ASSIGNMENT MODULE: TROUBLESHOOTING AND HELPDESK

SECTION 1: Multiple Choice

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

* B) IDENTIFYING THE PROBLEM

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

* C) MULTIMETER

1. Which windows utility can be used to view system logs, monitor performance, and diagnose and software issues ?

* C) Event viewer

SECTION 2: TRUE OR FALSE

1. 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

1. 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

1. 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

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

* There are lots of reasons why our computer won’t turn on. We have few methods to try to resolve the problem.

1. Check the power supply

Firstly we have to do make sure our PC is getting enough power supply . If you see any lights, fans and noises then our power supply is working. If not, then we need to change it or test it with a multimeter.

1. Remove or replace hardware components

To remove the faulty hardware component, we can try removing or replacing some parts one by one. For example , the RAM ,VIDEO CARD , HARD DRIVE etc .

1. Boot into safe mode or recovery mode

If our PC try to the boot but gets problem or crashes , it could be a software issue. To diagnose this, we can try booting into safe mode or recovery mode. These are special modes that load only the essential drivers and programs, or errors. To access these modes, we need to press a certain keys, this depending on our operating system and PC model, some common are F8,F11, SHIFT+F8,OR Esc.

1. Repair or reinstall the operating system

If not of the above steps work ,then we need to repair or reinstall our operating system . To repair our operating system we need to use a recovery disk or partition that came with our PC . This will try to fix any damaged or missing system files without affecting our data. To reinstall our operating system, we need to use an instillation disk or USB that contains the same or a newer version of our operating system .

SECTION 4: PREATICAL APPLICATION

1. Demonstrate how to troubleshoot network connectivity issues on a windows computer using the ipconfig command

* Ipconfig full form is INTERNET PROTOCOL CONFIGURATION. It is a command line used for managing and troubleshooting network connections.

To run Ipconfig, we need to open a command prompt on our computer.

1. Press the Windows key + R to open the run dialog box.
2. Type “cmd” in the run dialog box and press enter
3. The command prompt window will open.
4. Type “ Ipconfig” and press enter

Troubleshooting by Ipconfig

1. Don’t connect to the internet

* Run ipconfig and look for our defaut gateway Ip address.
* Open web browser and enter default Ip address in the address bar.
* If we can’t access the router configuration page, try resetting the router or modam.
* If we access the router configuration page check the WEN setting and make sure they match our ISP’s requirements.

1. Slow speed of internet

* Run ipconfig and look for our DNS server IP address.
* Ping all DNS server to test their response time.
* If one DNS server is slow or unresponsive, try switching to a different DNS SERVER.

1. Displaying active network connections

* If we want to see a list of our active network connection, we use the “netstat” command.
* Type “netstat-an” in command prompt window to display list of all active network connection.

SECTION 5: ESSAY

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

* effective communication skills really important in helpdesk or technical support role because we deal with customers for good business . here we discuss some critical skills .

1. active listening

* It is the foundation of effective communication . when we deal with customers give them full attention. Allow them to express their issues and questions without interruption.

1. Use simple language

* Avoid high level languages and technical language , use simple language so we sure the customer understands properly. Explain concepts in simple everyday language. We must use technical terms, be prepared to provide explanations.

1. Clarifying questions

* We have to ask open-ended and clarifying questions to gather more information about the problems. Questions like “can you describe the problem in more details?” etc.

1. Summarize and repeat

* After gathering information then summarize the customer’s problems and repeat them beck, and give them ensures we are properly understand the problems .

1. Manage Expectations

* Always be transparent about the customer can expect. If solution take a time then tell them clearly. Managing expectation helps avoid disappointment.