**01. The OS is a program that manages the computer’s resources, provides services for programmers, and schedules the execution of other programs.**

**02. Three key interfaces in a typical computer system are: instruction set architecture, application programming interface, and ABI.**

**03. The kernel , or nucleus, contains the most frequently used functions in the OS.**

**04. In an interactive system the user/programmer interacts directly with the computer, usually through a keyboard/display terminal to request the execution of a job or to perform a transaction.**

**05. A batch system groups the user’s program with programs for other users and is submitted by a computer operator, with results being printed out for the user upon completion of the program.**

**06. Early computer systems presented two main problems: setup time and scheduling.**

**07. The portion of the monitor that must always be in main memory and available for execution is referred to as the resident monitor.**

**08. The technique where memory is expanded to hold three, four, or more programs and switch among all of them is multiprogramming (or multitasking).**

**09. In a time-sharing system multiple users simultaneously access the system through terminals, with the OS interleaving the execution of each user program in a short burst or quantum of computation.**

**10. The five defined states for a process are: new, ready, waiting, halted, and running.**

**11. Each process is represented in the OS by a process control block,which typically contains identifier, state, priority, program counter, memory pointers, context data, I/O status information, and accounting information.**

**12. Because a process executes only in main memory, that memory is referred to as real memory.**

**13. Segmentation allows the programmer to view memory as consisting of multiple address spaces or segments.**

**14. When the processor executes a process it automatically converts from logical to physical address by adding the current starting location of the process, called its base address to each logical address.**

**15. Demand paging means that each page of a process is brought in only when it is needed.**