**Name**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Year & Block**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Score**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Quiz 1 – Platform Technologies**

**General Instructions.**

1. Read each question carefully before answering, and no erasures are allowed.
2. Put your answers before the number.

**Part 1 (Multiple Choice)**

1. **What is the primary 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 |

1. **Which of the following is a key function of an operating system?**

|  |  |
| --- | --- |
| a) Running a web browser | b) Playing a video game |
| c) Managing I/O devices | d) Creating documents |
|  |  |

1. **What is a defining characteristic of a mobile operating system?**

|  |  |
| --- | --- |
| a) High reliability and uptime | b) Designed for a single user |
| c) Tailored for touch interfaces and energy efficiency | d) Compatible with large-scale databases |

1. **According to the timeline, what was a key feature of the first operating systems in the 1940s-1950s?**

|  |  |
| --- | --- |
| a) They introduced multiprocessing. | b) They allowed for graphical user interfaces. |
| c) Programs were manually loaded and run, one at a time. | d) They were based on mobility and cloud. |

1. **When a user opens a new web browser and a video editing program simultaneously, which two operating system functions are primarily responsible for preventing them from overwriting 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 |

1. **A user's program suddenly terminates with an error. The OS function responsible for handling this type of notification and interruption is:**

|  |  |
| --- | --- |
| a) System Calls | b) Signals |
| c) Security Management | d) Command Interpreter |

1. **A virus attempts to modify core system files in the boot directory. Which function of the operating system is specifically designed to prevent this unauthorized action?**

|  |  |
| --- | --- |
| a) Secondary Storage Management | b) Security Management |
| c) Process Management | d) File Management |

1. **Which of the following lets a user talk to the operating system by typing commands instead of clicking icons?**

|  |  |
| --- | --- |
| a) Command Interpreter | b) I/O Device Management |
| c) Process Management | d) File Management |

1. **When you click 'save' in a text editor, the application uses an OS function to ensure the data is written from temporary memory to a location for long-term storage. This is a task of:**

|  |  |
| --- | --- |
| a) System Calls | b) Main Memory Management |
| c) Process Management | d) Secondary Storage Management |

1. **The open-source operating system Linux, which revolutionized operating system development, was introduced in which decade?**

|  |  |
| --- | --- |
| a) 1970s | b) 1990s |
| c) 1980s | d) 2000s-Present |

1. **What is an "absolute path"?**

|  |  |
| --- | --- |
| a) A path that gives directions based on your current location | b) A path used only in Linux systems |
| c) A path that changes depending on the user’s current directory | d) A path that always starts from the root directory |

1. **How is the root of the file system written in Linux?**

|  |  |
| --- | --- |
| a) / | b) // |
| c) \\ | d) \ |

1. **How is the root of the file system written in Windows?**

|  |  |
| --- | --- |
| a) / | b) root: |
| c) C:\ | d) \ |
|  |  |

1. **What file system is primarily known for a maximum file size limit of 4 GB?**

|  |  |
| --- | --- |
| a) NTFS | b) FAT32 |
| c) Ext4 | d) HFS+ |

1. **It is the default file system for most modern Linux distributions.**

|  |  |
| --- | --- |
| a) NTFS | b) FAT32 |
| c) Ext4 | d) HFS+ |

**Part 2 (Identification)**

**\_\_\_\_\_\_\_\_\_\_\_\_ 1)** This type of operating system is tailored for touch interfaces and energy efficiency to maximize battery life.

**\_\_\_\_\_\_\_\_\_\_\_\_ 2)** This is an extra information about a file itself, such as its size and creation date.

**\_\_\_\_\_\_\_\_\_\_\_\_ 3)** A path that is based on your current location in the filesystem, making it shorter and more flexible since it does not start from the root.

**\_\_\_\_\_\_\_\_\_\_\_\_ 4)** Name the Windows file system that supports large files, is secure, and is used in modern Windows operating systems.

**\_\_\_\_\_\_\_\_\_\_\_\_ 5)** Which Linux file system supports advanced features like snapshots and backups?

**\_\_\_\_\_\_\_\_\_\_\_\_ 6)** Command-line tools that Linux and macOS users can use to check their current file system type.

**\_\_\_\_\_\_\_\_\_\_\_\_ 7)** This refers to the process of coordinating interactions with input and output devices.

**\_\_\_\_\_\_\_\_\_\_\_\_ 8**) It gives the full address of a file or folder, starting from the very root of the file system. This path is always complete and will take you to the correct location no matter where you currently are in the system.

**\_\_\_\_\_\_\_\_\_\_\_\_ 9)** This type of operating system is built to manage large-scale resources and serve multiple users at the same time, often optimized for serving web pages, databases, or managing networks.

**\_\_\_\_\_\_\_\_\_\_\_\_ 10)** This type of operating system is used on personal devices such as desktops and laptops. It is user-friendly and focuses on providing smooth computing experience.

**\_\_\_\_\_\_\_\_\_\_\_\_ 11)** This function of the Operating System is responsible for handling and controlling network connections.

**\_\_\_\_\_\_\_\_\_\_\_\_ 12)** It creates the physical structure of the disk (tracks, sectors, cylinders). It is done by the manufacturer and prepares the disk for data storage at the hardware level.

**\_\_\_\_\_\_\_\_\_\_\_\_ 13)** It sets up the file system (e.g., NTFS, FAT32) and prepares the disk for use by the user. It organizes how files are stored and accessed but does not change the physical layout of the disk.

**\_\_\_\_\_\_\_\_\_\_\_\_ 14)** It is a section of a storage device that the operating system treats as a separate space. It is like dividing a bookshelf into separate sections, each with its own purpose.

**\_\_\_\_\_\_\_\_\_\_\_\_ 15)** Also known as a folder, it is a space on a storage device used to keep files and other directories organized.