



**SUBJECT: COMPUTER SCIENCE**

**CLASS- X**

**CHAPTER - Societal Impacts of IT**  
**(Major Ethical Issues)**

**Guidelines:**

Dear students, read the notes carefully and thereafter attempt the online assignment given in the end.

**Introduction:**

Information Technology (IT) is playing a crucial role in the society. It has transformed the whole world into a global village with a global economy. As technology has advanced, the way in which privacy is protected and violated, has also changed. Several positive and some negative social implications of IT could be far-reaching. Besides the positives that IT has given us, some major ethical threats have cropped up in the cyber world.

Let us understand about these threats today:-

**Subtopics**

- Malware
- Types of Malware
- Spamming
- Phishing

**MALWARE**

- Malware stands for Malicious Software. It is a broad term that refers to a variety of malicious programs that are used to damage computer system, gather sensitive information, or gain access to private computer systems
- Malware is an unwanted software that any unauthorized person wants to run on your computer. These are known as security threats.
- It includes computer viruses, worms, Trojan horses, rootkits, spyware, adware etc.

Let us discuss them separately:-

**a) VIRUS:**

VIRUS stands for **Vital Information Resource Under Siege**. Virus is a harmful program, which enters a computer system and starts replicating itself and then corrupts the executable files and folders causing serious damage to the computer system. E.g. **Bomber, Whale, OneHalf, KoKo, Eliza etc.**

**b) TROJAN HORSES: -**

A Trojan or Trojan horse, is a **non-self-replicating** type of malware, which appears to perform a desirable function but instead facilitates unauthorized access to the user's computer system. It is a code hidden in a program such as a game or spreadsheet that looks safe to run but has hidden side effects. When such program runs, the Trojan destroys, damages or alter the data in the background while it seems to function as per the user expectation. **E.g. Beast, Sub7. Zeus, ZeroAccess rootkit etc.**

**c) WORM:**

It is a standalone malware computer program that replicates itself in order to spread to other computers. Often, it uses a computer network to spread itself, relying on security failures of the target computer to access it. Unlike a computer virus, it does not need to attach itself to an existing program. Worms spread much more rapidly than computer viruses. **E.g. MS-Blaster, Sobig Worm, Melissa Worm etc.**

Trojan Horses and Worms are both considered to be Viruses.

What do Trojans and Worms have in Common?

They both multiply, and spread themselves to other computers and can cause damage.

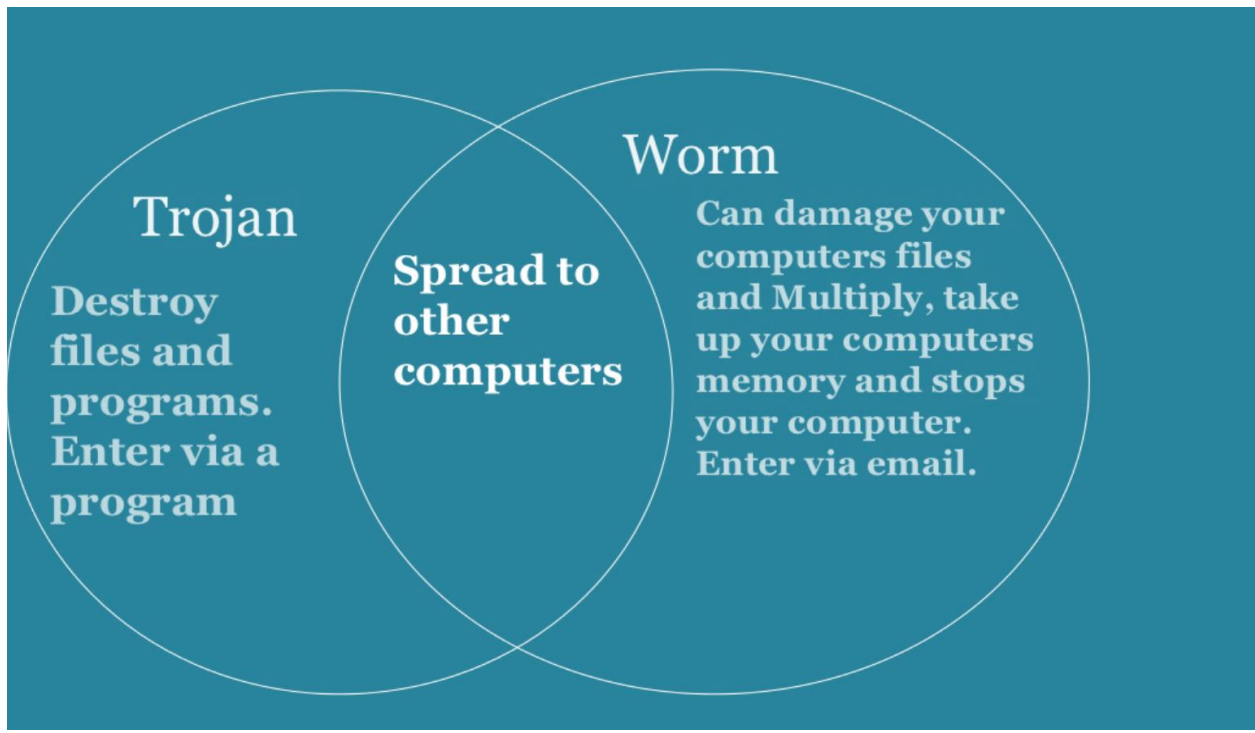
What makes Trojans and Worms different?

Trojans get into your computer via a program then **damage and destroy programs and files-.**

Worms get into your computer usually via email and can damage your computer or cause a computer to **stop** by multiplying and using up all a computers memory

VIRUS/WORM VIDEO





### Understanding difference between Virus, Trojan and Worm

This internet resource shall help you distinguish between Virus, Trojan and Worm

<https://www.youtube.com/watch?v=y8a3QoTg4VQ>

#### d) **SPYWARE:-**

Spyware is a general term used to describe software that performs certain behaviours, generally without appropriately obtaining your consent first, such as advertising, collecting personal information, changing the configuration of your computer etc. e.g. **Trymedia, Muvens, Live PC care etc.**

#### e) **ADWARE:-**

It is a software that displays banners or pop-up ads on to your computer. It downloads to your computer when you access certain internet sites, or when you agree to download a certain freeware or shareware. It might contain spyware and could track your files or surfing habits and pass on the information to a third party.

#### f) **SPAM:-**

It is usually defined as unsolicited E-mail. Spam is an electronic messaging system used by various commercial organizations to send bulk messages to a large number of addresses. E-mail spam, junk mail or junk newsgroup postings is a widely recognized form of spam.

**Watch this video for a better understanding of Spamming**

<https://www.youtube.com/watch?v=apCdjFlacfU>

**g) PHISHING:-**

Another way by which hackers try to get personal information from you is Phishing. **Phishing** is a cybercrime in which a target or targets are contacted by email, telephone or text message by someone posing as a legitimate institution to lure individuals into providing sensitive data such as personally identifiable information, banking and credit card details, and passwords.

**Watch this video for a better understanding of Spamming**

<https://www.youtube.com/watch?v=9TRR6IHviQc>

**Check Your Knowledge**

Attempt this quick online quiz to test what you learnt so far. Click this link to play a gamified Quiz: -

<https://quizizz.com/join?gc=161674>

**(The link is open till April 22, 2020 only)**