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

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 : B ) Toner probe

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

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 : The steps involved in troubleshooting a computer that fails to boot into the operating system are,

1. Check power supply and ensure cables are properly connected.

2. Verify hardware components (RAM, hard drive, cables) are seated correctly.

3. Enter BIOS/UEFI to check if the boot drive is detected and boot order is correct.

4. Try booting into Safe Mode or using Startup Repair from recovery options.

5. Run troubleshooting tools such as System Restore or CHKDSK.

6. If the problem persists, repair or reinstall the operating system.

Section 4: Practical Application

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

Answer : To troubleshoot network connectivity issues on a Windows computer using the ipconfig command:

1. Open Command Prompt

Press Windows + R, type cmd, and press Enter.

2. Check current network configuration

Type: ipconfig

This displays the computer’s IP address, subnet mask, and default gateway.

If no IP is shown or it shows 169.x.x.x, there is a connectivity issue.

3. Release and Renew IP Address

Type: ipconfig /release → this drops the current IP address.

Type: ipconfig /renew → this requests a new IP from the DHCP server.

4. Flush the DNS Cache (if websites are not loading)

Type: ipconfig /flushdns

This clears old or corrupted DNS records.

5. Verify Connection

Run ipconfig again to confirm you have a valid IP address and gateway.

Then try browsing or pinging a website (e.g., ping www.google.com) to test connectivity.

Section 5: Essay

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

Answer : Effective communication skills are essential in a helpdesk or technical support role because they allow technicians to clearly understand user problems and provide accurate solutions. Many users who contact support may not have technical knowledge, so it is important for support staff to explain solutions in simple and non-technical language. Good communication helps reduce confusion, saves time, and increases customer satisfaction.

Active listening is another key skill, as it ensures that the technician fully understands the issue before attempting to resolve it. By listening carefully and asking clarifying questions, helpdesk staff can avoid misdiagnosis and unnecessary troubleshooting steps.

In addition, maintaining a polite and professional tone builds trust and confidence. Even when users are frustrated, effective communication can calm the situation and create a positive experience. Written communication skills are also important for documenting issues and solutions, which helps future troubleshooting and knowledge sharing.

In summary, effective communication in helpdesk and technical support roles improves problem-solving, enhances teamwork, and ensures that customers feel supported and valued.