SECOND HAND LAPTOP/PC CHECK

These Methods are valid for Windows only:

4 1. Basic Information

What to check:

- Model, brand, and year of manufacture
- Original specs (CPU, RAM, storage, GPU, display size, etc.)
- Original OS license (Windows key, etc.)

a How to check:

- Check model number on sticker or in BIOS.
- Compare it on the manufacturer's website.
- For Windows:
 Press Win + R → type msinfo32 → Enter → see all system info.

2. Processor (CPU)

What to check:

- Model and generation (e.g. Intel i5-1135G7, AMD Ryzen 5 4600U)
- Temperature and performance under load

math How to check:

- Press Ctrl + Shift + Esc → Performance tab → CPU name and cores.
- Use Cinebench R23 or CPU-Z for benchmark and details.

Check temperature with HWMonitor or CoreTemp.
 (Over 90°C under load = overheating or bad cooling.)

3. RAM (Memory)

What to check:

- Total amount and type (DDR3, DDR4, DDR5)
- Working condition (no errors)
- Upgradability (available slots)

math How to check:

- Press Ctrl + Shift + Esc \rightarrow Performance \rightarrow Memory.
- Use MemTest86 to check for bad RAM.
- For upgradability, look up model specs online.

Other steps that are included in windows

Steps:

• Press Win + R, type:

mdsched.exe

- 1.
- 2. Choose:
 - "Restart now and check for problems"
 - o or "Check next time you start your computer"
- 3. Your PC will reboot and run tests automatically.
- 4. After restart → results appear in Notification Center, or open **Event Viewer**:

- Press Win + X → Event Viewer
- Go to Windows Logs → System
- Click Find and search MemoryDiagnostics-Results
- \blacksquare If it says "No errors detected" \to RAM is fine.
- If errors are found → one of your RAM sticks is faulty.

Additional way is search windows memory diagnosis on start or win search bar then the application

4. Storage (HDD / SSD)

What to check:

- Type (SSD is much faster than HDD)
- Health and lifespan
- Read/write speed

math How to check:

- Use **CrystalDiskInfo** → Health status and power-on hours.
- Use CrystalDiskMark → speed test.
- Avoid drives showing "Caution" or "Bad" status.

5. Graphics (GPU)

What to check:

Dedicated (NVIDIA / AMD) or Integrated (Intel)

- Test for overheating or artifacts (glitches)
- Driver status

make How to check:

- Device Manager → Display adapters
- Use **GPU-Z** or **MSI Afterburner** for temperature and specs.
- Try a light stress test (like **Unigine Heaven** or **3DMark demo**).

6. Battery (Laptop Only)

What to check:

- Battery health percentage
- Runtime under normal use
- Charging behavior

make How to check:

Run this in CMD:

powercfg /batteryreport

- → It will create an HTML report (check "Design Capacity" vs "Full Charge Capacity").
- Good battery health: 70%+ capacity.

7. Cooling and Fans

What to check:

- Fan noise, heat output, air vents
- Thermal paste condition (optional, if you can open it)

make How to check:

- Let it run for 15–20 minutes (watch temperature via HWMonitor).
- If the fan is too loud or laptop gets hot fast \rightarrow bad sign.

8. Ports and Connectivity

What to check:

- USB ports, HDMI/VGA, audio jack, card reader, Wi-Fi, Bluetooth
- Webcam, mic, and speakers

ea How to check:

- Plug in a USB drive, mouse, or external display.
- For Wi-Fi/Bluetooth: check from **Device Manager** → **Network adapters**.
- Open Camera app to test webcam.

💡 9. Display and Keyboard

What to check:

- Screen brightness, color, dead pixels, backlight bleeding
- Keyboard and trackpad working properly

math How to check:

- Use a dead pixel test website (search "dead pixel test").
- Press all keys (or use KeyboardTester.com).

10. Audio and Microphone

What to check:

- Speaker sound clarity
- Microphone input

math How to check:

- Play a song or YouTube video.
- Open Sound settings \rightarrow Input \rightarrow Test mic.

11. Operating System and BIOS

What to check:

- Is the OS genuine and activated?
- Any BIOS/UEFI lock or password?
- Is Secure Boot and TPM available (for Windows 11)?

How to check:

Run slmgr /xpr in CMD → shows activation status.

- Enter BIOS (usually **F2**, **F10**, or **Del** on startup) → check for password.
- TPM: Press Win + $R \rightarrow tpm.msc$.

For overall testing:

Run

winsat formal

in powercell.exe and run this command **get-ciminstance win32-winsat**For getting the score .