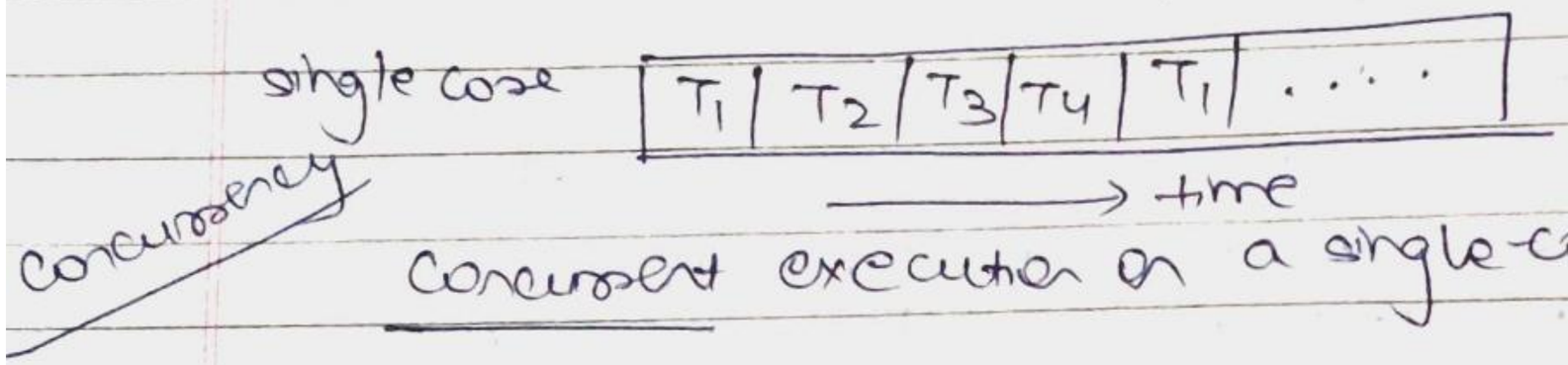
KUSHAGRA AGARWAL
2018113012

Q1) Fixed size messages are
↳ Good for OS designer
↳ Complex for programmer
Variable size messages are
↳ Complex for OS designer
↳ Good for programmer

Q3) Parallelism implies a system can perform more than one task simultaneously.
Concurrency supports more than one task making progress. Thus it is possible to have concurrency without parallelism



Q4) Time sharing systems may introduce sometimes an additional intermediate level of scheduling. These medium-term schedulers are advantageous in removing a process from memory and hence reduce the complexity of multiprogramming. We can then later bring the process back to memory and resume its operation. This mechanism is called swapping which improves the process mix because a change in memory requirements has caused some free up of memory to take place.

Qs) The separation of policy and mechanism adds flexibility. This is because policies are more prone to changes which would then cause mechanism to change. Therefore building a ~~system~~ mechanism which is insensitive to policy changes should be our goal.

If a mechanism is properly separable from the policy then it can be used either to support a policy decision that I/O intensive programs should have priority over CPU intensive ones or to support the opposite policy.

Making the scheduling mechanism general purpose allows vast policy changes to be made with a single load-new-table command.

Q6) If we run any program with O(c) constant in different threads then we instead of optimisation, lose time in overheads for multithreading. In all such cases single threaded works better

i) Adding a list of numbers

ii) Memory allocation to data variables

Q2) If the number of kernel threads is is greater than the number of processors but less than the number of user-level threads then all of the processes will be able to simultaneously work with the assumption that user threads are available. If let's say a kernel thread gets blocked (while performing a blocking system call) then we can move to a kernel thread which is not blocked by swapping.