFI-** Restart and press the setup key (likeF2, DEL, or ESC) to see if the system is detecting the hard drive.
 - **4. Try safe mode** If window is loading normally, press F8 (or shift+ Restart) to entry safe mode with only basic drives.
 - **5. Run startup Repair** Use windows recovery tools to fix boot problems automatically.
 - **6.** Use System Restore- Roll back the computer to an earlier working state.
 - 7. Reinstall the operating system- if nothing works, reinstall the OS to get the computer running again.

SECTION 4: PRACTICAL APPLICATION

- **8.** Demonstrate how to troubleshoot network connectivity issues on a Windows computer using the ipconfig command
- To troubleshoot network problem on a windows computer using the ipconfig command, follow these steps:
- 1. Open the command prompt (press window & R)

- **2.** Type ipconfig and press enter. This shows your computer's IP address, subnet mask, and gateway.
- **3.** If you see an address starting with 168x.x.x.x., it means the computer is not getting a proper IP.
- **4.** Type ipconfig/release and press enter to remove the current IP.
- 5. Then type ipconfig/renew to request a new IP from the network.
- **6.** Use ipconfig/all if you want to see detailed network information like DNS servers.
- 7. Finally, you can test the connection by typing ping 8.8.8.8 to check if the internet is working.

Section 5: ESSAY

- **9**. Discuss the importance of effective communication skills in a helpdesk or technical support role.
 - In a helpdesk or technical support job, good communication skills are just as important as technical knowledge. Many people who ask for support may not understand technical terms. If the supports person uses difficult language, the user can get confused. That is why explaining problem and solution in clear and simple words is very important.
 - Communication also means listening carefully. A support person should listen to the user's problem without interrupting. This helps in understanding the issue better and finding the right solution faster. Good listening also makes the user feel respected and valued.
 - Another important point is patience and empathy. Sometimes users may be frustrated or stressed because their computer or network is not working. In such cases, the support person should stay calm, polite, and supportive. This builds trust and makes the user feel comfortable.
 - Clear communication is also needed for documentation. Writing down the problem and the solution helps other team members and also saves time id the same problems happen again.
 - In short, effective communication skills help in solving problems quicky, building good relationship a positive experience. For a helpdesk or technical support role, these skills are just as importance as knowing how to fix the technical issues.