

Module – 3 : Troubleshooting and Helpdesk

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

Ans. b) Identifying the problem

Reason : It involves gathering information, observing symptoms to understand what is not working as expected. Once problem is found than it's solutions can be explored.

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

Ans. c) Multimeter

Reason : Multimeter is used to diagnose hardware issues by measuring electrical values such as voltage, current and resistance.

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

Ans. c) Event Viewer

Reason : It provides detailed information about errors, warnings and system events that helps in troubleshooting problems.

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.

Ans. True

Reason : Safe Mode loads only essential drivers and services, making it easier to troubleshoot and fix system problems without any interference from third-party software and drivers.

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.

Ans. True

Reason : A system restore point saves system files and settings, allowing users to revert to a previous state if issues like software errors or updates causes problems.

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.

Ans. True

Reason : Ping checks network connectivity by sending ICMP echo requests to a target and waits for echo replies, helping diagnose connection issues.

7. Describe the steps involved in troubleshooting a computer that fails to boot into the operating system.

Ans. Steps :

- 1) Check power supply unit and make sure that all cables are connected properly.
 - 2) Listen for the beep codes to detect issues of hardware.
 - 3) Verify monitor and display connections.
 - 4) Disconnect all external devices.
 - 5) Enter into BIOS/UEFI and check boot sequence settings.
 - 6) Try booting into safe mode.
 - 7) Use startup repair from recovery options.
 - 8) Perform system restore if available.
 - 9) Check and test hardware components.
 - 10) Reinstall the OS if nothing is working.
8. Demonstrate how to troubleshoot network connectivity issues on a Windows computer using the ipconfig command.

Ans. Steps :

- 1) Open command prompt using **Windows + R** command, type **cmd** and press Enter.
- 2) View it's ip configuration using **ipconfig** command.
- 3) Release current ip address using **ipconfig /release** command.
- 4) Renew and ip address using **ipconfig /renew** command.
- 5) If facing any website access issues than type **ipconfig /flushdns** to clear old and corrupted data.
- 6) Use **ping.google.com** to check internet access.
- 7) If it fails, try **ping 8.8.8.8** to test basic network reachability.
9. Discuss the importance of effective communication skills in a helpdesk or technical support role.

Ans. **Importance :**

- 1) Clear Problem Understanding :
 - Good communication helps support staff to understand user's issue properly.
- 2) Simplify Technical Terms :
 - Technicians must have to explain complex issues in simple and user-friendly language.
- 3) Build Trust and Confidence :
 - Polite and gentle communication to reassures users and builds trust.
- 4) Efficient Issue Resolution :
 - Clear instructions reduces confusion and speeds up problem solving.
- 5) Professionalism :
 - Proper communication shows positivity on company's image.
- 6) Better Documentation :
 - Clearly communicate in logs or tickets helps future troubleshooting if any problem occurs.