



NetExam

Sri Lanka Institute of Information Technology

Question 4

Not yet answered

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1.00

Flag question

Given the following set of processes with their arrival times and burst times:

assumption: all processes arrived at $t = 0$ sec

Process	Burst Time	Priority
A	9	5
B	4	3
C	5	1
D	7	2
E	3	4

Calculate the average turnaround time for Priority Scheduling algorithm.

C		D		B		E		A
---	--	---	--	---	--	---	--	---

Select one:

- a. 16.0
- b. 16.8
- c. 16.2
- d. 15.8
- e. 16.4

5 12 16 19 28
turn round = completion time - arrival time
Turn down average = sum of turn around/ no of process

Question 23

Not yet answered

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1.00

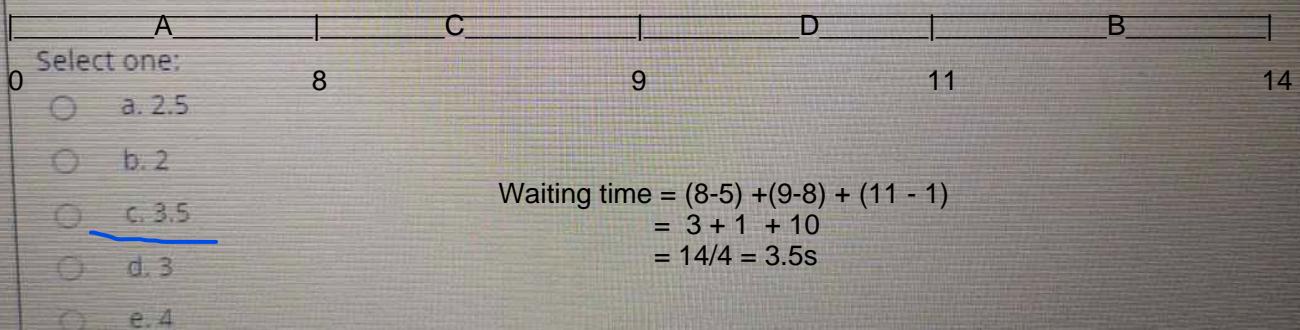
Flag question

Consider the following four processes and their arrival and burst times.

Process	Arrival Time	Burst Time
A	0	8
B	1	3
C	5	1
D	8	2

Compute the average waiting time

Non - primitive method (SJF)



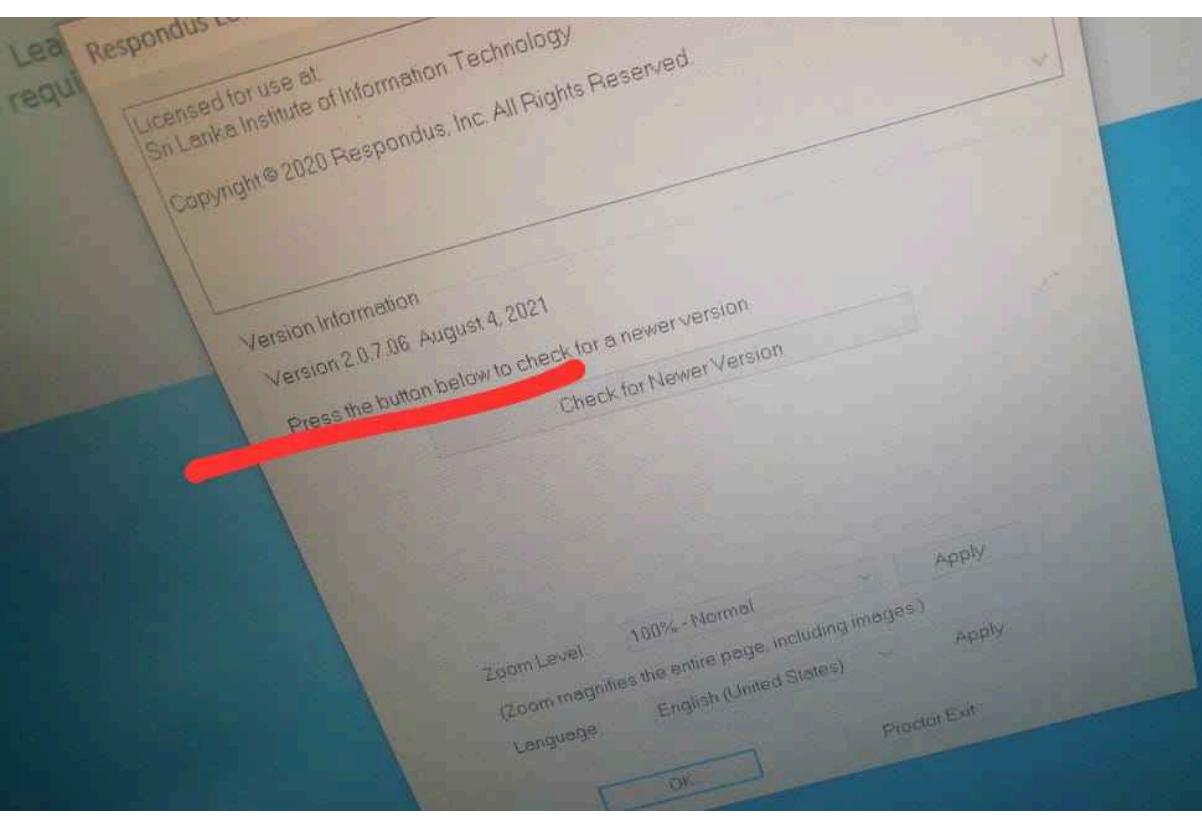
Consider the following four processes and their arrival and burst times.

Process	Arrival Time	Burst Time
A	0	8
B	1	3
C	5	1
D	8	2

Compute the average turnaround time.

Select one:

- a. 8
- b. 6
- c. 6.5
- d. 7.5
- e. 7



Moodle

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Dashboard

Examinations

Lockdown Bro

Uses the lockdown browser.

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Summary of your previous attempts

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Version Information

Version 2.0.7.06 August 4, 2021

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Zoom Level: 100% - Normal

Apply

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Language: English (United States)

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Proctor Exit

P2	1	3	7	10
P3	5	1	6	7
P4	8	2	4	6

Average Wait Time = 4.25 Average Turnaround Time = 7.75

0 -> P1 -> 8 -> P2 -> 11 -> P3 -> 12 -> P4 -> 14

SHORTEST JOB FIRST

	KEY	ARRIVAL	BURST	WAIT	TURNAROUND
ads/	P1	0	8	0	8
	P2	1	3	10	13
	P3	5	1	3	4
	P4	8	2	1	3

Average Wait Time = 3.5 Average Turnaround Time = 7.0

0 -> P1 -> 8 -> P3 -> 9 -> P4 -> 11 -> P2 -> 14

SHORTEST REMANING TIME FIRST

	KEY	ARRIVAL	BURST	WAIT	TURNAROUND
	P1	0	8	1	9
	P2	1	3	10	13
	P3	5	1	2	3
	P4	8	2	1	3

Average Wait Time = 3.5 Average Turnaround Time = 7.0

0 -> P1 -> 7 -> P3 -> 8 -> P1 -> 9 -> P4 -> 11 -> P2 -> 14

ROUND ROBIN QT=3

	KEY	ARRIVAL	BURST	WAIT	TURNAROUND
irst	P1	0	8	4	12
rst	P2	1	3	2	5
aning	P3	5	1	4	5
QT={}	P4	8	2	4	6

Average Wait Time = 3.5 Average Turnaround Time = 7.0

0 -> P1 -> 3 -> P2 -> 6 -> P1 -> 9 -> P3 -> 10 -> P1 -> 12 -> P4 -> 14

~/Downloads/CPU-Scheduling-Calculation-master via v2.7.18



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Consider the following statements regarding operating system:

- A. Most of the system calls are implemented using the assembly language and C language.
- B. Current operating systems are based on the modules concept
- C. Modern operating systems are interrupt driven
- D. Modern operating systems are always real time

Which of the following is correct:

Select one:

- a. Only A. and B. are correct.
- b. Only A, B and C. are correct.
- c. Only A. and C. are correct.
- d. All are correct
- e. None of the above

Exam

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Consider the following four processes and their arrival and burst times.

Process	Arrival Time	Burst Time
A	0	8
B	1	3
C	5	1
D	8	2

Compute the average turnaround time.

Select one:

- a. 6.5
- b. 6
- c. 7.5
- d. 7
- e. 8

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The processes are waiting in the ready queue before it is selected by.....
Find the suitable item for the black space.

Select one:

- a. Short term scheduler
- b. Medium term scheduler
- c. Swapper
- d. Long term scheduler
- e. Pager

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What is the operating system structure which is used by most of the

Select one:

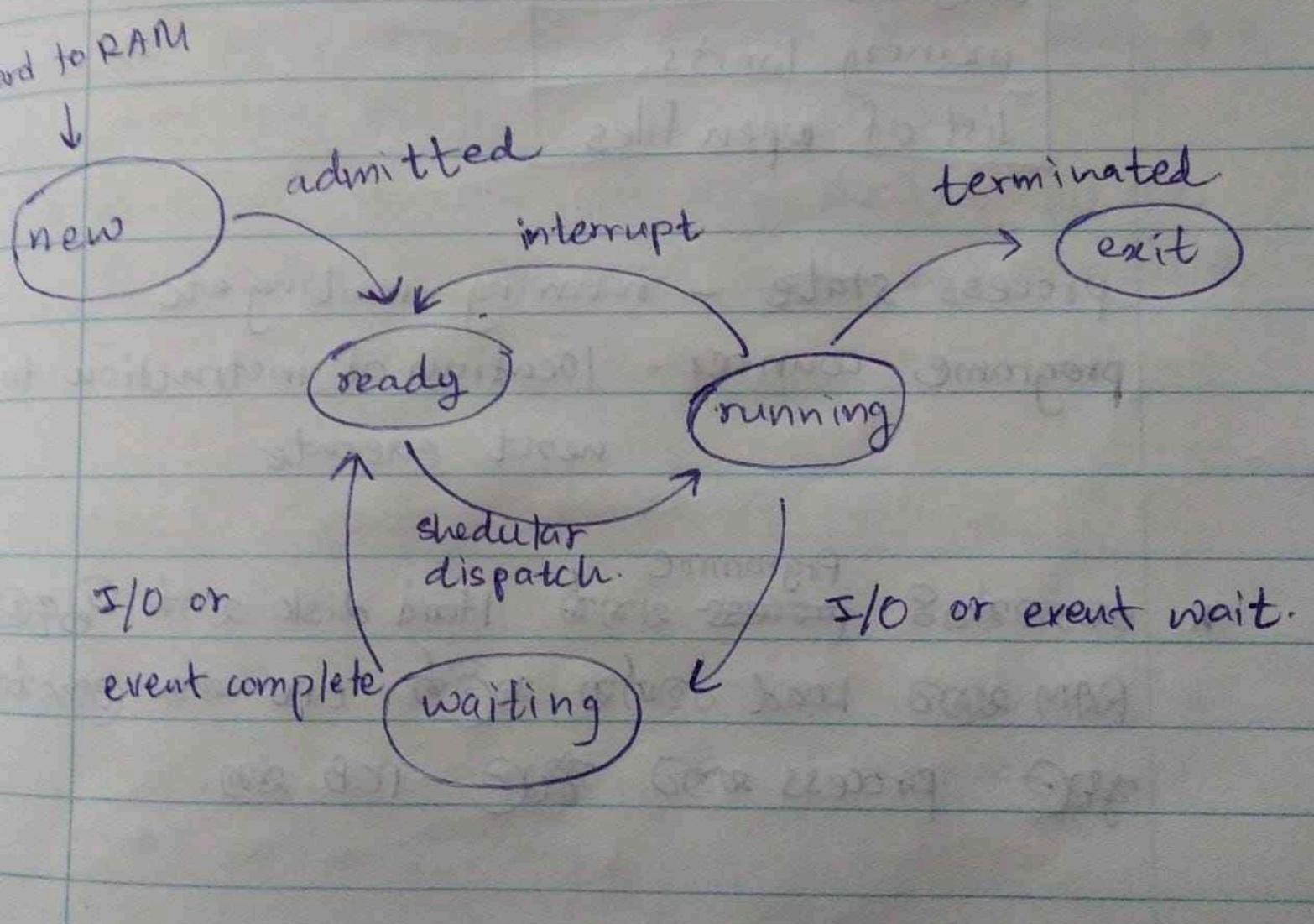
- a. Modules
- b. Layered architecture
- c. Micro Kernel
- d. Object oriented
- e. Monolithic structure

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What is the operating system structure which is used by most of the modern OS?

Select one:

- a. Modules
- b. Layered architecture
- c. Micro Kernel
- d. Object oriented
- e. Monolithic structure



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The state of a process after it encounters an I/O instruction is

Select one:

- a. Ready
- b. Waiting
- c. Idle
- d. Run
- e. New

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When a process is blocking for IO devices then it is in the

Select one:

- a. Ready state
- b. waiting state
- c. Terminated state
- d. Running state
- e. New state

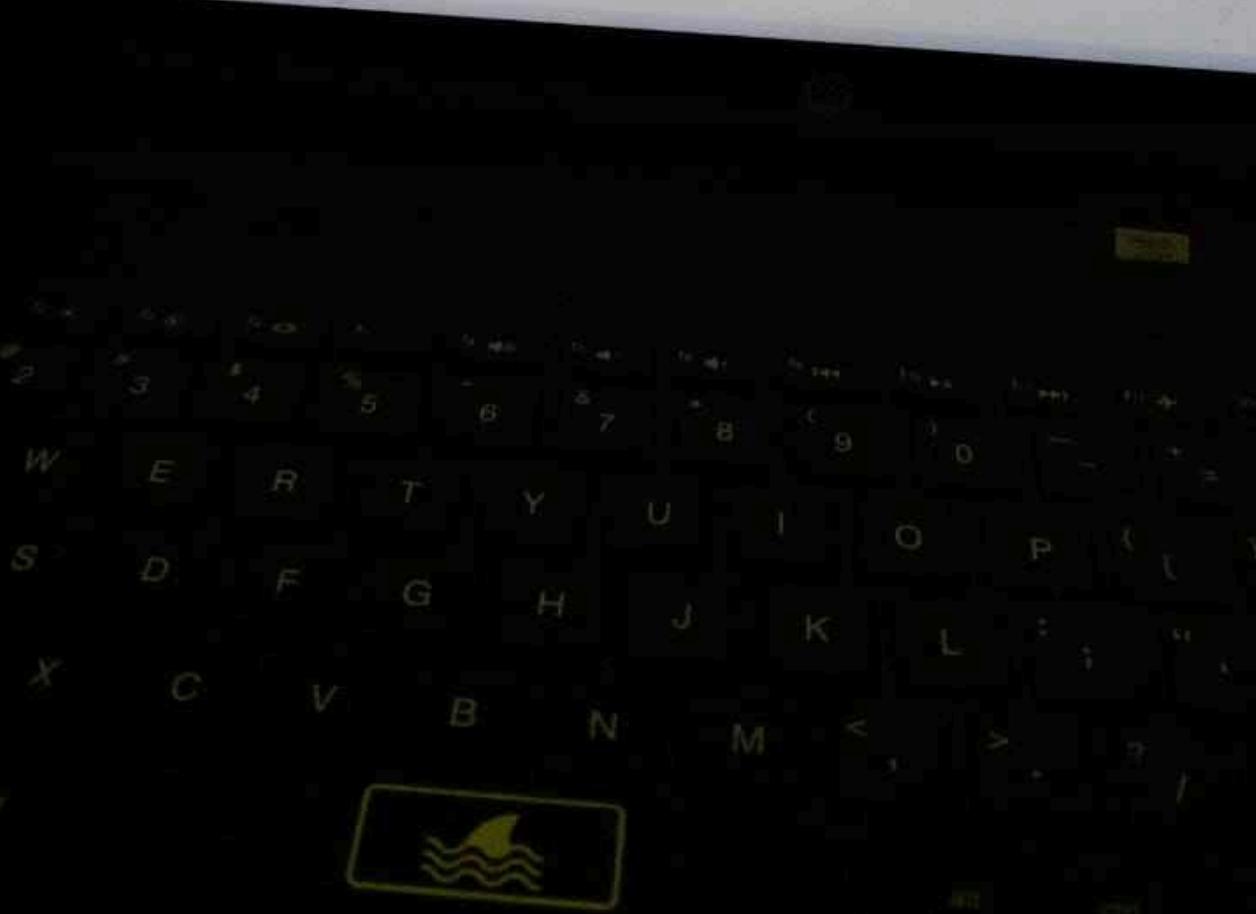


Select the system call which can be used to avoid the zombie processes in the system.

Select one:

- a. close()
- b. wait()
- c. fork()
- d. sleep()
- e. exit()

Next >



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Answered
out of
8 question

When a process is blocking for IO devices then it is in the

Select one:

- a. Ready state
- b. waiting state
- c. Terminated state
- d. Running state
- e. New state



Consider the following four processes and their arrival and burst times.

Process	Arrival Time	Burst Time
A	0	8
B	1	3
C	5	1
D	8	2

Compute the average waiting time.

Select one:

- a. 4
- b. 2
- c. 3
- d. 2.5
- e. 3.5



The following four process states: ready, waiting, running & terminated. For the following state a process will be moved. 'A divide by zero instruction is executed in a process.

From one:

- a. Running to new
- b. Running to waiting
- c. Running to terminate
- d. Running to running
- e. Running to ready

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When a process is blocking for IO devices then it is in the

Select one:

- a. Ready state
- b. New state
- c. Terminated state
- d. Running state
- e. Waiting state

Unit Exam
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Select the incorrect statement.

Select one:

- a. Every process follows the CPU-I/O burst cycle.
- b. First come first serve is a preemptive scheduling algorithm.
- c. Dispatch latency is the time taken by the dispatcher to stop one process and start another.
- d. CPU bound process needs less I/O time.
- e. Context switch is occurred when one process is suspended and another is ready.

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The processes are waiting in the ready queue before it is selected by
Find the suitable item for the black space.

Select one:

- a. Long term scheduler
- b. Short term scheduler
- c. Swapper
- d. Medium term scheduler
- e. Pager

Unit Exam

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Consider the following statements for interrupt handling:

- A. Run the Interrupt Service Routing (ISR)
- B. Current state is saved in Process Control Block (PCB)
- C. Interrupt received through the Interrupt Request Line (IRL)
- D. Resume the suspended process
- E. operating system suspend the current process
- F. Access the Interrupt Vector (IV)

Find the correct order the interrupt handling.

Select one:

- a. C., E., B., F., A., D.
- b. C., B., E., F., A., D.
- c. C., E., B., A., F., D.
- d. C., E., F., B., A., D.
- e. None of the above

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If the kernel is single threaded, then any user level thread performing a blocking system call will:

Select one:

- a. cause the entire process to run along with the other threads.
- b. cause the thread to block with the other threads running.
- c. cause the entire process to block even if the other threads are available to run.
- d. cause the main thread to block and others are running.
- e. None of these

Next page

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A process which has just terminated but has yet to release its resources is called

Select one:

- a. A suspended process
- b. A zombie process
- c. A blocked process
- d. A terminated process
- e. An orphan process

Which scheduling algorithm cannot be implemented?

Select one:

- a. FCFS
- b. RR
- c. SJF
- d. Priority-based
- e. Guaranteed scheduling

Which is not a service of the operating system?

Select one:

- a. File-system manipulation
- b. Process communication
- c. Resource allocation
- d. Accounting of the resource usage
- e. Virus detection



The CPU protection is implemented using

Select one:

- a. Limit register
- b. Mode bit
- c. Timing
- d. Non privileged instructions
- e. Base register

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The total time taken to suspend one process and resume another process because of interrupt is called as

Select one:

- a. Swapping time
- b. PCB time
- c. Interrupt handling time
- d. Dispatch latency
- e. Context switch time

[Next page](#)

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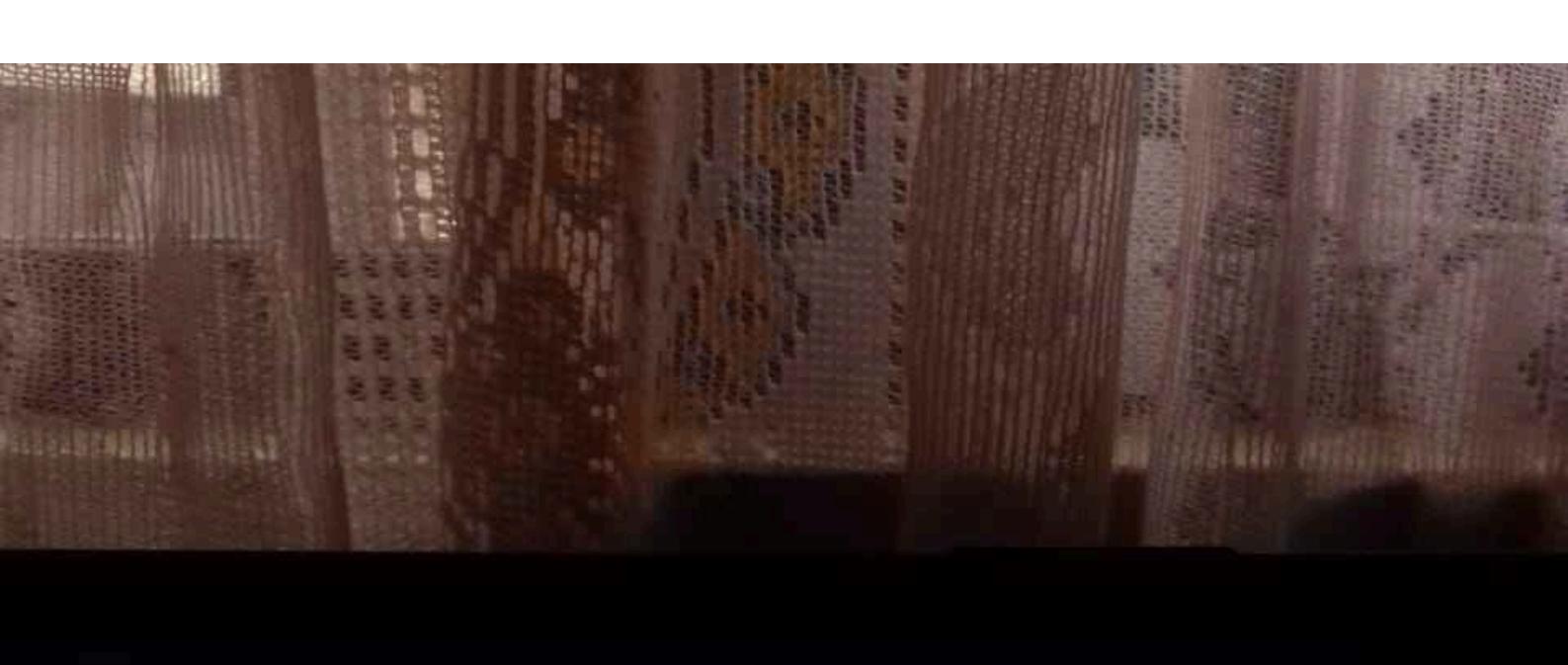
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Consider the following statements regarding the processes and threads:

- a) Processes creation is faster than thread creation.
- b) Inter thread communication is much faster than the inter process communication.
- c) User level threads are slower than the kernel level threads.

Select one:

- a. Only a) is correct.
- b. Only b) is correct.
- c. Only b) and c) are correct.
- d. All are correct
- e. None of the above



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Processes are moving among different states while they are executing in the computer. Select the transition which is not possible between two states.

Select one:

a. Ready to waiting

b. Running to terminate

c. Running to ready

d. Running to waiting

e. Waiting to ready

NetExam

Given the following set of processes with their arrival times and burst times:

Process	Arrival Time	Burst Time
A	0	8
B	1	6
C	3	3
D	5	2
E	6	4

Calculate the average turnaround time for First Come First Serve algorithm.

Select one:

- a. 13.6
- b. 13.4
- c. 13.2
- d. 12.8
- e. 13.0

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15

Not answered
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30

Flag question

A thread

Select one:

- a. Is a lightweight process where the context switching is slow
- b. Is an independent sequence of execution of a program code
- c. Is independent from another thread
- d. All of the above
- e. None of the above

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When a process is interrupted by any interrupt signal then it moves to

Select one:

- a. Waiting queue
- b. Running state
- c. New state
- d. Ready state
- e. Terminated state

Dispatcher selects the process from

Select one:

- a. Device queue
- b. Dispatch queue
- c. Ready queue
- d. Waiting queue
- e. IO Queue

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Consider the following statements regarding OS structures:

- a) Module architecture is used by most of the modern Operating systems.
- b) Micro kernel provides better reliability.
- c) Layered architecture is less efficient.

Select one:

- a. Only a) is correct.
- b. Only b) is correct.
- c. Only a) and b) are correct.
- d. All are correct
- e. None of the above



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20

answered

out of

question

The CPU protection is implemented using

Select one:

- a. Non privileged instructions
- b. Limit register
- c. Mode bit
- d. Base register
- e. Timer

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Answered
out of
Flag question

Dispatcher selects the process from

Select one:

- a. Ready queue
- b. Waiting queue
- c. IO Queue
- d. Device queue
- e. Dispatch queue

The screenshot shows a Windows application window titled "Net Exam". The window has a dark blue header bar with standard window controls (close, minimize, maximize) and a title bar. Below the header is a logo for "Sri Lanka Institute of Information Technology" (SLIIT) featuring a shield with a flag and the letters "SLIIT". The main content area contains a question and several multiple-choice options.

Consider the following statements regarding the processes and threads:

a) Processes creation is faster than thread creation.
b) Inter thread communication is much faster than the inter process communication.
c) User level threads are slower than the kernel level threads.

Select one:

a. Only a) is correct.
 b. Only b) is correct.
 c. Only b) and c) are correct.
 d. All are correct
 e. None of the above

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The primary difference between user-level threads and kernel threads is

Select one:

-  a. User level threads do not use OS services via system calls, whereas kernel threads require system calls.
- b. User level threads are independent of each other, whereas kernel threads can write into each other's memory space.
- c. User level threads require memory management where kernel threads do not.
- d. All of the above
- e. None of the above

BOTH OF THEM USE MEMORY
MANAGEMENT

CEXAM

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What is the ready state of a process?

Second one:

- a. When process is scheduled to run after some execution
- b. When process is unable to run until some task has been completed
- c. When process is using the CPU
- d. When process is ready to execute an I/O operation
- e. None of the above

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Consider the following statements regarding sockets:

A. Socket is a communication end point with IP address and port number.

B. Each port number has 16 bits number.

C. Port numbers below 1024 are already reserved for servers

D. Every client program needs a port number for the communication.

Which of the following is correct:

Select one:

a. Only A. is correct.

b. Only B and C. are correct.

c. Only A. and C. are correct.

d. All are correct

e. None of the above

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Processes are moving among different states while they are executing in the computer. Select the transition which is not possible between two states.

Select one:

- a. Running to ready
- b. Running to terminate
- c. Waiting to ready
- d. Running to waiting
- e. Ready to waiting

[NEXT PAGE](#)

EXAM

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100 100 out of 100

View question

Select the incorrect statement.

Select one:

- a. Process needs more resources like CPU time, RAM space, files, PCB and I/O devices.
- b. Processes are active entity and programs are passive entity.
- c. Program counter is a register which is used to store the address of the memory location where the next instruction is stored.
- d. Thread is a light weight process that can share the memory while process is stored in the kernel memory.
- e. Process control block is stored in the user memory while process is stored in the kernel memory.

PCB will be stored on the kernel memory

 |  | 

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Given the following set of processes with their arrival times and burst times:

Process	Arrival Time	Burst Time
A	0	8
B	1	6
C	3	3
D	5	2
E	6	4

Calculate the average waiting time for First Come First Serve algorithm.

Select one:

- a. 8.4
- b. 8.0
- c. 8.6
- d. 8.8
- e. 8.2

time taken to suspend one process and resume another process because of interrupt is called as

- One:
- a. Interrupt handling time
 - b. Swapping time
 - c. PCB time
 - d. Context switch time
 - e. Dispatch latency

Given the following set of processes with their arrival times and burst times:

Process	Burst Time	Priority
A	9	5
B	4	3
C	5	1
D	7	2
E	3	4

Calculate the average waiting time for Priority Scheduling algorithm.

Select one:

- a. 10.6
- b. 10.0
- c. 10.4
- d. 10.8
- e. 10.2

The total time taken to suspend one process and resume another process because of interrupt is called as

Select one:

- a. Interrupt handling time
- b. Swapping time
- c. PCB time
- d. Context switch time
- e. Dispatch latency

NetExam

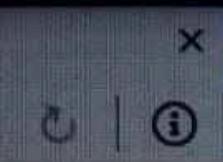
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The processes are waiting in the ready queue before it is selected by

Find the suitable item for the black space.

Select one:

- a. Long term scheduler
- b. Short term scheduler
- c. Medium term scheduler
- d. Swapper
- e. Pager



X

C



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What is the operating system structure which is used by most of the modern OS?

Select one:

- a. Layered architecture
- b. Object oriented
- c. Monolithic structure
- d. Micro Kernel
- e. Modules



Select the incorrect statement:

Select one:

- a. When the interrupt is occurred the current process state will be saved in PCB.
- b. Interrupt generated by CPU itself is called as trap.
- c. Interrupt vector contains address of the interrupt service routine.
- d. Interrupts can be generated only by timer with CPU.
- e. Interrupt vector will be installed in physical memory.

Kam
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Consider the following statements related to the CPU scheduling:

a) Medium term scheduler controls the degree of multiprogramming
b) Short term scheduler is faster than the short term scheduler
c) Long term scheduler is faster than the short term scheduler

Select one:

- a) Only a is correct.
- b) Only b is correct.
- c) Only a and b) are correct.
- d) All are correct.
- e) None of the above

b) long term scheduler controls the degree of multiprogramming

C) short term scheduler faster than long term scheduler

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A thread

Select one:

It needs to be where the context switching is faster

- a. Is a lightweight process where the context switching is slow
- b. Is an independent sequence of execution of a program code
- c. Is independent from another thread
- d. All of the above
- e. None of the above

they are dependent on other threads, explained in multi-threading models

Consider the following statements related to the CPU scheduling:

- a) Medium term scheduler controls the degree of multiprogramming.
- b) Short term scheduler is faster than the short term scheduler.
- c) Long term scheduler is available in Time shared system.

Select one:

- a. Only a) is correct.
- b. Only b) is correct.
- c. Only a) and b) are correct.
- d. All are correct.
- e. None of the above



Select the non-privileged Instruction

Select one:

- a. Change the memory content
- b. Change the program counter
- c. Get the system time
- d. Change the base register
- e. Turn off the interrupt



Select the incorrect statement.

Select one:

- a. Threads are not independent since they share the memory.
- b. Context switch time between threads is faster than context switch time between processes.
- c. Pthread is a thread library which provides the specification to create and manage threads.
- d. Kernel level threads are faster than user level threads.
- e. User level threads are managed by the thread library while kernel threads are managed by system call

Next pa

Select the incorrect statement.

Select one:

- a. Thread is a light weight process that can share the memory.
- b. Program counter is a register which is used to store the address of the memory location where the next instruction is stored.
- c. Process control block is stored in the user memory while process is stored in the kernel memory.
- d. Process needs more resources like CPU time, RAM space, files, PCB and IO devices.
- e. Processes are active entity and programs are passive entity.

Next page

Processes are moving among different states while they are executing in the computer. Select the transition which is not possible between two states.

Select one:

- a. Running to Waiting
- b. Running to terminate
- c. Running to ready
- d. Ready to waiting
- e. Waiting to ready

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Consider the following four processes and their arrival and burst times.

Process	Arrival Time	Burst Time
A	0	8
B	1	3
C	5	1
D	8	2

Compute the average turnaround time.

Select one:

- a. 6
- b. 8
- c. 7
- d. 7.5
- e. 6.5



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When a process is interrupted by any interrupt signal then it moves to

Select one:

- a. Waiting queue
- b. Terminated state
- c. Ready state
- d. Running state
- e. New state

C) asynchronous cancellation - terminates the target thread immediately

Deferred cancellation - allows the target thread to periodically check if it should be cancelled

Consider the following statements regarding the processes and threads:

- a) User-level threads are invisible to the kernel.
- b) One to one model in threads is used by the most modern operating systems.
- c) In thread cancellation, asynchronous cancellation is better than the deferred cancellation.

Select one:

- a. Only a) is correct.
- b. Only b) is correct.
- c. Only a) and b) are correct.
- d. All are correct
- e. None of the above

A) The user level thread are in the user memory so they are invisible to the kernel

B) Most modern operating systems have adopted the one-to-one thread model to support fast execution of threads in both multi-core and single-core systems

Consider the following statements regarding the processes scheduling:

- a) Short term scheduler is faster than the medium term scheduler.
- b) Context switching between kernel level threads are faster than the user level threads.
- c) Ready queue is implemented with first in first out policy.

Select one:

- a. Only a) is correct.
- b. Only b) is correct.
- c. Only b) and c) are correct.
- d. All are correct
- e. None of the above

- What is the ready state of a process?
- Select one:
- a. When process is scheduled to run after some execution
 - b. When process is unable to run until some task has been completed
 - c. When process is using the CPU
 - d. When process is ready to execute an IO operation
 - e. None of the above

When the computer is starting up, it follows the instructions of the BIOS program. The BIOS settings are stored in

Select one:

- a. Hard Disk
- b. L1 Cache
- c. CMOS
- d. RAM
- e. ROM

Bios setting is stored in CMOS chip

Bios is stored in ROM

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Select the system call which can be used to avoid the zombie processes in the system.

Select one:

- a. close()
- b. sleep()
- c. exit()
- d. fork()
- e. wait()



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Question 1

Not yet answered

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1.00

Flag question

Select the incorrect statement.

Select one:

- a. Pthread is a thread library which provides the specification to create and manage threads.
- b. Kernel level threads are faster than user level threads.
- c. Threads are not independent since they share the memory.
- d. User level threads are managed by the thread library while kernel threads are managed by system call
- e. Context switch time between threads is faster than context switch time between processes.

Switching the CPU to another Process requires to save state of the old process and loading new process state is called as

Select one:

- a. Process Blocking
- b. Context Switch
- c. Time Sharing
- d. Process loading
- e. None of the above

Next page

The address of the next instruction to be executed by the current process is provided by the,

Select one:

- a. CPU registers
- b. Cache
- c. Program counter
- d. Process stack
- e. None of the above

process stack stores the function parameters, return address, and local variable

X | |

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Which scheduling algorithm cannot be implemented?

Select one:

- a.
FCFS
- b.
RR
- c.
SJF
- d.
Priority based
- e.
Guaranteed scheduling

Not sure

A process can be terminated due to

Select one:

- a. normal exit
- b. Fatal Error
- c. Killed by another process
- d. All of the above
- e. None of the above

Consider the following statements related to the Operating System:

- a) The main goal of SPOOLING is to maximize the utilization of IO devices and CPU.
- b) The main goal of the Multiprogramming is to maximize the CPU utilization.
- c) The main goal of the Time sharing system is to maximize the resource sharing.

Select one:

- a. Only a) is correct.
- b. Only b) is correct.
- c. Only a) and c) are correct.
- d. All are correct
- e. None of the above

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When a process is interrupted, its details are saved in the PCB and other process details are reloaded from the PCB. This process is called as

Select one:

- a. Waiting
- b. Context switch
- c. Dispatching
- d. Interrupting
- e. Swapping

time taken for context switching is dispatch latency

Next page

Which scheduler move the process from new state to ready state?

Select one:

- a.
CPU scheduler
- b.
Long term scheduler
- c.
Short term scheduler
- d.
Medium term scheduler
- e. None of the above