**Questions:**

1. **Which layer of an operating system is responsible for managing hardware resources?**
   * A) Application Layer
   * B) System Call Interface
   * C) Kernel
   * D) User Interface
2. **What is the primary function of the shell in an operating system?**
   * A) To manage memory allocation
   * B) To provide a command-line interface for user interaction
   * C) To handle system calls
   * D) To manage file systems
3. **In which operating system structure is the kernel divided into multiple distinct modules?**
   * A) Monolithic Kernel
   * B) Microkernel
   * C) Hybrid Kernel
   * D) Exokernel
4. **Which of the following is NOT typically a part of an operating system's kernel?**
   * A) Process Management
   * B) Memory Management
   * C) User Interface
   * D) Device Drivers
5. **What is the main advantage of a microkernel architecture over a monolithic kernel?**
   * A) Better performance due to less overhead
   * B) More modular and easier to maintain
   * C) Direct hardware access
   * D) Reduced complexity in user-space applications
6. **Which layer of the operating system provides services to user applications and manages system calls?**
   * A) Kernel
   * B) User Space
   * C) System Call Interface
   * D) Device Drivers
7. **What role does the operating system's scheduler play?**
   * A) Allocates memory to processes
   * B) Manages input and output devices
   * C) Determines the order in which processes are executed
   * D) Provides a graphical user interface
8. **In an operating system, what is the purpose of a process control block (PCB)?**
   * A) To store user application data
   * B) To keep track of the status and context of processes
   * C) To manage device drivers
   * D) To handle file system operations
9. **Which of the following is a characteristic of a hybrid kernel?**
   * A) Combines features of both microkernels and monolithic kernels
   * B) Operates with a single large kernel module
   * C) Segregates all kernel services into user space
   * D) Provides direct access to hardware without an abstraction layer
10. **Which of the following components is responsible for managing file systems in an operating system?**
    * A) Shell
    * B) System Call Interface
    * C) File System Manager
    * D) Network Interface