

Started on Tuesday, 7 May 2024, 11:06 AM

State Finished

Completed on Tuesday, 7 May 2024, 11:15 AM

Time taken 8 mins 49 secs

Question 1

Complete

Marked out of 2.00

The following C program is executed on a Unix / Linux system:

```
#include < unistd.h >
int main() {
    int i;
    for (i = 0; i < 10; i++)
        if (i % 2 == 0) fork();
    return 0;
}
```

The total number of child process created is _____ .

Select one:

- ☒ a. 31
- ☐ b. 63
- ☐ c. 6
- ☐ d. 5

Question 2

Complete

Marked out of 2.00

Which of the following is an advantage of dynamic linking?

Select one:

- ☐ a. Increased execution speed
- ☒ b. Reduced memory usage
- ☐ c. Easier debugging
- ☐ d. Improved code readability

Question 3

Complete

Marked out of 2.00

Which of the following system calls does not return control to the calling point, on termination?

Select one:

- ☒ a. exec
- ☐ b. fork
- ☐ c. wait
- ☐ d. ioctl

Question 4

Complete

Marked out of 2.00

To overcome difficulties in Readers-Writers problem, which of the following statement/s is/are true?

- 1) Writers are given exclusive access to shared objects
- 2) Readers are given exclusive access to shared objects
- 3) Both readers and writers are given exclusive access to shared objects.

Select one:

- ☐ a. both 2 and 3
- ☒ b. 2 only
- ☐ c. 3 only
- ☐ d. 1 only

Question 5

Complete

Marked out of 2.00

Which process can be affected by other processes executing in the system?

Select one:

- ☐ a. child process
- ☐ b. init process
- ☐ c. parent process
- ☒ d. cooperating process

Question 6

Complete

Marked out of 2.00

Which disk scheduling algorithm moves the disk arm from the current position towards the closest end of the disk and services all requests in that direction before reversing direction?

Select one:

- ☐ a. LOOK
- ☐ b. C-LOOK
- ☒ c. C-SCAN
- ☐ d. SCAN

Question 7

Complete

Marked out of 2.00

What is the header file to include when using the `wait()` system call?

Select one:

- ☐ a. `stdio.h`
- ☒ b. `sys/wait.h`
- ☐ c. `unistd.h`
- ☐ d. `stdlib.h`

Question 8

Complete

Marked out of 2.00

Which scheduling algorithm provides fairness in terms of CPU allocation?

Select one:

- ☐ a. First-Come, First-Served
- ☐ b. Priority Scheduling
- ☐ c. Round Robin
- ☒ d. Shortest Job Next

Question 9

Complete

Marked out of 2.00

Which of the following is an example of a dynamic linking library in Linux?

Select one:

- ☐ a. .lib (library)
- ☐ b. .dylib (dynamic library)
- ☒ c. .so (shared object)
- ☐ d. .dll (dynamic link library)

Question 10

Complete

Marked out of 2.00

Which of the following is an advantage of user-level threads?

Select one:

- ☐ a. Simpler representation
- ☐ b. More efficient context switching
- ☒ c. All options are correct
- ☐ d. Easier to implement than kernel-level threads

[◀ OS ISE1](#)[Jump to...](#)[DS_Lab_ESE ▶](#)