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## **TOPS Tech Assignment-1**

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### **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

**Ans:** 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

**Ans:** Multimeter

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:** Event Viewer



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### **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.

**Ans:** 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.

**Ans:** 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.

**Ans:** True



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### **Section 3: Short Answer:-**

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

**Ans:** This is steps involved in troubleshooting a computer that fails to boot into the operating system:

1. Power and Hardware Checks:
  - ➔ Confirm the computer is receiving power and see like lights, fan noise, or screen activity.
  - ➔ If you not see then power supply, battery, or cables. Sometimes loose RAM or storage drives also boot issues, so reseating them can fix.
2. BIOS/UEFI Settings:
  - ➔ Open BIOS/UEFI. Check if hard drive/SSD is detected and set as first in boot order.
3. Error Codes and Messages:
  - ➔ Check for beep sounds, lights, or error messages. They can tell you which part is not working.
4. Safe Mode and Recovery Options:
  - ➔ If the computer starts but doesn't load fully, try using Safe Mode or recovery tools to fix the problem.
5. Operating System Corruption:
  - ➔ System files might be broken. Use repair tools or file check options to fix them.
6. Hardware Failures:
  - ➔ If software fixes don't work then check the RAM, hard drive, or other parts for problems.
7. Reinstallation of the Operating System:
  - ➔ If nothing works, save your files and install the OS again.
8. Post-Recovery Measures:
  - ➔ After fixing, update drivers, check for viruses, and keep copies of your files.



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### **Section 4: Practical Application:-**

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

**Ans.** This is a steps of troubleshoot network connectivity issues on a Windows computer using the ipconfig command.

1) Open Command Prompt

2) Check IP (use **ipconfig** command):

➡ This is show information like IP address and more.

- If you see a proper IPv4 address (like 192.168.x.x), it's okay.
- If you see 169.254.x.x, there's a problem with your connection.

3) Release and Renew IP Address:

➡ If your IP show wrong (like 169.254.x.x), you can run this command:

- ipconfig /release (Release New IP)
- ipconfig /renew (Renew IP)

➔ This used for provide a router new IP.

4) Check DNS(Domain Name System):

➡ This clears old DNS (Domain Name System) records and provide new DNS.

- ipconfig /flushdns

5) Test:

➡ Try opening a website or type:

- Ping google.com

➔ Than after complet this steps and check this ipconfig command.



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### **Section 5: Essay :-**

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

**Ans.**

1. Introduction:

- Helpdesk and support people talk with customers.
- Talking skills are same important as work skills.
- Simple and clear talk makes trust and solves problems fast.

2. Understanding the User's Problem:

- Listen carefully to know the real problem.
- Ask easy questions to remove confusion.
- Users don't know computer words, so staff must understand them.

3. Explaining Solutions Clearly:

- Use very simple words, not hard words.
- Tell steps one by one.
- Clear steps stop repeat calls and mistakes.

4. Reducing Stress and Misunderstandings:

- Wrong talking makes user and staff upset.
- Give updates so users stay calm.
- No difficult words, it avoids confusion.

5. Team Collaboration

- Sometimes big problems go to senior staff.
- Clear talking makes handover easy.
- Sharing ideas with team saves time.



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6. Enhancing Efficiency and Productivity:

- Simple and clear talk makes calls short.
- Problems solved fast with easy steps.
- This saves company time and money.

7. Conclusion:

- In support job, good talking makes customer happy.
- If talking is not good, knowledge is useless.
- Good talking = good service, happy user, success.