



RAPID MCQ 01

OPERATING SYSTEMS

2026 A/L ICT

Become a Tech-Savvy Entrepreneur

STUDENT ID

NAME

DATE

1. A video-editing app launches and immediately loads its timeline into RAM, waiting for CPU time while several background services are active. Which state best describes the app right after loading into main memory, before it first runs?
 - A. New
 - B. Ready
 - C. Running
 - D. Waiting (Blocked)
 - E. Terminated
2. A spreadsheet program is executing when the user clicks "Export to PDF." The program hands the task to the disk subsystem and must wait for the file to be written. What is the spreadsheet program's likely state during the disk write?
 - A. New
 - B. Ready
 - C. Running
 - D. Waiting (Blocked)
 - E. Suspend Ready
3. On a busy server, the OS has moved an email service out of RAM to the swap device due to memory pressure, even though the service is not waiting on I/O. What is the most accurate state of that service now?
 - A. Ready
 - B. Suspend Ready
 - C. Waiting (Blocked)
 - D. Suspend Waiting (Suspend Blocked)
 - E. Terminated
4. A mobile OS preempts a game mid-frame to let the camera app run, saving the game's CPU registers, program counter, and other context to a data structure. Which OS structure is updated at this moment?
 - A. File Allocation Table
 - B. Page Frame List
 - C. Process Control Block
 - D. Bootloader Table
 - E. Interrupt Vector Table
5. A backup utility reads many small files from a directory tree. During the read of each file, the backup utility yields the CPU because it's waiting on storage. Which transition occurs most frequently for the backup utility's process?
 - A. New → Ready
 - B. Running → Ready
 - C. Running → Waiting (Blocked)
 - D. Waiting (Blocked) → Terminated
 - E. Terminated → New
6. A browser tab is performing heavy computations in JavaScript. The user switches to another app; the OS decides to keep the tab's process in RAM but not running. Which state describes the tab's process after preemption, before it is scheduled again?
 - A. Ready
 - B. New
 - C. Waiting (Blocked)
 - D. Suspend Ready
 - E. Terminated



7. An engineering simulation exceeds available RAM. The OS moves an I/O-bound logging process (currently waiting on network I/O) from main memory to disk to free space. What is the logging process's new state?
 - A. Ready
 - B. Suspend Ready
 - C. Waiting (Blocked)
 - D. Suspend Waiting (Suspend Blocked)
 - E. Terminated
8. A university timesharing system must choose the next student program to execute on the CPU. Which OS activity is directly responsible for deciding which ready process runs next and for how long?
 - A. Memory compaction
 - B. Process scheduling
 - C. File permission enforcement
 - D. Deadlock detection
 - E. Demand paging
9. A developer terminates a crashed app using the task manager. The OS removes its entry from all queues and releases its PID and other records. Which item is deleted as part of this cleanup?
 - A. PCB of the app's process
 - B. Page replacement policy
 - C. File directory inode
 - D. Interrupt priority level
 - E. Boot configuration data
10. A scientific app requests an additional 200 MB for a matrix operation. The OS checks free space, assigns frames, updates page tables, and marks the allocation. Which OS function best describes this set of actions?
 - A. Process control
 - B. File management
 - C. Memory management
 - D. I/O scheduling
 - E. Authentication management