

Question2: Explain the difference between an I/O-bound process and a CPU-bound process. 2 points

Question3: Describe how UNIX and Linux manage orphan processes. 2 points

Question4: What are the three general ways that a deadlock can be handled? 3 points

- 1-
- 2-
- 3-

Question 5: Consider the following snapshot of a system: 4 points

	Allocation	Max	Available
	<i>A B C D</i>	<i>A B C D</i>	<i>A B C D</i>
<i>P0</i>	2 0 0 1	4 2 1 2	3 3 2 1
<i>P1</i>	3 1 2 1	5 2 5 2	
<i>P2</i>	2 1 0 3	2 3 1 6	
<i>P3</i>	1 3 1 2	1 4 2 4	
<i>P4</i>	1 4 3 2	3 6 6 5	

If a request from process *P1* arrives for (1, 1, 0, 0), can the request be granted immediately?

Question 9: Describe the address translation process, show how TLB can be used with page table to find the physical address from the logical address. 3 points

Question 10: How files can be protected from race condition when multiple access occur. 2 points

Question 11: Given the following code write a code for test_and_set function below 2 points

```
do {  
while (test_and_set(&lock));  
  
/* critical section */  
  
lock = false;  
} while (true);
```

Good Luck

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