NAME: M. HASSAN ADEEL.

ID: 15437.

DEPARMENT: SOFTWARE ENGINEERING.

PAPER: OPERATING SYSTEM.

TEACHER: SIR M. DAUD.

Name : M. Hasan Adeel.
ID : 15437.
Department : S.E.

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*) Question : 1 :-
ANSWER :- INTERRUPT.

*) Question : 2 :
Answer : Memory Related Information.

*) Question : 3 :
ANSWER :- Wait.

*) Question : 4 :-
ANSWER :- ASYMMETRIC.

*) Question : 5 :-
ANSWER :- Ps.

*) Question : 6 :
ANSWER :- fg.

*) Question : 7 :
ANSWER :- Jobs.

*) Question : 8 :-
ANSWER :- <Ctrl - C>.

*) Question : 9 :-
ANSWER :- Multitasking.

*) Question : 10 :-
ANSWER : Efficiency.

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ID: 15437.
Department: S.E.

*) Question: 11:-
ANSWER: /lib.

*) Question: 12:-
ANSWER: Long Term.

*) Question: 13:
ANSWER:- DO.

*) Question: 14:-
ANSWER: Semaphore.

*) Question: 15:
ANSWER: Spinlock.

*) Question: 16:-
ANSWER: False.

*) Question: 17:
ANSWER: False.

*) Question: 18:
ANSWER: Bounded Waiting.

*) Question: 19:-
ANSWER:- Firmware Based Solution.

*) Question: 20:
ANSWER: Medium Term Scheduler.

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Department : S.E

QUESTION : 21 (M-2)

Write the formula / procedure for calculating the waiting time in preemptive Shortest Job First scheduling.

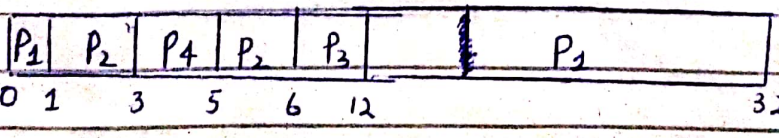
ANSWER :-

PRE-EMPTIVE SHORTEST JOB FIRST :-

In Preemptive Shortest Job first scheduling, jobs are put into ready queue as they arrive, but as a process with short burst time arrives, the existing process is preempted or removed from execution.

PROCESS	BURST TIME	ARRIVAL TIME
P_1	21	0
P_2	3	1
P_3	6	2
P_4	2	3

Table : 1.1.



The average waiting time will be,

$((5-3)+(6-2)+(12-1))/4 = 4.25$ ms.

As u can see in the above table, as P_1 arrives first, hence its execution starts immediately, but just after 1 ms, process P_2 arrives with a burst time 3 ms. which is less than the burst time

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of P_1, hence the process P_1 (1 ms done, 20 ms left) is preemptied & process P_2 is executed.

As P_2 is getting executed, after 1 ms, P_3 arrives but it has a burst time greater than that of P_2, hence execution of P_2 continues. But after another millisecond, P4 arrives with a burst time of 2 ms, as a result P_2 (2 ms done, 1 ms left) is preemptied an P4 is executed.

After the completion of P4, process P_2 is picked up & finishes, then P_2 will get executed & at last P_1.

The premptive SJF is also known as Shortest Remaining Time First, because at any given point of time, the job with the shortest remaining time is executed first.

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Question No. 22 (M-3).

If a process exits and there are still threads of that process running, will they continue to run.

A) ANSWER:-

No, When a process exits, it takes everything with it. This includes the process structure, the memory space etc. including threads.

(The process is the execution environment; without it, a thread can not be execute.).

Question No: 23 (M-5):

Considering the Resource sharing feature of thread, what do you think is 'resource sharing' an advantage of a thread or disadvantage of a thread. Explain your answer briefly.

ANSWER:-

I consider resource sharing an advantage of a thread. Following are the reasons why.

1. Threads minimize the context switching time.
2. Use of threads provides concurrency with a process.
3. The advantage of sharing code is that it allows any application to have multiple different threads of activity inside the same address.