Progress Test 1

Total points 20/20

The respondent's email [redacted] as recorded on submission of this form.

✓ Q1. To access the services of operating system, the interface is provided by the ____ 1/1

- (●) System calls ✓
- ( ) API
- ( ) Library
- ( ) Assembly instructions

Feedback

System calls

✓ Q2. By operating system, the resource management can be done via ____ 1/1

- ○ time division multiplexingon
- ○ space division multiplexing
- ◉ both time and space division multiplexing ✓
- ○ none of the mentioned

Feedback

both time and space division multiplexing

✓ Q3. ____ offers 3 kinds of services: batch, transaction processing, time-sharing. 1/1

- ○ Server OS
- ◉ Mainframe OS ✓
- ○ PC OS
- ○ Multiprocessor OS

Feedback

Mainframe OS

✓ Q4. A Process Control Block (PCB) does not contain which of the following : 1/1

- ○ Code
- ○ Stack
- ◉ Bootstrap program ✓
- ○ Data

Feedback

Bootstrap program

✓ Q5. A process stack does not contain 1/1

- ○ Function parameters
- ○ Local variables
- ○ Return addresses
- ◉ PID of child process ✓

Feedback

PID of child process

✓ Q6. Which of these statements about processes are not true? 1/1

- (●) A program on disk. Associated with each process is its file and directory. ✓
- ( ) Associated with each process is set of resources such as executable code, data, stack, CPU registers value, and other information needing to run a program
- ( ) A program in execution.
- ( ) Process table stores all the information of processes.

Feedback

A program on disk. Associated with each process is its file and directory.

✓ Q7. Which of the following is not the state of a process? 1/1

- ( ) Ready
- ( ) Waiting
- ( ) Running
- (●) Old ✓

Feedback

Old

✓ Q8. Consider the following set of processes, the length of the CPU burst time given in milliseconds : Process Burst time P1 6 P2 8 P3 7 P4 3 Assume that the above proceses are being scheduled with the SJF scheduling algorithm: 1/1

- (●) The waiting time for process P1 is 3ms ✓
- ( ) The waiting time for process P1 is 0ms
- ( ) The waiting time for process P1 is 16ms
- ( ) The waiting time for process P1 is 9ms

Feedback

The waiting time for process P1 is 3ms

✓ Q.9. A _____ of processing must be handled as a unit. 1/1

- (●) critical region ✓
- ( ) semaphore
- ( ) line
- ( ) segment

Feedback

critical region

✓ Q10. A problem with Priority scheduling in Interactive Systems is _____. 1/1

- ○ an error
- ○ synchronization
- ○ deadlock
- ◉ starvation ✓

Feedback

starvation

✓ Q11. Which of these statements about Shortest Remaining Time First Scheduling are true? 1/1

- (●) If a new process arrives with CPU burst length less than remaining time of current executing process, preempt. Gives minimum average waiting time for a given set of processes. ✓
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Feedback

If a new process arrives with CPU burst length less than remaining time of current executing process, preempt. Gives minimum average waiting time for a given set of processes.

✓ Q12. What is the Linux command to display ppid, pid of the parent processes and processes? 1/1

- (●) ps -e -o ppid,pid,command ✓
- ( ) ps
- ( ) process
- ( ) pprocess

Feedback

ps -e -o ppid,pid,command

✓ Q.13. Assume that Process A with 4 threads, Process B with 3 threads are running local scheduling, 50-msec for process quantum and threads run 10-msec/CPU burst. Which of possible scheduling for user level threads are true? 1/1

- [x] B1, B2, B3, B1, B2, A1, A2, A3, A4, A1, B1, B2, ... ✓
- [x] A1, A2, A3, A4, A1, B1, B2, B3, B1, B2, ... ✓
- [ ] A1, B1, A2, B2, A3, B3, A4, B1, ...
- [ ] B1, A1, B2, A2, B3, A3, B1, A4, ...

Feedback

B1, B2, B3, B1, B2, A1, A2, A3, A4, A1, B1, B2, ...
A1, A2, A3, A4, A1, B1, B2, B3, B1, B2, ...

✓ Q14. Round Robin schedulers normally maintain a list of all runnable processes, with each process occurring exactly once in the list. What would happen if a process occurred twice in the list? 1/1

- ○ CPU burst time of process more than time quantum.
- ○ Process was swapped out and then swapped in.
- ○ Process was blocked and then unblocked.
- ◉ All of the above. ✓

Feedback

All of the above.

✓ Q15. Operating System maintains the page table for _____. 1/1

- ◉ each process ✓
- ○ each thread
- ○ each instruction
- ○ each address

Feedback

each process

✓ Q16. Physical memory is broken into fixed-sized blocks called _____. 1/1

- pages
- backing store
- segments
- frames ✓

Feedback

frames

✓ Q17. Which of these statements about address space are not true? 1/1

- Address space is the abstraction that is referenced to the set of addresses a process
- Address space is decoupled from the physical memory ✓
- Address space is the linear address.
- None of the above.

Feedback

Address space is decoupled from the physical memory

✓ Q18. Suppose that a machine has 48 bits virtual addresses and 32 bits physical addresses. If pages are 4KB. How many entries are in the page table if it has only a single level? 1/1

- (●) 2^36 ✓
- ( ) 2^32
- ( ) 2^20
- ( ) 2^10

Feedback

2^36

✓ Q19. A computer has 32 bits virtual addresses and 4 KB pages. How many entries are needed for two level paging, with 10 bits in each part? 1/1

- ( ) 4096
- ( ) 4095
- (●) 1024 ✓
- ( ) 1023

Feedback

1024

✓ Q20. Consider a swapping system in which memory consists of the following hole sizes in memory order: 10 MB, 4 MB, 18 MB, 20 MB, 7 MB, 9 MB, 12 MB, and 15 MB. Which hole is taken for successive segment requests of 12 MB for worst fit algorithm? 1/1

- (●) 20 MB ✓
- ( ) 12 MB
- ( ) 18 MB
- ( ) 15 MB

Feedback

20 MB