14:37

1. For which of the following offset can be positive or negative? **Answers** 1. SEEK SET P 2. SEEK END 3. SEEK_CUR 4. All of the above 5. None of the above 2. In which of the IPC mechanism, data is not copied from user space to kernel s Answers 1. Pipe 2. Message queue 3. Shared memory 4. socket 3. A bootloader is responsible for i. loading an operating system kernel and its components ii. loading supporting infrastructure into memory iii. beginning the kernel's execution **Answers** 1. i and ii 2. i and iii 3. ii and iii 4. All of the above 4. In which of the following state change in child process, performing wait allo **Answers** 1. the child terminated 2. the child was stopped by a signal 3. the child was resumed by a signal 4. All of the above

5. Which of the following is not used to examine and change the signal action?

Answers

- 1. signal
- 2. sigaction
- 3. sigprocmask
 - 4. All of the above

6. Select the value of mode if O_CREAT flag is provided in open system call to ϵ

Answers

- 1. 0640
- 2. 0644
- 3. 0460
- 4. 0464

7. Select correct option for mutex.

Answers

- 1. A thread can lock mutex twice.
- 2. A thread locking mutex is owner of that mutex.
- 3. Owner can not unlock the mutex.
- 4. None of the above
- 8. What is internal fragmentation?

Answers

- 1. process is not utilizing the whole partition allocated to it.
- 2. process is utilizing the whole partition allocated to it.
- 3. amount of space required for process is not available.
- 4. amount of space required for process is available, but not contiguous.

Answers
1. Pages, Frames
2. Frames, Pages
3. Pages, Fragments
4. fragments, Frames
10. If the size of logical address space is 2 to the power of m, and a page size
Answers
1. m, n
2. n, m
3. m - n, m
4. m - n, n
11. LRU page replacement algorithm suffers from Belady's anomaly.
Answers
1. true
2. false
12. Which of the following is journaling file system
Answers
1. JFS
2. UFS
3. ext2
4. ext3
13. Thrashing
Answers
1. reduces page I/O
2. decreases the degree of multiprogramming
3. implies excessive page I/O
implies excessive page 1/0
4. improves the system performance

9. Physical memory : _____ :: Logical Memory : _____

14. While fork(), the child's set of pending signals is initially
Answers
1. filled with same as parent
2. empty
3. filled except masked signals in parent
4. None of the above
15. The child does not inherit
Answers
1. semaphore adjustments from its parent
2. its parent's memory locks
3. timers from its parent
4. All of the above
5. None of the above
16. Which of the following architecture does not support embedded operating syst Answers 1. ARM 2. AVR32 3. MIPS 4. None of the above
Answers 1. ARM 2. AVR32 3. MIPS
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```
18. #include <stdio.h>
  #include <unistd.h>
  int main()
       fork();
       fork();
       fork();
       printf(" A New Process Created.");
       return 0;
  }
  How many times Above message "A New Process Created" is printed?
Answers
1. 1
2. 3
3. 8
4. 16
19. sigprockmask() system call does _____
Answers

    change the process signal mask.

2. retrive the existing mask
3. Both of the above
4. None of the above
   20. Spinlocks are intended to provide _____ only.
   Answers
   1. Mutual Exclusion
   2. Bounded Waiting
   3. Aging
   4. Progress
   21. Which of the following not belong to exec() family?
   Answers
   1. execv();
   2. execvp();
   3. execvpe();
   4. execlv();
```

22. msgsnd() returns an integer. which of the following is true statement. **Answers** 1. Return value > 1 indicates a correct send. 2. Return value = 0 indicates a correct send. 3. Both of above 4. Return value = -1 indicates an error has occurred ___ is a technique of gradually increasing the priority of the process **Answers** 1. Starvation 2. Waiting queue 3. Aging 4. Non of the above 24. Multiple source files are compiled together to form a single kernel binary i **Answers** 1. Micro-kernel 2. Monolithic kernel 3. Modular kernel 4. Hybrid kernel 25. Named pipe or FIFO can be created by _____ command. **Answers** 1. pipe 2. mkfifo 3. mkpipe 4. makefifo

26. Bankers algorithm is an example of
Answers
1. deadlock prevention
2. deadlock avoidance
3. deadlock detection
4. deadlock recovery
27. Preemption is
Answers
1. forced deallocation of the CPU from a program which is executing on the CPU
2. release of CPU by a program after the completing its task
3. forced allotment of CPU by a program to itself
4. a program is terminating itself due to detection of error
28. Which one of the following bootloader is not used by linux?
Answers
1. GRUB
2. LILO
3. NTLDR
4. None of the mentioned
29. Each thread has its own user stack and no kernel stack.
Answers
1. True
2. False
30. Thread synchronization is required because
Answers
1. all threads of a process share the same address space
2. all threads of a process share the same global variables
3. all threads of a process can share the same files
4. all of the mentioned

```
31. Mutex Functionality :
Answers

    based up on locking mechanism

2. based up on signalling mechanism
3. both A and B
4. None of the above
32. On success, pthread_join() returns :
Answers
1. 0
2. 1
3. Error No
4. None of the above
33. fork() returns non zero value in child process and zero in parent process.
Answers
1. False
2. True
34. Select odd option from below
Answers

    execl("./cmdline", "cmdline", "one", "two", "three", "four", NULL);

2. char *args[] = { "cmdline", "one", "two", "three", NULL }; execv("./cmdline")
3. execlp("ps", "ps", "-e", "-o", "pid,ppid,cmd");
4. None of the above
35. Which is Fastest IPC mechanism
Answers
1. FIFO
2. Pipe
3. Shared Memory
4. Queue
```

36. The two ways of aborting processes and eliminating deadlocks are
Answers
1. Abort all deadlocked processes
2. Abort all processes
3. Abort one process at a time until the deadlock cycle is eliminated
4. All of the mentioned
37. The segment limit contains the
Answers
1. starting logical address of the process
2. starting physical address of the segment in memory
3. segment length
4. none of the mentioned
Answers 1. the queue can store at least one message 2. the sender blocks until the receiver receives the message 3. the sender keeps sending and the messages don't wait in the queue
4. none of the mentioned
39. What will happen if a non-recursive mutex is locked more than once?
Answers
1. Starvation
2. Deadlock
3. Aging
4. Signaling

40. The signal operation of the semaphore basically works on the basic _____ \$

Answers

- 1. continue()
- 2. start()
- 3. wakeup()
- 4. getup()