

5

..... ensures that an update to a cache is reflected immediately in other caches.
(2 Points)

- ☐ Cache update
- ☐ Cache reflection
- ☐ Cache decoding
- ☒ Cache coherency

6

..... in multiprocessor systems means that failure of one processor will not halt the system.
(2 Points)

- ☐ Increased throughput
- ☐ Economy of scale
- ☒ Increased reliability

7

In, one node is in hot standby mode monitoring the active server.
(2 Points)

- ☒ asymmetric clustering
- ☐ symmetric clustering
- ☐ asymmetric processing
- ☐ symmetric processing

8

In dual mode operation, privileged instructions can execute only in
(2 Points)

- ☐ asymmetric mode
- ☐ application mode
- ☒ kernel mode
- ☐ user mode

9

In, the CPU switches between jobs so frequently to allow for multitasking.
(2 Points)

- ☐ batch systems
- ☐ multiprogramming systems
- ☒ timesharing systems
- ☐ bulk systems

10

..... is a collection of physically separate computer systems that are networked together.
(2 Points)

- ☐ A distributed system
- ☒ A cluster system
- ☐ A multiprocessor system
- ☐ A multicore system

11

..... delivers computing as a service and users pay based on usage.
(2 Points)

- ☒ cloud computing
- ☐ peer-to-peer computing
- ☐ client-server computing
- ☐ batch computing

12

..... has well defined, fixed time constraints.
(2 Points)

- ☐ A distributed system
- ☐ A single-processor system
- ☐ A multiprocessor system
- ☒ A real-time system

13

The operating system provides application programmers with to invoke services.
(2 Points)

- ☐ DMA
- ☐ RPC
- ☐ IPC
- ☒ API

14

..... system calls support open, close, read, write, reposition file operations.
(2 Points)

- ☒ Process control
- ☐ File management
- ☐ Device management
- ☐ Information maintenance

15

..... system calls support get time/date and set time/date operations.
(2 Points)

- ☐ Process control
- ☐ File management
- ☒ Device management
- ☐ Information maintenance

16

Using the makes the OS difficult to implement and extend.
(2 Points)

- ☒ monolithic Approach
- ☐ layered Approach
- ☐ micro-kernel Approach
- ☐ hybrid approach

17

Using the removes all nonessential components from the kernel and implements them as system programs.

(2 Points)

- ☐ monolithic Approach
- ☐ layered Approach
- ☒ micro-kernel Approach
- ☐ hybrid approach

18

In a process, the contains the temporary variables.

(2 Points)

- ☐ text section
- ☐ data section
- ☐ heap section
- ☒ stack section

19

A process is said to be in a state if it is being created.
(2 Points)

- ☒ new
- ☐ running
- ☐ waiting
- ☐ ready

20

Context switch saves the current context of the current process into its
(2 Points)

- ☐ IPC
- ☐ RPC
- ☐ DMA
- ☒ PCB

21

A process shares data with other executing processes.
(2 Points)

- ☐ independent
- ☒ cooperating
- ☐ batch
- ☐ interactive

22

..... contains processes waiting for a certain event to occur.
(2 Points)

- ☐ ready queue
- ☒ wait queue
- ☐ device queue
- ☐ system queue

23

..... is a process that can receive messages from mailbox.
(2 Points)

- ☐ user
- ☒ owner
- ☐ sender
- ☐ receiver

24

In addressing, both sender and receiver processes must name each other.
(2 Points)

- ☐ multicore
- ☐ cluster
- ☐ asymmetric
- ☒ symmetric

25

..... involves the distribution of tasks across multiple cores.
(2 Points)

- ☐ Data parallelism
- ☐ Data distribution
- ☒ Task parallelism
- ☐ Task distribution

26

In the one-to-one model, thread management is done by
(2 Points)

- ☒ the operating system
- ☐ a thread library
- ☐ RPC mechanisms
- ☐ IPC mechanisms

27

In the, the entire process will block if a thread makes a blocking system call.
(2 Points)

- ☒ many-to-one
- ☐ one-to-one
- ☐ many-to-many
- ☐ one-to-many

28

..... is a synchronous version of the thread pool.
(2 Points)

- ☐ Blocking send
- ☐ Blocking receive
- ☒ Implicit fork-join
- ☐ Explicit fork-join

29

In cancellation, the target thread periodically checks whether it should terminate.
(2 Points)

- ☒ Deferred
- ☐ Cascading
- ☐ Synchronous
- ☐ Asynchronous

30

The is a segment of code, in which the process may be accessing and updating shared data.
(2 Points)

- ☐ entry section
- ☐ exit section
- ☒ critical section
- ☐ remainder section

..... is a deadlock condition and it means that at least one resource must be held in a non-shareable mode.

(2 Points)

- ☒ Mutual exclusion
- ☐ Hold and wait
- ☐ No preemption
- ☐ Circular wait

32

Deadlockensure that at least one of the necessary conditions for a deadlock to occur cannot hold.

(2 Points)

- ☐ avoidance
- ☒ prevention
- ☐ detection
- ☐ recovery

33

..... instructions such as Test-and-Set execute as one uninterruptible unit.
(2 Points)

- ☐ Blocking
- ☐ Privileged
- ☐ Automatic
- ☒ Atomic

34

A binary semaphore behaves similarly to
(2 Points)

- ☒ mutex locks
- ☐ race condition
- ☐ waiting locks
- ☐ signal locks

35

Process execution ends with a
(2 Points)

- ☐ device burst
- ☐ I/O burst
- ☒ CPU burst
- ☐ operating system burst

36

The gives control of the CPU to the process selected for execution.
(2 Points)

- ☐ CPU scheduler
- ☒ dispatcher
- ☐ bootstrap program
- ☐ CPU register

37

..... scheduling allows for stopping a running process before it completes its CPU burst.
(2 Points)

- ☐ preemptive
- ☒ non-preemptive
- ☐ round-robin
- ☐ asynchronous

38

Question

Problem 1

Consider the following set of processes with the specified arrival time, priority, and length of CPU burst given in milliseconds

Process	Arrival Time	Burst Time	Priority
P_1	0	5	2
P_2	2	8	3
P_3	4	4	3
P_4	7	1	1

Enter your answer

Problem 1

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Enter your answer

39

In problem 1, if preemptive priority scheduling is used, the turnaround time of P2 will be
(2 Points)

- ☐ 18
- ☐ 9
- ☒ 11
- ☐ 1

..... scheduling allows for stopping a running process before it completes its CPU burst.
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Question

Problem 1

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42

The contains the length of the addresses allocated to the process.
(2 Points)

- ☐ base register
- ☐ relocation register
- ☐ limit register
- ☒ page-table base register

43

..... is a contiguous allocation method that produces the smallest leftover hole.
(2 Points)

- ☐ First Fit
- ☒ Best Fit
- ☐ Worst Fit
- ☐ Next Fit

44

Paging divides the physical memory into blocks of the same size called
(2 Points)

- ☐ pages
- ☒ frames
- ☐ blocks
- ☐ segments

45

Memory compaction is a possible solution for the problem.
(2 Points)

- ☒ external fragmentation
- ☐ internal fragmentation
- ☐ swapping
- ☐ segmentation

46

..... occurs when the allocated memory is slightly larger than the requested memory.
(2 Points)

- ☐ Overflow
- ☐ Compaction
- ☐ Internal fragmentation
- ☒ External fragmentation

47

Referencing a page that is not currently in memory results in
(2 Points)

- ☐ a deadlock
- ☒ a page fault
- ☐ page starvation
- ☐ page fragmentation

If there is no frame in memory, a algorithm can be used to select a victim frame.
(2 Points)

- ☐ page-fault
- ☐ page-fragmentation
- ☒ page-replacement
- ☐ page-starvation

49

In frame allocation, the number of memory frames allocated to a process depends on its size.
(2 Points)

- ☐ equal
- ☐ priority
- ☒ dynamic
- ☐ proportional

50

..... processes information in the file in order, one record after the other.
(2 Points)

- ☒ Sequential access
- ☐ Direct access
- ☐ Random access
- ☐ Relative access

51

The records information (e.g. name, location, size, and type) for all files on a volume.
(2 Points)

- ☐ device directory
- ☐ volume scanner
- ☒ file locator
- ☐ random-access list

52

To condense the length of the file access-control list, many systems classify users into owner, group, and _____
(2 Points)

- ☐ cooperator
- ☐ universe
- ☒ coordinator
- ☐ subgroup

Submit

Never give out your password. [Report abuse](#)

41

In problem 1, if preemptive priority scheduling is used, the response time of P2 will be
(2 Points)

☒ 3

☐ 1

☐ 0

☐ 2

42

The _____ contains the length of the addresses allocated to the process.
(2 Points)

☐ base register

☐ relocation register

☐ limit register

In problem 1, if preemptive priority scheduling is used, the turnaround time of P2 will be
(2 Points)

- ☐ 18
- ☐ 9
- ☒ 11
- ☐ 1

In problem 1, if preemptive priority scheduling is used, the waiting time of P2 will be
(2 Points)

- ☒ 1
- ☐ 13
- ☐ 7
- ☐ 0