

**LEVEL 5 TERM 1 CAT ASSESSORS GUIDE**

**Differentiate between computer hardware and software( 4marks)**

Hardware: Hardware is tangible and represents the physical infrastructure of the computer. It includes all the electronic and mechanical components that make up the computer system.

Software: Software is intangible and represents the instructions, programs, and data that tell the hardware what to do. It includes code and programming languages.

(***Award 2 marks)***

**List and 5 computer problems and their solutions (10 marks)**

Problem: Slow Performance

Solution: Check for malware, optimize startup programs, upgrade hardware (add more RAM or use an SSD), and regularly maintain the system by removing unnecessary files.

Problem: Blue Screen of Death (BSOD)

Solution: Update device drivers, scan for malware, check for hardware issues (RAM, hard drive), and utilize system restore or recovery options.

Problem: No Internet Connection

Solution: Restart the router and modem, check physical cable connections, update network drivers, run network troubleshooters, and verify ISP status.

Problem: Software Crashes

Solution: Update software and operating system, reinstall or repair the problematic software, check for conflicting programs, and ensure hardware meets software requirements.

Problem: Computer Won't Start

Solution: Check power connections, inspect hardware components for damage, troubleshoot the power supply, perform a hard reset, and use recovery options such as booting into safe mode or accessing system repair tools.

(***Award 2 mark for each maximum 10 marks)***

**Define the following and give an example in each case (9 marks)**

(i) Input Devices:

Input devices are peripherals that allow users to input data, commands, or information into a computer system. These devices facilitate the communication between the user and the computer.

Examples:

Keyboard: Mouse:

(ii) Output Devices: Output devices are peripherals that present information or results processed by the computer to the user in a human-readable form. They convey the output of the computer to the external environment.

Monitor/Display:Printer:

(iii) Storage Devices: Storage devices are hardware components that store and retrieve digital data for the long term. They provide non-volatile storage for the operating system, software, and user files.

Examples:

Hard Disk Drive (HDD):Solid-State Drive (SSD)

(***Award 3 mark for each maximum 9 marks)***

**List 3 compnents found in the CPU(6 MARKS)**

Arithmetic Logic Unit (ALU)

Control Unit (CU)

Registers

(***Award 2 mark for each maximum 6 marks)***

**Define troubleshooting (1 mark)**

Troubleshooting is the process of diagnosing and resolving problems or issues within a system, device, or software by identifying the cause of the malfunction and implementing corrective actions.