Assignment 4

The due date for submitting this assignment has passed. As per our policy, you have not submitted this assignment.

1. A bug in the CPU's design allows for a total of 4 exceptions handled when a CPU is trying to run an application. 
   - False

2. A system has an interrupt controller that can handle up to 8 interrupts. When an interrupt occurs, the processor saves the CPU state and branches to the interrupt service routine. 
   - True

3. A system has a preemptive scheduler. What is the maximum number of processes that can run concurrently? 
   - Cannot be determined.

4. When a CPU is interrupted, it 
   - Stalls execution, fetches instructions, acknowledges the interrupt, and continues.
   - Stalls execution, acknowledges the interrupt, and branches to a subroutine.
   - Stalls execution, fetches instructions, acknowledges the interrupt, and continues.
   - Stalls execution, acknowledges the interrupt, and branches to a subroutine.

5. The process is waiting for a device that is not available. Processes A and B are ready, but neither is running. Process C is running. 
   - True

6. Which one of the following is FALSE? 
   - Kernel level threads cannot share the same thread segment.
   - User level threads are not scheduled by the kernel.
   - Context switching occurs between kernel level threads when a user thread is blocked.
   - A user-level thread can be blocked by other threads.

7. Match the following: 
   - a. Trap
   - b. Fault
   - c. Abort
   - d. Overflow
   - e. 3.01
   - f. 2.04
   - g. 3.01
   - h. 2.04
   - i. 3.01
   - j. 2.04
   - k. 3.01
   - l. 2.04
   - m. 3.01
   - n. 2.04
   - o. 3.01
   - p. 2.04