**Assignment module 4: Troubleshooting and**

**Section 1: Multiple Choice**

1. What is the first step in the troubleshooting process?

==> b) Identifying the problem

2. Which of the following tools is commonly used to diagnose hardware issues by testing electrical connections?

==> c) Multimeter

3. Which Windows utility can be used to view system logs, monitor performance, and diagnose hardware and software issues?

==> c) Event Viewer

**Section 2: True or False**

4. True or False: 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. True or False: 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. True or False: 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.

==> Steps to Troubleshoot a Computer That Fails to Boot:

1. Check Power – Make sure the computer is plugged in and turned on.

2. Check Display – Confirm the monitor is working and connected.

3. Listen for Beeps – BIOS beeps can indicate hardware issues.

4. Disconnect External Devices – Remove USBs or external drives.

5. Enter BIOS/UEFI – Check if the hard drive is detected.

6. Boot into Safe Mode – Try starting in Safe Mode to fix issues.

7. Use Startup Repair – Run Windows Startup Repair from a recovery disk.

8. Check for Error Messages – Note any errors and search for solutions.

9. System Restore – Use restores points to roll back changes.

10. Check Hardware – Test RAM or hard drive for faults if needed.

**Section 4: Practical Application**

8.Demonstrate how to troubleshoot network connectivity issues on a Windows computer using the ipconfig command.

==> Troubleshooting Network Issues with ipconfig (Windows):

* Open Command Prompt – Press Win + R, type cmd, and press Enter.
* View IP Info – Type ipconfig and press Enter to see IP address, subnet, and gateway.
* Check Connection – If IP shows 169.x.x.x, it's not connected properly.
* Release IP – Type ipconfig /release to drop the current IP.
* Renew IP – Type ipconfig /renew to get a new IP from the router.
* Flush DNS – Type ipconfig /flushdns to clear DNS cache.

Section 5: Essay

9. Discuss the importance of effective communication skills in a helpdesk or technical support role.

==> Importance of Communication Skills in Helpdesk or Tech Support:

* Understand the Problem – Good listening helps you understand the user’s issue clearly.
* Give Clear Instructions – Simple, step-by-step guidance avoids confusion.
* Stay Calm and Polite – Keeps users comfortable, even when they’re frustrated.
* Explain in Simple Terms – Avoid technical jargon when talking to non-technical users.
* Build Trust – Good communication builds confidence in your support.