Cyber Laws and Cyber Security:

In order to ensure that humans do not misuse Cyber technologies, Cyber laws are generated. The overall idea of Cyber law is to stop any person from violating the rights of other persons in Cyberspace. Any kind of violation of Cyber rights is considered to be a Cyberspace violation and is deemed punishable under Cyber Laws.

It is important to note that since Cyberspace does not belong to the physical world, the physical laws do not apply to Cyberspace crime. A separate set of Cyber laws are formulated by the government to provide Cyber security to Cyber users. Such Cyber laws are needed to monitor and prevent any immoral or illegal activities of humans. Some of the common Cyberspace violation activities include hacking, theft, money laundering, terrorism, piracy, etc. Hackers can get hold of any internet account through the Domain Name Server (DNS), phishing, IP address, etc. to get entry into the computer system of any person and steal the data, or introduce computer bugs and render the system ineffective.

Cyber Laws:

Cyber laws encompass all the legal issues related to the communicative, distributive and transactional aspects of network-related information devices and technologies. It is different from the Property Law or any other law. Unlike property law, it is not so distinct; it is broader since it covers several areas of laws and regulations. It encapsulates the statutory, legal and constitutional provisions related to computers and the internet. Cyber laws are related to individuals and institutions that

- Play a crucial role in providing Cyberspace access to people
- Generates software and/or hardware to allow people with entry into Cyberspace, and
- Make use of their computer system to gain entry into Cyberspace.

If we go by the Cyberspace definition, Cyber law can be considered as a generic term related to all regulatory and legal properties of the internet. Any activities of the citizen related to or concerned with the legal aspect of Cyberspace come under the purview of Cyber laws.

To define the different arms of Cyber security, two main acts are considered in India. They are:

- The Indian Penal Code, 1860
- The Information Technology Act, 2000

Cyberspace:

Cyberspace mainly refers to the computer which is a virtual network and is a medium electronically designed to help online communications to occur. This facilitates easy and accessible communications to occur across the world. The whole Cyberspace is composed of large computer networks which have many sub-networks. These follow the TCP or IP protocol.

The TCP (Transmission Control Protocol) is a standard for communications that allows the application programs and other computing devices to exchange data and messages over a Cyber network. These are designed to send data across the internet which then makes sure that the sent data are successfully delivered over the networks. It is the standards that are mostly used to define the rules of the internet and are defined by the Internet Engineering Task Force or IETF. It is a very commonly used protocol and it ensures that there is an end-to-end delivery of data.

On the other hand, Internet Protocol or IP is the protocol or method that involves sending data from one device to another using the internet. Each and every device has an IP address that is unique to it and this gives it its identity. The IP address enables communication and exchange of data to other devices across the internet. It defines how devices and their applications will exchange packages of data with each other and connected networks. All the transfer occurs through either of the Internet Protocol Suite or protocols i.e. either TCP or IP.

<u>Cyberspace is that space in which users share information, interact with each other; engage in discussions or social media platforms, and many other activities.</u>