2.4 Evaluate the issues relating to IT ethics, justifying their conclusions

Ethical Issues in Information Technology (IT)

Information Technology specifies to the components that are used to store, fetch and manipulate the information at the minimum level with the server having an operating system. Information Technology have a wide area of applications in education, business, health, industries, banking sector and scientific research at a large level. With the leading advancement in information technology, it is necessary to have the knowledge of security issues, privacy issues and main negative impacts of IT. To deal with these issues in IT society it is important to find out the ethical issues.
Some of the major ethical issues faced by Information Technology (IT) are:

1. Personal Privacy **2.**
Access Right
3. Harmful Actions
4. Patents
5. Copyright
6. Trade Secrets
7. Liability
8. Piracy

These are explained with their affects as following below:

1. **Personal Privacy:**
   It is an important aspect of ethical issues in information technology. IT facilitates the users having their own hardware, operating system and software tools to access the servers that are connected to each other and to the users by a network. Due to the distribution of the network on a large scale, data or information transfer in a big amount takes place which leads to the hidden chances of disclosing information and violating the privacy of any individuals or a group. It is a major challenge for IT society and organizations to maintain the privacy and integrity of data. Accidental disclosure to inappropriate individuals and provisions to protect the accuracy of data also comes in the privacy issue.

2. **Access Right:**
   The second aspect of ethical issues in information technology is access right. Access right becomes a high priority issue for the IT and cyberspace with the great advancement in technology. E-commerce and Electronic payment systems evolution on the internet heightened this issue for various corporate organizations and government agencies. Network on the internet cannot be made secure from unauthorized access. Generally, the intrusion detection system are used to determine whether the user is an intruder or an appropriate user.

3. **Harmful Actions:**
   Harmful actions in the computer ethics refers to the damage or negative consequences to the IT such as loss of important information, loss of property, loss of ownership, destruction of property and undesirable substantial impacts. This principle of ethical conduct restricts any outsiders from the use of information technology in manner which leads to any loss to any of the users, employees, employers and the general public. Typically, these actions comprises of the intentional destruction or alteration of files and program which drives a serious loss of resources. To recover from the harmful actions extra time and efforts are required to remove the viruses from the computer systems.

4. **Patents:**
   It is more difficult to deal with these types of ethical issues. A patent can preserve the unique and secret aspect of an idea. Obtaining a patent is very difficult as compared with obtaining a copyright. A thorough disclosure is required with the software. The patent holder has to reveal the full details of a program to a proficient programmer for building a program.

5. **Copyright:**
   The information security specialists are to be familiar with necessary concept of the copyright law. Copyright law works as a very powerful legal tool in protecting computer software, both before a security breach and surely after a security breach. This type of breach could be the mishandling and misuse of data, computer programs, documentation and similar material. In many countries, copyright legislation is amended or revised to provide explicit laws to protect computer programs.

6. **Trade Secrets:**
   Trade secrets is also a significant ethical issue in information technology. A trade secret secures something of value and usefulness. This law protects the private aspects of ideas which is known only to the discover or his confidants. Once disclosed, trade secret is lost as such and is only protected by the law for trade secrets. The application of trade secret law is very broad in the computer range, where even a slight head start in the advancement of software or hardware can provide a significant competitive influence.

7. **Liability:**
   One should be aware of the liability issue in making ethical decisions. Software developer makes promises and assertions to the user about the nature and quality of the product that can be restricted as an express warranty. Programmers or retailers possess the legitimate to determine the express warranties. Thus they have to be practical when they define any claims and predictions about the capacities, quality and nature of their software or hardware. Every word they say about their product may be as legally valid as stated in written. All agreements should be in writing to protect against liability. A disclaimer of express warranties can free a supplier from being held responsible of informal, speculative statements or forecasting made during the agreement stages.

8. **Piracy:**

   Piracy is an activity in which the creation of illegal copy of the software is made. It is entirely up to the owner of the software as to whether or not users can make backup copies of their software. As laws made for copyright protection are evolving, also legislation that would stop unauthorized duplication of software is in consideration. The software industry is prepared to do encounter against software piracy. The courts are dealing with an increasing number of actions concerning the protection of software