

# Computer Class 8

## Chapter 1, Operating system

### Q.1 Fill in the blanks.

1. OS acts as an interface between the **User** and the **Computer**.
2. The CPU must be used **efficiently** so that computer can keep pace with the instructions being input by the user.
3. The primary memory is **RAM** where a program is stored before being sent to the CPU.
4. Whenever an application or a process makes an input output request, the operating system passes it to the concerned **device drivers**.
5. To know your computer's IP Address, which is used by the computer to connect to the Internet, type **ipconfig** at command prompt.

### Q.2 True or False.

1. Operating system helps the CPU to manage processes. T
2. Windows is a CLI based operating system. F
3. An RTOS is used in embedded computers. T
4. Android is a popular mobile OS. T
5. UNIX is a multi -user, multitasking OS. F
6. Desktop is the main screen of any GUI operating system. T

### Q.3 Match the following.

1. Single user - to use a computer by one user at a time
2. Multi - user - to use a computer by many users at the same time
3. Multitasking - to open multiple application on a computer or device at the same time.
4. Process scheduling - to manage processes for the CPU
5. User interface - an environment for users to interact with the device
6. Pointer - a small angled arrow that represents a pointing device.

### Q.4 Full forms.

1. CLI - Command Line Interface
2. GUI - Graphical User Interface
3. RTOS - Real Time Operating System

Q 1 Define the following-

1. **Operating System** - The OS is the main software that controls the internal working of the computer, allows the software to run and provides an interface to the user to access the hardware devices.
2. **Graphical User Interface**- GUI is an interface through which a user interacts with electronic devices.
3. **Mobile OS** - A Mobile OS is an operating system that is specially designed to operate a mobile device such as mobile phones, tablet, PDA and other handheld devices.
4. **CPU scheduler**- The software that schedules tasks for CPU and the printer to process.
5. **Multitasking OS** - Operating System manages memory and allow multiple programs to run in their own space and even communicate with each other through shared memory.

Q.2 What are the functions performed by an OS in a computer? Explain briefly.

Ans. Functions of an OS are -

1. **Processor Management**- The CPU must be efficiently so that computer can keep the pace with the instructions being input by the user.
2. **Memory Management** - The primary memory is RAM where a program is stored being sent to the CPU. It decides how much memory space a program needs so that the program can use it.
3. **File Management** - The OS creates a hierarchical structure of storage space with a root directory, the top-most directory, which contains all files.
4. **Device Management** - The OS keeps track of all input and output devices attached to a computer through a program known as input/output controller.
5. **Application Management** - The operating system manages various application such as MS word, Ms Excel, Internet Explorer, etc., Running on a computer, using different applications program interfaces.
6. **User interface Management** - The operating system is the interface between the user and the computer. The processor takes commands from the OS, and the OS takes commands from the user.

Q.3 Explain any two capabilities of operating systems.

Ans. 1. Management of internal processing, such as CPU management.

2. Management of application and software. Ex - stopping a process that is taking too long to finish.

Q.4 Explain any two functions of an operating system.

Ans. **CPU Management** - The CPU must be efficiently so that computer can keep pace with the instructions being input by the user.

**Application Management** - The operating system manages various application programs such as MS Word, MS Excel, Internet Explorer etc., running on a computer, using different application program interfaces.

Q.5 What is user interface?

Ans. A user interface is an interface through which a user interacts with electronic devices such as computers, hand-held devices and other appliances.