# 11 Lecture - CS101

# **Important Subjective**

#### 1. What is an operating system?

**Answer:** An operating system is a software program that manages computer hardware and software resources and provides services to computer programs.

### 2. What is a process in the context of an operating system?

**Answer:** A process is a program in execution, which includes the current values of the program counter, registers, and variables.

#### 3. What is a file system in the context of an operating system?

**Answer:** A file system is a way of organizing and storing files on a computer. It includes directories, files, and metadata.

#### 4. What is a shell in the context of an operating system?

**Answer:** A shell is a program that provides a command-line interface for interacting with the operating system.

#### 5. What is virtual memory in the context of an operating system?

**Answer:** Virtual memory is a technique that allows a computer to use more memory than it physically has by using the hard drive as a backup storage for unused memory.

#### 6. What is a device driver in the context of an operating system?

**Answer:** A device driver is a program that allows the operating system to communicate with hardware devices, such as printers and scanners.

#### 7. What is a context switch in the context of an operating system?

**Answer:** A context switch is a process of saving the state of the current process and restoring the state of another process to allow multiple processes to run concurrently.

#### 8. What is scheduling in the context of an operating system?

**Answer:** Scheduling is the process of determining which process will run on the CPU at any given time.

#### 9. What is a system call in the context of an operating system?

**Answer:** A system call is a request made by a user program to the operating system to perform a specific task, such as reading or writing a file.

## 10. What is a kernel in the context of an operating system?

**Answer:** The kernel is the core component of the operating system that manages system resources and provides services to applications.