week 9 assignment

Assignment Week 9

1) The Translation Look Aside Buffer (TLB) stores
   - Branching data
   - Map of Cache data and RAM data
   - Map of Physical Address and Logical Address
   - Memory Translation times

   **Accepted Answers:**
   Map of Physical Address and Logical Address

2) CR3 contains
   - Starting Address of BTB
   - Data Segment Address
   - Starting Address of Page directory
   - None of these

   **Accepted Answers:**
   Starting Address of Page directory

3) A user process cannot change the CR3 register because
   - It is not a PL0 instruction
   - It is not a PL1 instruction
   - It is not a PL2 instruction
   - It is not a PL3 instruction

   **Accepted Answers:**
   It is not a PL0 instruction

4) Increasing the number of page frames decreases the number of page faults
   - True
   - False
5) Page frames are loaded into pages in physical memory  
   - True  
   - False  

6) Per-process paging is achieved using  
   - different page numbers to each page  
   - different CR3 registers for each process  
   - different page handler for each process  
   - All of the above  

7) Page Replacement Algorithms are needed because  
   - There are limited number of pages in an operating system  
   - Pages are to be given to other running processes  
   - There are limited number of page frames allocated to each process  
   - All of the above  

8) A given page replacement algorithm has to be devoid of Belady's anomaly because otherwise  
   - An increase in program size will cause page faults  
   - An increase in variable size of the program will cause page faults.  
   - An increase in number of frames wont decrease number of page faults.  
   - None of the above  

9) A page replacement algorithm will be devoid of Belady's anomaly if it follows  
   - Operating system instructions  
   - Stack Property  
   - page frame allocation ordering  
   - None of the above  

10) A system call for a PL3 process(A) to PL1 process will be held in  
   - Stack Property
- PL3 stack of A
- PL2 stack of OS
- PL1 stack of A
- A new PL1 stack for the new process

Accepted Answers:
PL1 stack of A