**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

Answer:b) Identifying the problem

Reason:Before fixing anything,you must know what the problen is.id you dont't know the issue,you can't solve it.

So,the first step always:"Find out what's wrong"=Identifying the problen.

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

Answer:c)Multimeter

Reason:A Multimeter is a tool that checks if electric current,voltage,or resistance is correct or not.

It helps in:

* Checking power supply
* Testing motherboard or battery
* Finding broken circuits

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

Answer:c)Event Viewer

Reason:Event Viewer shows system logs-it keeps a record of what's happening inside the computer(error,warnings,etc)

You can used it to:

* Check why you PC crashed
* Fing software or hardware error
* Monitor system health

**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.

Answer: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.

Answer: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.

Answer:True

**Section 3: Short Answer**

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

Answer:Troublesshooting Steps for computer not booting.

1. Check Power - Make sure power cable is connected.
2. Check Display - Ensure monitor and cables are working.
3. Listen for Beeps - Beep sounds may show hardware problems.
4. Enter BIOS - Check if hard drive is detected.
5. Try Safe Mode - Boot using F8 or recovery options.
6. Use System Restore - Restore to earlier working state.
7. Check Boot Order - Make sure hard driver is first.
8. Check RAM/HDD - Reinsert or replace if needed.

These steps helps find and fix booting issues easily.

**Section 4: Practical Application**

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

Answer:Troubleshooting Network Issue Using ipconfig.

Steps:

1. Open Command Prompt

* Press window+R,type cmd,and hit enter.

2. Type the Command

* Type:ipconfig
* Press Enter

3. Check IP Address

* If it shows 169.1.0.3 it means no proper IP is assigned.
* If you see a proper IP like 192.168.1.79, the PC is connected to a router.

4.Renew IP Address

* Type: ipconfig/release->(remove current IP)
* Then Type: ipconfig/renew->(gets a new IP)

5.Check Connection

* Type: ipconfig/all to see details network info.

6.Check Default Gateway

* Look for "Default Gateway".
* If missing = router problem

Result: Using ipconfig,you can:

* Check IP address
* Fix IP problem
* Reconnect to the network

This helps solve most basic network issues on Windows.

**Section 5: Essay**

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

Answer:Important of Communication in Helpdeck

1. Helps understand user problem - So we can fix it correctly.
2. Gives cleans steps - Easy for users to follow .
3. Keeps user clam - Speaking politely makes them feel better.
4. No technical words - Use simple language.
5. Listen carefully - So you don't miss any details.
6. Builds trust - Users feel safe and supported.

Good Communication =Happy user +Fast solution.