

## Module 4 : (Troubleshooting and Helpdesk)

### Topic : Troubleshoot security

- 1) Troubleshooting is a systematic process used to locate the cause of a fault in a computer system and correct the relevant hardware and software issues.
- 2) The need for troubleshooting security is identity theft, data loss, or unauthorized access.
- 3) 7 steps to troubleshoot computer
  - Identify the problem.
  - Research.
  - Establish a theory of probable cause.
  - Test the theory.
  - Establish a plan of action.
  - Implement or escalate.
  - Verify functionality.

- Document the solution.

#### 4) Common computer problems

- Consult Google, Search engines can be your best friend when it comes to error codes or detailed problems.
- Reboot.
- Check Connections.
- Look for Program Updates.
- Close Background Tasks.
- Clean Up Your Hard Drive.
- Run an Antivirus Program.

5) Ensure cables are connected and working.

6) The blue screen of death can be caused by any problem that causes Windows to stop running safely.

### Topic : OS Troubleshooting

- 1) 7 steps are basic troubleshooting.
- 2) Gather information.

- Describe the problem.
- Determine the most probable cause.
- Create a plan of action and test solutions.
- Implement the solution.
- Analyze the results.
- Document the process.

3) is the process of restoring data that has been lost, accidentally deleted, corrupted or made inaccessible.

4) Enables you to recover and restore lost, deleted, inaccessible, corrupted, or damaged files so you can get back to work quickly.

5) 7 tools for recovery

- Disk Drill Data Recovery (Windows & macOS).
- R-Studio (Windows, macOS, Linux).

EaseUS Data Recovery Wizard (Windows & macOS).

- Stellar Data Recovery Professional (Windows, Mac) ...
- DM Disk Editor and Data Recovery Software (Windows, macOS, Linux) ...
- Recuva (Windows).
- DiskInternals Uneraser (Windows).

### Topic : Hard drive troubleshooting

- 1) Hardware troubleshooting is the process of reviewing, diagnosing and identifying operational or technical problems within a hardware device or equipment.
- 2) Bad or corrupted sectors on a hard drive can cause performance issues, bluescreen (STOP error) issues, and operating system boot issues.

## Topic : Laptop,Printer,Video card

### Troubleshooting

#### 1) Troubleshooting for printer.

- Unplug and restart your printer.  
Sometimes power cycling your printer can resolve the issue.
- Check cables or wireless connection.
- Uninstall and reinstall your printer.
- Install the latest driver for your printer.
- Clear and reset the print spooler.
- Change a printer's status to "online".

#### 2) Basic troubleshooting for laptop.

- Consult Google, Search engines can be your best friend when it comes to error codes or detailed problems.
- Reboot.
- Check Connections.
- Look for Program Updates.

- Close Background Tasks.
- Clean Up Your Hard Drive.
- Run an Antivirus Program.