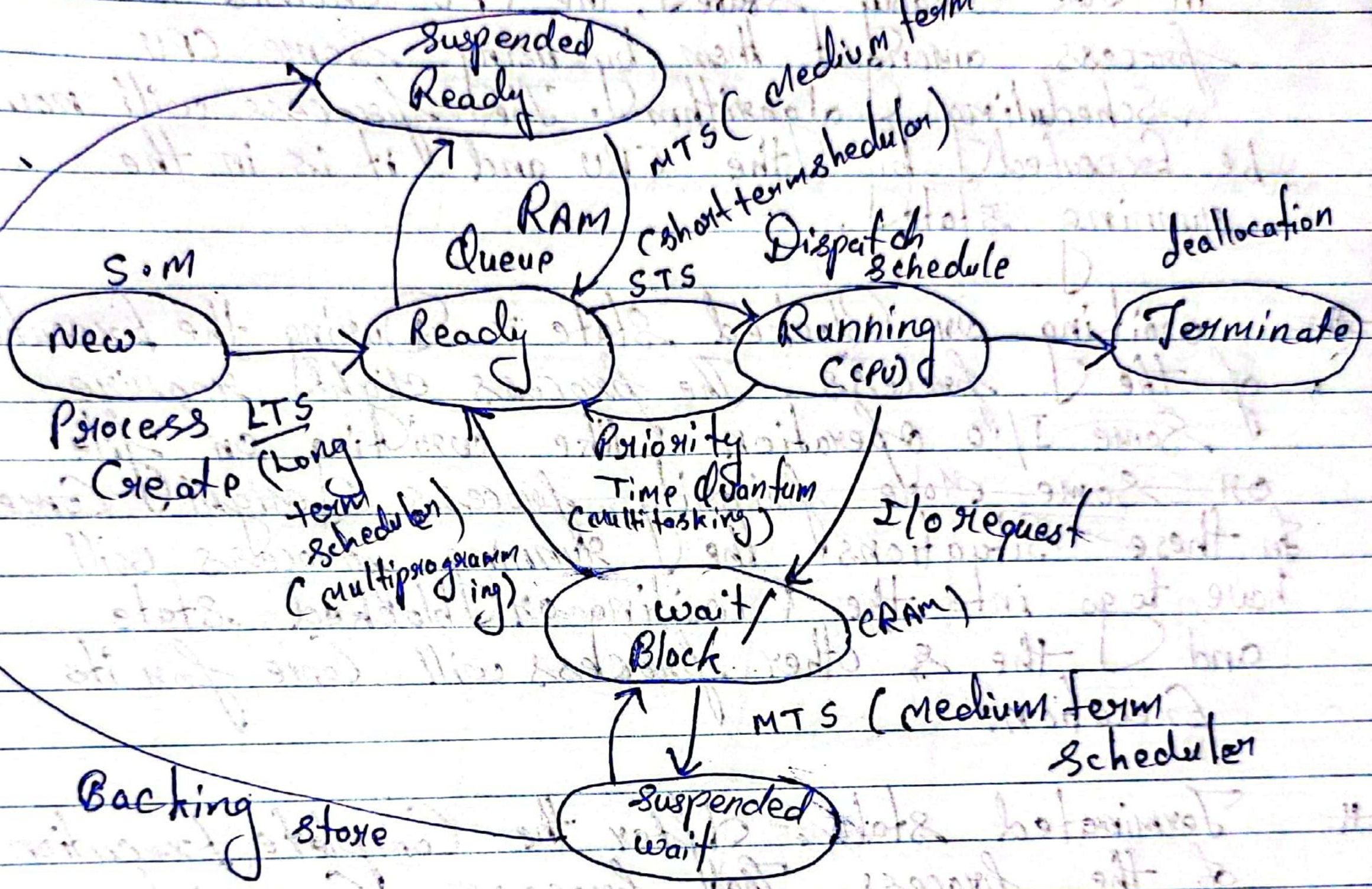
Preemtive — (Priority, Time Quantum)
non-Preemtive · X

Process States :-



New State ⇒ This is the state when the process is just Created. It is the first state of a Person. Process.

Ready State ⇒ After the Creation of the process, when the process is ready for its Execution then it goes in the ready State. In a ready state, the process is ready for its execution by the CPU but it is waiting for its turn to come.

Running State :- Amongst the process present in the ready state, the CPU Choosed one process amongst them by using some CPU Scheduling algorithm. The process will now be Executed by the CPU and it is in the running state.

waiting or Blocked state → During the Execution of the process. The process might require some I/O operation like writing on file or some more priority process might come. In these situations, the running process will have to go into the waiting or blocked state and the other process will come for its Execution.

5) # Terminated state :- After the Complete Execution of the process. The process comes into the terminated state and the information related to this process is deleted.

6) # Suspend Ready state.

If a process with a higher priority needs to be executed while the main memory is full, the process goes from ready to suspend ready state.

Suspend wait state

if a process with a higher priority needs to be Executed while the Main Memory is full, the process goes from the wait state to the Suspend wait state.

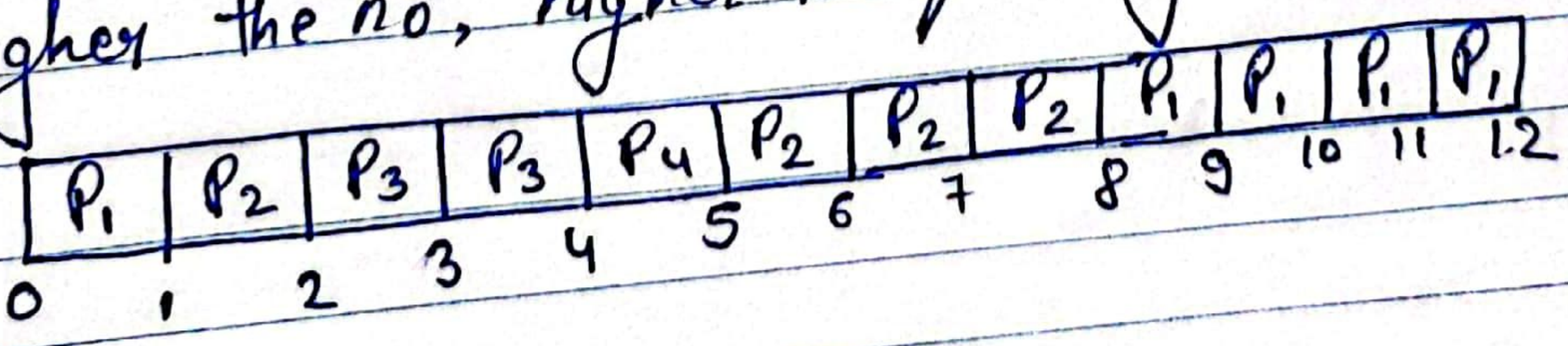
Question Preemtive Scheduling.

Priority	Process No	Arrival Time	Burst time	Completion time	TAT	WT
10	P_1	0	~~8~~ 4	12	12	7
20	P_2	1	~~4~~ ~~3~~ ~~2~~ ~~1~~ 0	7	7	3
30	P_3	2	~~2~~ 1 0	2	2	0
40	P_4	4	~~1~~ 0	1	1	0

Criteria = Priority ; Mode = preemptive ; TAT = CT - AT

WT = TAT - BT

Higher the no, higher the priority.



TAT = turn Around time

WT = waiting time.

24 Jul 2024 11:12 am

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