

Computer virus

1. Answer the following questions

(a) What is a computer virus?

A computer virus is a malicious software program loaded onto a user's computer without their knowledge. It is designed to damage the system, steal data, or disrupt performance, and it has the ability to replicate itself by modifying other computer programs.

(b) Mention a cause of virus infection in a computer.

One common cause of virus infection is inserting an infected external storage device (like a USB pen drive or hard disk) into the computer without scanning it first.

(c) Write a symptom of computer infected with virus.

A common symptom is slow performance; the computer takes a long time to start up or open programs, and it may freeze or crash frequently.

(d) Suggest a preventive measure of virus infection.

One of the best preventive measures is to install a reliable antivirus software and keep it updated regularly to detect and block threats.

(e) Distinguish between computer viruses and anti-viruses.

Computer Virus	Antivirus Software
It is a malicious/destructive program.	It is a protective/utility program.
It destroys files and disrupts the system.	It detects, prevents, and removes viruses.
Trojan Horse, Worms, I Love You.	Norton, McAfee, Kaspersky.

(f) How can you say a computer is virus-infected?

You can say a computer is infected if you notice the following signs:

- The system runs significantly slower than usual.
- Files or folders are missing or corrupted.
- Unexpected pop-up windows appear frequently.
- The computer crashes or restarts on its own.

Short Q/A

(g) What do you suggest to protect computer from viruses?

To protect a computer, I suggest:

- Installing reputable antivirus software.
 - Turning on the computer's Firewall.
 - Avoiding clicking on suspicious email attachments or links.
 - Scanning all removable drives (USBs) before opening them.
 - Updating the operating system regularly.
5. **Backups:** Regularly back up important data so it can be restored if an infection occurs.

(h) What is a computer virus? List out how it is transmitted and prevented.

Definition: A computer virus is a program written to alter the way a computer operates and can spread from one computer to another.

Modes of Transmission (How it spreads):

1. **Infected Removable Media:** Using infected Pen drives, CDs, or DVDs.
2. **Internet Downloads:** Downloading infected software, games, or music from untrusted websites.
3. **Email Attachments:** Opening spam emails containing malicious attachments.
4. **Network Sharing:** Connecting to an infected local network.

Preventive Measures:

1. **Antivirus:** Use updated antivirus software to scan for threats.
2. **Firewall:** Enable the firewall to block unauthorized access.
3. **Safe Browsing:** Do not download files from unknown sources.
4. **Scan External Devices:** Always scan USB drives before using them.