Name: _____   **Date:** _____

Year & Block: _____   **Score:** _____

General Instructions

1. Read each question carefully before answering. **No erasures are allowed — an erasure means the answer is wrong.**
2. Write your answers before each number.

Part I – Multiple Choice

Choose the best answer.

1. In Linux, how is the root of the file system represented?
   a) /
   b) //
   c) \
   d) \

2. When a user opens both a web browser and a video editor at the same time, which two OS functions ensure that they don't overwrite each other's data in RAM?
   a) Main Memory Management and Security Management
   b) Process Management and Network Management
   c) Secondary Storage Management and Main Memory Management
   d) Process Management and Main Memory Management

3. What is an "absolute path"?
   a) A path based on your current directory
   b) A path used only in Linux
   c) A path that changes depending on the current folder
   d) A path that always begins at the root directory

4. Which file system is known for its maximum file size limit of 4 GB?
   a) NTFS
   b) FAT32
   c) Ext4
   d) HFS+

5. Which of the following lets a user communicate with the OS by typing commands instead of clicking icons?
   a) Command Interpreter
   b) I/O Device Management
   c) Process Management
   d) File Management

6. What is the main role of an operating system?
   a) To manage application programs only
   b) To act as an interface between users and computer hardware
   c) To manage only software resources
   d) To manage only hardware components

7. The open-source operating system Linux, which influenced OS development worldwide, was introduced in which decade?
   a) 1970s
   b) 1990s
   c) 1980s
   d) 2000s–Present

8. A virus attempts to change system boot files. Which OS function prevents this unauthorized action?
   a) Secondary Storage Management
   b) Security Management
   c) Process Management

d) File Management

9. In Windows, how is the root of the file system typically written?
   a) /
   b) root:
   c) C:\
   d) \

10. A program suddenly crashes with an error message. Which OS function handles this interruption?
    a) System Calls
    b) Signals
    c) Security Management
    d) Command Interpreter

11. Which of the following is a core function of an operating system?
    a) Running a web browser
    b) Playing a video game
    c) Managing I/O devices
    d) Creating documents

12. In the 1940s–1950s, what was a major characteristic of the first operating systems?
    a) They introduced multiprocessing
    b) They supported graphical user interfaces
    c) Programs were manually loaded and run one at a time
    d) They were based on mobility and cloud

13. It is the default file system used in most modern Linux distributions.
    a) NTFS
    b) FAT32
    c) Ext4
    d) HFS+

14. What is a unique feature of a mobile operating system?
    a) High reliability and uptime
    b) Designed for a single user
    c) Optimized for touch interfaces and energy efficiency
    d) Compatible with large-scale databases

15. When you save a text file, which OS function ensures data is stored permanently in secondary storage?
    a) System Calls
    b) Main Memory Management
    c) Process Management
    d) Secondary Storage Management

Part II – Identification

Write the correct answer.

1. A file path that depends on your current working directory and does not begin from the root directory.
2. An operating system built to manage large-scale resources and serve many users at the same time, often found in servers.
3. Information stored about a file, such as its size, creation date, or last modified time.
4. A container in a storage device that keeps files and subfolders organized.
5. The part of the OS responsible for establishing, managing, and maintaining network connections.
6. The low-level disk process, usually done by manufacturers, that sets up tracks, sectors, and cylinders on a disk.
7. A complete file path that begins from the root directory and always points to the same location.
8. The Linux file system known for supporting advanced features such as snapshots and backup capabilities.
9. A type of operating system made for mobile devices, optimized for touch input and power efficiency.
10. The disk process performed by the user that sets up the file system (e.g., NTFS, FAT32) and organizes how files are stored.
11. A logical section of a storage device treated by the OS as a separate unit, like dividing a bookshelf into compartments.
12. The decade when timesharing systems such as CTSS (1961) and Multics (1969) were developed, allowing multiple users to interact with a single system.
13. The Windows file system that supports large files, offers better security, and is standard in modern Windows versions.
14. The OS function that manages the communication between the system and input/output devices.
15. A type of operating system designed for desktops and laptops, focusing on ease of use and user experience.