

- Virus is a type of Malware.
- The boot sector virus hides in the boot code for a media device and automatically when the media is loaded.
- A program virus becomes active when the program file (usually with extensions .BIN, .COM, .EXE, .OVL, .DRV) carrying the virus is opened.
- An antivirus program is a software utility designed to protect your computer or network against computer viruses.
- A worm has the ability to self-replicate, and can lead to negative effects on your system and network. Importantly they are detected and eliminated by antiviruses.
- Trojan is used to hack into a computer by misleading users of its true intent.
- Spyware is a software that is installed on a system without the user's knowledge.

EXERCISES

1. Fill in the blanks.

- A Virus is a type of malicious software program that, when executed, replicates by reproducing itself or infecting other computer programs by modifying them.
- A File Virus is a computer virus that can only spread if you run the specific program that it has infected.
- An Antivirus is a software utility designed to protect your computer or network against computer viruses.

- d. Spyware is software that is installed on a system without the user's knowledge.
 e. The Mail worms are carried by email messages.

2. State whether the following statements are True (T) or False (F).

- a. It is safe to use open WiFi.
 b. A computer virus might damage your boot sector creating problems when you boot into the windows.
 c. It is necessary to keep your antivirus up to date but not your operating system.
 d. Trojans can self replicate.
 e. Stoned is an example of program file virus.

false ☐ F
 true ☐
 false ☐
 false ☐ F
 false ☐

3. Tick (✓) the correct option.

- a. Which are the phases of execution of a virus?

- i. Infection Phase ☐ ii. Attack Phase ☐
 iii. Both (i) and (ii) ☒ iv. None of these ☐

- b. Name the software that is used to scan and remove viruses.

- i. Antivirus ☒ ii. Eraser ☐
 iii. Delete ☐ iv. Scan ☐

- c. Which among the following is not done by an Antivirus?

- i. Fix ☐ ii. Quarantine ☐
 iii. Delete ☐ iv. Rename ☒

- d. Name the type of virus that comes embedded in a Microsoft Word document.

- i. Macro Virus ☒ ii. Boot Sector Virus ☐
 iii. Multipartite Virus ☐ iv. Worms Virus ☐

4. Short answer type questions.

- a. Define a boot sector virus.
 b. Define an antivirus.
 c. What are program file viruses?
 d. How are worms different than Trojans?

5. Long answer type questions.

- a. What are the symptoms of a computer virus? → Page No. 21/22 → Symptoms of virus
 b. What are the possible harms a computer virus can do? → Page No. 22 → Harms by a virus
 c. Write in brief about antivirus and its functions. → 203 prevention and cure points in blue letters
 d. Make a list of preventive measures to keep your system virus free. →
 e. Define the following with examples
 i. Worm ii. Trojan iii. Spyware

Lab Zone

1. Make a PowerPoint Presentation about the timeline of computer viruses.
2. Prepare a report on the latest trends in antivirus programs giving vivid detail about the new variety and variations in such softwares.

Define a boot sector virus.

Q4) a) Boot sector Virus hides in the boot code for a media device, such as a disk or CD, and runs automatically when the media is loaded.

b) Define an antivirus.

→ An antivirus program is a software utility designed to protect your computer or network against computer viruses.

c) What are program file viruses?

→ A program file virus, also known as a file-infecting virus or file injector, is a type of malware that infects executable files on a computer.

d) How worms are different than Trojans?

→ worms are self-replicating malware programs can spread quickly across a network.

Trojan horses → is used to hack into a computer by misleading users of its true intent.

Q-5 Long Answer type questions.

a) what are the symptoms of a computer virus?

→ page No. 21/22 → ^{write} symptoms of virus
write any 8 points.

b) what are the possible harms a computer virus can do?

→ page No. 22 → write any 4 Harms caused by computer virus.

c) write in brief about antivirus and its functions?

→ An antivirus program is a software utility designed to protect your computer or network against computer viruses.

→ functions of Antivirus.

- scan specific files or directories for any malware

→ write any 4 points from page no. 22 about what an antivirus does.

d) Make a list of preventive measure to keep your system virus free.

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- ① Install Anti Virus programs.
 - ② think before you click on the web.
 - ③ set Browser's security setting to High.
 - ④ scan External media before opening.
 - ⑤ use strong passwords.
 - ⑥ use public / open wifi carefully.

e. Define

1) worm → These is self-replicating programs can spread without any interaction from the malware author. They can infect your email, delete files, lock you out of your computer or steal your information.

2) Trojan horses → These programs appears as legitimate software to gain access to your system. They can access files, folders, entire system. They ^{can be} hidden in emails, video games, mobile apps.

3) Spyware :- This program collects information and data on your device and user, and observes your activity without your knowledge.