

Sec-7

Q2) Write the condition of dead lock. Explain the protocol to be used to break the circular wait condition.

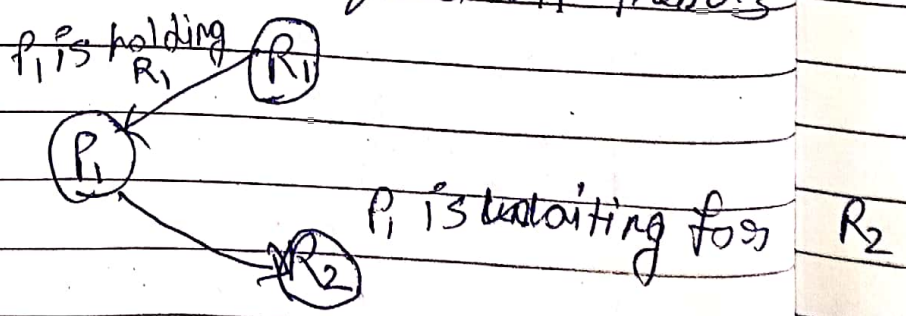
Soln

Four Necessary and sufficient condition for deadlock.

- Mutual exclusion. The resource involved must be unsharable, otherwise, the process would not be prevented from using resource when necessary.
- Hold & wait or partial allocation.
- No pre-emption
- Resource waiting or circular wait

Circular wait

one protocol to ensure that the circular wait condition never hold is impose a linear ordering of all resources types. Then each process can only request resource in an increasing order of priority with those priorities. If process P wants to use r_1 & r_2 , it should first request r_1 then r_2 .



Hold & wait