Course Name: O Level (1st Sem)   Subject: ITTNB
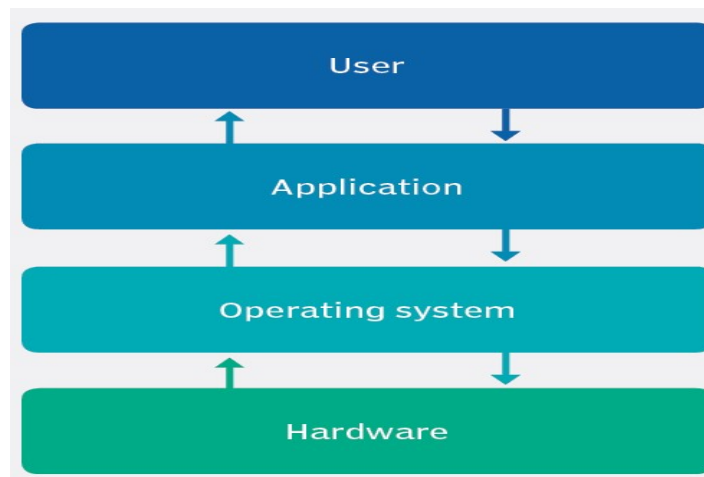
Topic: Introduction to Operating System   Date: 19-03-20

Operating System:

- An Operating System (OS) acts as an intermediary between the user of a computer and computer hardware. The purpose of an operating system is to provide an environment in which a user can execute programs in a convenient and efficient manner.
- An OS is a software program that controls the internal activities of the computer hardware and provides user interface. Application programs need to interact with the operating system for using hardware resources.
- OS is the first program loaded (copied) into the computer's main memory after the computer is switched on.
  Thus, one of the primary functions of operating system is to provide an interface between the user and hardware. Examples of Operating systems are Linux, Unix, Windows etc.

Main Functions of OS:

- **Process Management**: different processors perform different tasks.
- **Memory Management**: allocates the main memory and secondary memory as per requirement by program and data.
- **Input/ Output Management**: manages and coordinates different input and output devices.
- **File Management**: manages different file operations (such as reading from/writing to the files, rename, copy, paste, hide files etc).
- **Security Management**: establishes data security and integrity.

Types of OS:

- **Single user OS:** for e.g. DOS, Windows XP etc.
- **Multi-user OS:** for e.g. Linux, Unix, Windows etc
- **Single Tasking OS:** for e.g. DOS
- **Multi-tasking OS:** for e.g. Linux, Unix, Windows etc

Basic Elements of Opening Screen of Windows OS:

- **Desktop**
- **Icons**
- **This PC/ My Computer**
- **Recycle bin:**
- **Taskbar**
- **Start Menu**

Exercises:

1. **Define Operating System (OS) and describe any three functions of operating system in detail.**

2. **Discuss the function of the following:**
   a. **My Computer/ This PC**
   b. **Recycle Bin**
   c. **Help**
   d. **Start Menu**
   e. **Taskbar**