

Caring for Your Computer

Fastrack® Revision

- ▶ **Care and Maintenance of Computer:** A large number of files are stored in the computer. These files can be disorganised and fragmented and may result in slowing down of the system. Regular maintenance of the system includes installing updates, security checks, taking backups, virus scans, etc.
 - ▶ Both internal and external components of the computer system should be maintained properly. Preventive maintenance increases the life of the components.
- ▶ **Computer Maintenance Activities:** A few computer maintenance activities are as follows:
 - ▶ Always keep the computer parts clean by wiping them with a dry cloth.
 - ▶ Keep food items away from the computer.
 - ▶ Replace or repair the hardware that is not functioning properly.
 - ▶ Install antivirus software and update it regularly.
- ▶ **Cleaning of Computer:** General precautions that can be taken while cleaning the computer components are as follows:
 - ▶ Always switch off the computer system before cleaning.
 - ▶ Never spray cleaning fluid directly on the components of the computer. First, spray the liquid on the lint-free cloth and then wipe the component.
 - ▶ Do not allow the cleaning fluid to drip near the circuit board.
 - ▶ Never use a regular vacuum to capture the dust (only use an anti-static computer vacuum).
 - ▶ Do not attempt to clean the inside of a computer monitor.
- ▶ **Cleaning Peripheral Device:** Following are the ways to clean a few common peripheral devices of a computer:
 - ▶ **Keyboard:** Dirt and dust can cause damage to the keyboard. Keys of the keyboard may not function properly if dirt enters them. You should always clean the keyboard periodically. Always disconnect the keyboard from the computer before cleaning it.
 - ▶ **Monitor:** To clean the computer monitor, first disconnect it from the computer system. This not

only lowers the risk of electrocution, but allows us to see dust and grime on the screen more easily. Now, wipe the dust off with a dry cloth. You can use a soft lint-free cloth, like cotton to wipe.

- **Optical Mouse:** Disconnect the optical mouse from the computer system. The cleaning process requires turning the mouse over as viewing the underside of an operational optical mouse may be injurious to the eyes. Clean the bottom of the optical mouse with a clean lint-free cloth.
- **Disk Drives:** While the CD/DVD tray is open, use compressed air to gently clean out the dust. Avoid using too high a pressure as it may cause damage to its internal components.

➤ **Preparing Maintenance Schedule:** Computer is a machine. Like other machines, regular maintenance of a computer system is very important.

By running anti-malware programs, deleting files as needed and cleaning out the dust on a computer, you can prolong the lifespan of your computer by years and use it efficiently too.

A few of the maintenance tasks to be performed to get the most out of your computer are:

- **Daily:**
 - Take backup of your data at least once per day.
 - Run antivirus software daily for virus prevention.
 - Check for updates everyday so that you do not miss any crucial upgrades.
- **Monthly:**
 - Use the defragmentation tool to keep your computer running fast and efficiently.
 - Scan your hard drive for errors to make sure that there are no physical problems occurring.
 - Clean out the disk drive every few weeks. This is similar to defragmentation, these are small pieces of trash that quietly accumulate over time.
- **Yearly:**
 - Backup your hard drive as an image, so if your computer ever crashes you would not have to reinstall from scratch. This should be done twice a year, just to be safe.
 - Clean your computer. This goes beyond simply using compressed air and actually opening it up to get rid of all of the smaller bits and pieces of dirt stuck in there.
 - Renew the antivirus subscription.
- **As Needed:**
 - Uninstall programs that you do not use anymore to free up space.
 - Practice safe browsing by not downloading files from or spending time on sites you are not familiar with, change passwords frequently as a general preventive measure against hackers.

➤ **Computer Virus:** The term **VIRUS** stands for **Vital Information Resource Under Seize**. A computer virus is similar to a biological virus.

A **computer virus** is a program or piece of code that is loaded on to your computer without your knowledge and runs against your wishes. A computer virus can easily attach itself to other files and programs.

➤ **How does a Computer Virus Attack and Spread?**

The major source of a computer virus attack is the Internet. A virus can enter your computer without your knowledge when you do normal web activities, for example,

- Sharing music, files or photos with other users.
- Visiting an infected website.
- Opening a spam e-mail or an e-mail attachment.
- Downloading free games, media players and other system utilities.
- Installing mainstream software applications without reading license agreements thoroughly.

➤ **Hazards Caused by a Computer Virus:** As a computer virus is a program or a piece of code, some computer viruses are programmed to harm a computer by damaging programs, deleting files or even reformatting the hard drive.

➤ **Symptoms of a Computer Virus:** Some of the common symptoms that are exhibited by a computer, in case of a virus attack, are as follows:

- Unusual messages start appearing on the screen while working.
- The computer tends to run slower than the normal.
- The space on the disk is reduced.
- Applications take a long time to load and may not work properly.
- Files on the computer start missing and vanish.
- The hard disk has more files than it had earlier.

➤ **Types of Computer Virus:** There are many different types of computer viruses. They infect the computer in different ways. The different types of viruses along with their description that can harm the data and information stored in a computer, are as follows:

- **Resident Viruses:** They are permanent viruses that reside in the RAM of a system. They can interfere and disturb the normal working of a computer. They can corrupt files and currently used applications in a computer. Some examples of such viruses are Jerusalem, Onehalf, Magistr, Junkie and Satanbug.
- **Non-resident Viruses:** They are similar to the Resident viruses except that these do not reside in the RAM of a system, rather reside in a module of a program. It may select one or more files to infect, each time the module is executed.
- **Program Viruses:** These infect the files with the extension .EXE, .COM, .SYS, .OVL and .SCR. The program files are used by the virus as they are easy to attack and they have simple format to which the virus can attach itself. When the infected file is executed, the virus becomes active. Some examples of these viruses are Sunday and Cascade.
- **Macro Viruses:** Macro language is used in the Macro virus, for its programming. It is a set of commands written by the user to be executed later. Data files are affected by these viruses. Macro viruses spread rapidly since the users share the infected documents. Some examples of these viruses are Concept and Nuclear.

- **Trojan Horse:** For passing the user's data to someone else, this virus is used. It is a program which appears to be useful. Confidential information is stolen and passed using this virus. A Trojan horse enters the computer with the help of the users. The users install it under the wrong impression that it is a useful and harmless program.
- **Malware:** It refers to the program which harms the computer and comes into the computer without the user's consent. Malware is the short name of **Malicious software**. It slows down the computer and networks. It is actively destructive and annoying.
- **Spyware:** Spyware is a kind of malware that is sent to someone's computer intentionally to steal information such as e-mail passwords, credit card password, etc.
- **Worms:** This virus is a program which is capable of reproducing and spreading itself to another computer system with the help of the computer network. This type of virus does not cause direct

damage to the files and the programs. Large amount of memory and network is used by this type of virus, thus, make difficult for the users to work on the network.

- **Boot Virus:** The boot records of hard disk are infected by this virus. These viruses are more dangerous than the program virus. Some examples of these viruses are Disk killer and Stoned virus.
- **Protecting Computer against Viruses:** The following are some points that you should keep in mind to safeguard your computer system against virus attacks:
 - Do not install and run pirated software on your computer.
 - Install an antivirus software on to your computer and keep it updated.
 - Avoid copying and using files coming from unreliable sources.
 - Restrict the access to your system, both online and offline.



Practice Exercise



Multiple Choice Questions

Q 1. Which of the following is not a computer maintenance activity?

- a. Take regular backup of data.
- b. Keep food items on the computer table.
- c. Cables and cords should not be messed up.
- d. Always shut down the computer properly.

Q 2. Which of the following general precautions should not be taken care of while cleaning the computer components?

- a. Always switch on the computer system before cleaning.
- b. Never spray cleaning fluid directly on the components of the computer.
- c. Do not attempt to clean the inside of a computer monitor.
- d. Never use a regular vacuum to capture the dust.

Q 3. What is the full form of VIRUS?

- a. Vital Information Resource Under Seize
- b. Vast Information Resource Under Seize
- c. Vital Information Record Under Seize
- d. None of the above

Q 4. Which of the following viruses resides in the RAM of a computer system?

- a. Non-resident virus
- b. Resident virus
- c. Boot sector virus
- d. Creeper virus

Q 5. Which of the following viruses can infect an Excel document?

- a. Boot virus
- b. Program virus
- c. Macro virus
- d. All of these

Q 6. Which of the following viruses infects the boot records on the hard disk?

- a. Macro
- b. Malware
- c. Boot virus
- d. Worm

Q 7. Which of the following is an example of an antivirus software?

- a. Quick Heal Total Security
- b. Norton antivirus
- c. McAfee antivirus
- d. All of the above

Q 8. Which of the following antivirus is available for free?

- a. Kaspersky antivirus
- b. Quick Heal Total Security
- c. Microsoft Security Essentials
- d. Norton antivirus

Q 9. Which of the following antivirus is made by a Chinese company?

- a. Kaspersky
- b. Microsoft Security Essentials
- c. 360 Total Security
- d. None of the above

Q 10. When cleaning any of the components or peripherals of a computer, which method would you use to clean dirt, dust or hair around their computer on the outside case and on the keyboard?

- a. Users can use a vacuum
- b. Users can use a damp cloth with water
- c. Users can use a feather duster
- d. All of the above

- Q 11. What should you never do when cleaning a computer?**
- a. Never use a vacuum cleaner
 - b. Never unplug the electricity
 - c. Never eat or drink around the computer
 - d. All of the above
- Q 12. When cleaning a component and/or the computer, what should you do before you clean it?**
- a. Leave it in standby mode
 - b. Leave the computer running while you are cleaning
 - c. Turn the computer on, then clean it
 - d. Turn it off from the power switch
- Q 13. Why should you be cautious when using any type of cleaning solvents?**
- a. You don't use cleaning solvents because it is dangerous.
 - b. Cleaning solvents are not to be used on computers as they are toxic.
 - c. You don't use cleaning solvents, you only use water.
 - d. Try to always use water or a highly diluted solvent if cleaning solvents cause you physical irritations such as watery eyes.
- Q 14. What should you not use inside of your computer that can cause damage to the internal components of your computer due to the build-up of static electricity?**
- a. Do not use metal objects such as a piece of metal to probe inside the computer.
 - b. Do not use a paper towels, tissues to wipe the inside of your computer.
 - c. Do not use a vacuum cleaner for the inside of your computer.
 - d. All of the above
- Q 15. Some components in your computer may only be able to be cleaned using a product designed for cleaning that component; if this is the case, which tip is most useful?**
- a. A toothbrush to clean the dust and hair that accumulates around the fan.
 - b. A water spray bottle that can be used to wipe the computer.
 - c. A portable vacuum can be used to sucking the dust, dirt, hair, cigarette particles and other particles out of a computer.
 - d. A dry paper tissue.
- Q 16. A cloth is the best tool to use when rubbing down a component; although paper towels can be used with most hardware, which hardware component can be cleaned with a cloth?**
- a. You use a cloth when cleaning components such as the outside of the case, a drive, mouse, keyboard
 - b. Monitor screen
 - c. Inside the case of a computer
 - d. All of the above
- Q 17. Why should you clean a dirty CD-ROM drive or other disc drive?**
- a. Because it is important to keep the surface shiny
 - b. Disks can collect dust and destroy the disk drive
 - c. Can cause read errors with CD discs
 - d. All of the above
- Q 18. How do you clean your hard drive?**
- a. The hard drive automatically cleans itself and does not need to be cleaned.
 - b. The hard drive is write protected and cannot be accessed using software utilities.
 - c. The hard drive should be cleaned regularly using the various software utilities installed in your operating system to maintain the system by keeping it running fast and more effectively.
 - d. All of the above
- Q 19. The computer keyboard is often the most germ infected item in your home or office, often it will contain more bacteria than your toilet seat. Cleaning it can help remove any dangerous bacteria, dirt, dust and hair can also build-up causing the keyboard to not function properly. What is the procedure for cleaning a keyboard?**
- a. Use a vacuum cleaner.
 - b. You clean the keyboard by turning it upside down and shaking.
 - c. A more effective method is to use compressed air. Compressed air is pressurized air contained in a can with a very long nozzle. Simply aim the air between the keys and blow away all of the dust and debris that has gathered there.
 - d. All of the above
- Q 20. A dirty LCD monitor can be caused by dust and finger prints that can make the screen difficult to read. The monitor screen is not made of glass, so therefore special cleaning procedures need to be followed. When cleaning the LCD monitor, what should you remember to not do?**
- a. When cleaning the LCD screen just wipe it with a damp cloth by rubbing the dirt marks off the screen as hard as you can.
 - b. When cleaning the LCD screen you can use water and detergent to soap the surface and then polish it with a fine dust cloth.
 - c. When cleaning the LCD screen it is important to remember to not spray any liquids onto the LCD directly, press gently while cleaning and do not use a paper towel as it may cause the LCD to become scratched.
 - d. All of the above
- Q 21. What is an Electric Static Discharge (ESD) and why should you be careful?**
- a. ESD is a short circuit caused by electricity. This can cause the computer to blow up.

- b. ESD is the electrical component of the motherboard that generates electricity.
- c. ESD is one of the few things an individual can do to damage or destroy his or her computer or hardware components.
- d. All of the above

Q 22. Which of the following are objectives of malware?

- a. Provide remote control for an attacker to use an infected machine.
- b. Investigate the infected user's local network.
- c. Steal sensitive data.
- d. All of the above

Q 23. Malware is short form of:

- a. malicious hardware
- b. malicious software
- c. Both a. and b.
- d. None of the above

Q 24.are computer programs that can damage the data and software programs or steal the information stored on a computer. [CBSE 2023]

- a. Spam
- b. Viruses
- c. Junk mail
- d. BIOS

Q 25. Which is true about worms?

- a. Self-replicating viruses that exploit security vulnerabilities to automatically spread themselves across computers and networks.
- b. Worms on existing programs and can only be activated when a user opens the program.
- c. Worms vary and hide themselves in the operating system.
- d. All of the above

Q 26. Which of the following malware do not replicate or reproduce through infection?

- a. Worms
- b. Trojans
- c. Viruses
- d. Rootkits

Q 27. RATs stands for:

- a. Rootkits Administration Tools
- b. Remote Access Tools
- c. Remote Administration Tools
- d. Remote Attack Tools

Q 28. Which malware has short for 'Robot Network'?

- a. Ronets
- b. Botnets
- c. Botwork
- d. Rowork

Q 29. Which malware enable administrative control, allowing an attacker to do almost anything on an infected computer?

- a. Rootkits
- b. RATs
- c. Botnets
- d. Worms

Q 30. Which malware are often the armies behind today's Distributed Denial of Service (DDoS) attacks?

- a. Botnets
- b. Botnets Spyware
- c. Trojans
- d. Viruses

Q 31. What is true regarding Trojans?

- a. Trojans will conduct whatever action they have been programmed to carry out.
- b. Trojan alludes to the mythological story of Greek soldiers hidden inside a wooden horse that was given to the enemy city of Troy.
- c. Trojans do not replicate or reproduce through infection.
- d. All of the above

Q 32. Which of the following is designed to perform legitimate tasks but it also performs unknown and unwanted activity?

- a. Viruses
- b. Worms
- c. Trojan horses
- d. Semantic attack

Q 33. A worm does not need another file or program to copy itself; it is a self-sustaining running program.

- a. True
- b. False
- c. Can be true or false
- d. Cannot say

Q 34. What are the types of malware?

- a. Caterpillars
- b. Worms
- c. Lions
- d. Horses

Q 35. Which of the following is not a stand-alone program?

- a. Trojan
- b. Worm
- c. Virus
- d. Spyware

Q 36. Identify the measure to protect computer from threats and viruses. [CBSE SQP 2021, Term-1]

- a. Sharing passwords with friends
- b. Use Antivirus
- c. Allow anyone to use your device
- d. Leave computer without logging out

Q 37. Neha is receiving several mails from companies who are advertising a product or trying to attract her to their websites. Such types of mails are called:

[CBSE SQP 2021, Term-1]

- a. Advertising mails
- b. Spam mails
- c. Bulk mails
- d. Labelled mails



Fill in the Blanks Type Questions

Q 38. Clean out the disk drive every week. This is similar to

Q 39. Always down the computer properly.

Q 40. You should not spray water or cleaning fluid on the computer monitor as it may run through the seams.

Q 41. Keep CDs/DVDs in proper cases to prevent them from

Q 42. Virus program can generate of itself.

Q 43. is the short name of Malicious software.



Assertion & Reason Type Questions

Directions (Q. Nos. 44–49): In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.

- Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
- Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).
- Assertion (A) is true, but Reason (R) is false.
- Assertion (A) is false, but Reason (R) is true.

Q 44. Assertion (A): A large number of files are stored in the computer. These files can be unorganised and fragmented and may result in slowing down of the system.

Reason (R): The CPU gets heated while working so there is a fan to cool it down. If the cooling fan is blocked due to dust or is not repaired or replaced, it can easily catch fire.

Q 45. Assertion (A): Dirt and dust can cause damage to the keyboard. Keys of the keyboard may not function properly if dirt enters them.

Reason (R): To clean the computer mouse, first disconnect it from the computer system. This not only lowers the risk of electrocution, but allows us to see dust and grime on the screen more easily.

Q 46. Assertion (A): Disconnect the optical mouse from the computer system. The cleaning process requires turning the mouse over as viewing the underside of an operational optical mouse may be injurious to the eyes.

Reason (R): Keep CDs/DVDs in proper cases to prevent them from scratches. If there is some dirt on the CD or DVD, it may not work at all.

Q 47. Assertion (A): Cleaning a camera lens needs special care to avoid scratches and other damages. Never touch the lens of the camera. To remove the dust, you can use a soft lens brush or wipe with a soft dry cloth.

Reason (R): Always wipe from middle to the edge and never in a circular motion. If the dirt is hard to remove, you can use any special cleaning fluid. Put the drop of the fluid on a swab of cotton and gently rub on the media.

Q 48. Assertion (A): Computer is a machine. Like other machines, regular maintenance of a computer system is not very important.

Reason (R): Clean out the disk drive every few weeks. This is similar to defragmentation, these are small pieces of trash that quietly accumulate over time.

Q 49. Assertion (A): A computer virus is similar to a biological virus. When a biological virus attacks you, it makes you feel sick.

Reason (R): A computer virus is a program or piece of code that is loaded on to your computer without your knowledge and runs against your wishes. A computer virus can easily attach itself to other files and programs.

Answers

- | | | | | |
|---------------------|---------------|---------|---------|---------|
| 1. (b) | 2. (a) | 3. (a) | 4. (b) | 5. (b) |
| 6. (c) | 7. (d) | 8. (c) | 9. (c) | 10. (a) |
| 11. (c) | 12. (d) | 13. (d) | 14. (c) | 15. (c) |
| 16. (a) | 17. (c) | 18. (c) | 19. (c) | 20. (c) |
| 21. (c) | 22. (d) | 23. (b) | 24. (b) | 25. (a) |
| 26. (b) | 27. (c) | 28. (b) | 29. (b) | 30. (a) |
| 31. (d) | 32. (c) | 33. (a) | 34. (b) | 35. (c) |
| 36. (b) | 37. (b) | | | |
| 38. defragmentation | 39. shut | | | |
| 40. directly | 41. scratches | | | |
| 42. copies | 43. Malware | | | |
| 44. (b) | 45. (c) | 46. (b) | 47. (b) | 48. (b) |
| 49. (b) | | | | |



Very Short Answer Type Questions

Q 1. Why care and maintenance of computer is required?

Ans. A large number of files are stored in the computer. These files can be unorganised and fragmented and may result in slowing down of the system. Regular maintenance of the system includes installing updates, security checks, taking back-ups, virus scans, etc.

Q 2. Explain the term computer virus.

Ans. The term 'virus' stands for Vital Information Resource Under Seize. A computer virus is similar to a biological virus.

A computer virus is a program or piece of code that is loaded on to our computer without our knowledge and runs against our wishes. A computer virus can easily attach itself to other files and programs.

Q 3. Describe how the virus can be spread within the computer.

Ans. Virus can be spread through e-mail, text message attachments, Internet file downloads, social media scam links, etc. They can be disguised as attachments of funny images, greeting cards or audio and video file.

Q 4. How is a computer virus different from a biological virus?

Ans. A computer virus is different from a biological virus as biological virus harms human body whereas computer virus harms the computer system.

Q 5. What is the major source of a computer virus attack?

Ans. The major source of a computer virus attack is the Internet. A virus can enter our computer without our knowledge when we do normal web activities.

Q 6. Define boot virus.

Ans. The boot records of hard disk are infected by the Boot virus. These viruses are more dangerous than the program virus. Some examples of these viruses are Disk killer and Stoned virus.

Q 7. What is Melissa virus?

Ans. Melissa virus (March 1999) was so powerful that it forced Microsoft and many other large companies to turn off their e-mail systems until the virus could be removed completely.

Short Answer Type Questions

Q 1. Write any four computer maintenance activities.

Ans. Four computer maintenance activities are as follows:

- (i) Always keep the computer parts clean by wiping them with a dry cloth.
- (ii) Keep food items away from the computer.
- (iii) Replace or repair the hardware that is not functioning properly.
- (iv) Install antivirus software and update it regularly.

Q 2. Write four daily computer maintenance tasks.

Ans. Daily computer maintenance tasks are as follows:

- (i) Take back-up of the data at least once per day.
- (ii) Run antivirus software daily for virus prevention.
- (iii) Check for updates everyday so that we do not miss any crucial upgrades.
- (iv) Shut down the computer properly after use.

Q 3. Write four monthly computer maintenance tasks.

Ans. Monthly computer maintenance tasks are as follows:

- (i) Check for software updates and update them when it is required.
- (ii) Use the defragmentation tool to keep the computer running fast and efficiently.
- (iii) Scan the hard drive for errors to make sure that there are no physical problems occurring.
- (iv) Empty the Recycle Bin.



TiP

Read the question properly before answering whether daily or monthly computer maintenance tasks are asked.

Q 4. How will you clean the monitor?

Ans. To clean the computer monitor, first disconnect it from the computer system. This not only lowers the risk of electrocution, but allows us to see dust and grime on the screen more easily. Now, wipe the dust off with a dry cloth. We can use a soft lint-free cloth, like cotton to wipe. Do not apply too much pressure on the screen.

Q 5. How can you protect your computer and other devices from virus attack?

Ans. The following are some points that we should keep in mind to safeguard the computer system against virus attacks:

- (i) Do not install and run pirated software on the computer.
- (ii) Install an antivirus software on to the computer and keep it updated.
- (iii) Avoid copying and using files coming from unreliable sources.
- (iv) Restrict the access to the system, both online and offline.

Q 6. Discuss a few symptoms of computer virus attack.

Ans. When a computer behaves differently than the normal behaviour, there are chances that it may have been attacked by a virus.

Some of the common symptoms that are exhibited by a computer in case of a virus attack, are as follows:

- (i) Unusual messages start appearing on the screen while working.
- (ii) The computer tends to run slower than the normal.
- (iii) The space on the disk is reduced.
- (iv) Applications take a long time to load and may not work properly.

Q 7. What is Trojan horse?

Ans. For passing the user's data to someone else, Trojan horse virus is used. It is a program which appears to be useful. Confidential information is stolen and passed using this virus. A Trojan horse enters the computer with the help of the users. The users install it under the wrong impression that it is a useful and harmless program.



Chapter Test

Multiple Choice Questions

Q 1. What is Trojan horse?

- a. A Trojan horse program has the appearance of having a useful and desired function.
- b. A Trojan horse neither replicates nor copies itself, but causes damage or compromises the security of the computer.
- c. A Trojan horse must be sent by someone or carried by another program and may arrive in the form of a joke program or software of some sort.
- d. All of the above

Q 2. Which of the following is a program capable of continually replicating with little or no user intervention?

- a. Virus
- b. Trojan horses
- c. Rootkit
- d. Worms

Q 3. What are the examples of Malware Spreads?

- a. Social network
- b. Pirated software
- c. Removable media
- d. All of these

Q 4. Which malicious program cannot do anything until actions are taken to activate the file attached by the malware?

- a. Trojan horse
- b. Worm
- c. Virus
- d. Boots

Q 5. The attack that focuses on capturing small packets from the network transmitted by other computers and reading the data content in search of any type of information is

- a. phishing
- b. eavesdropping
- c. scams
- d. exploits

Fill in the Blank Type Questions

Q 6. Run softwares daily for virus protection.

Q 7. language is used in the macro virus, for its programming.

Q 8. Installing and updating it frequently is a way to prevent from virus.

Assertion and Reason Type Questions

Directions (Q. Nos. 9-11): In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.

- a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
- b. Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).
- c. Assertion (A) is true, but Reason (R) is false.
- d. Assertion (A) is false, but Reason (R) is true.

Q 9. Assertion (A): When a computer behaves differently than the normal behaviour, there are chances that it may have been attacked by a virus.

Reason (R): Never download text or e-mail attachments that you are not expecting, or files from the websites you do not trust. Do not open junk e-mails or spam mails as these may contain virus.

Q 10. Assertion (A): Non-resident viruses are permanent viruses that reside in the RAM of a system. They can interfere and disturb the normal working of a computer.

Reason (R): Macro language is used in the Macro virus, for its programming. It is a set of commands written by the user to be executed later. Data files are affected by these viruses.

Q 11. Assertion (A): Worms is a program which is capable of reproducing and spreading itself to another computer system with the help of the computer network.

Reason (R): Spyware refers to the program which harms the computer, and comes into the computer without the user's consent. It slows down the computer and networks. It is actively destructive and annoying.

Very Short Answer Type Questions

Q 12. Define program viruses.

Q 13. What do you mean by malware?

Q 14. Define worm.

Q 15. Name some of the popular antivirus software.

Short Answer Type Questions

Q 16. Discuss the difference between a Resident virus and a Non-resident virus.

Q 17. How is Spyware different from Malware?