

Ques Write the condition of dead lock. Explain the protocol to be used to break the circular condition.

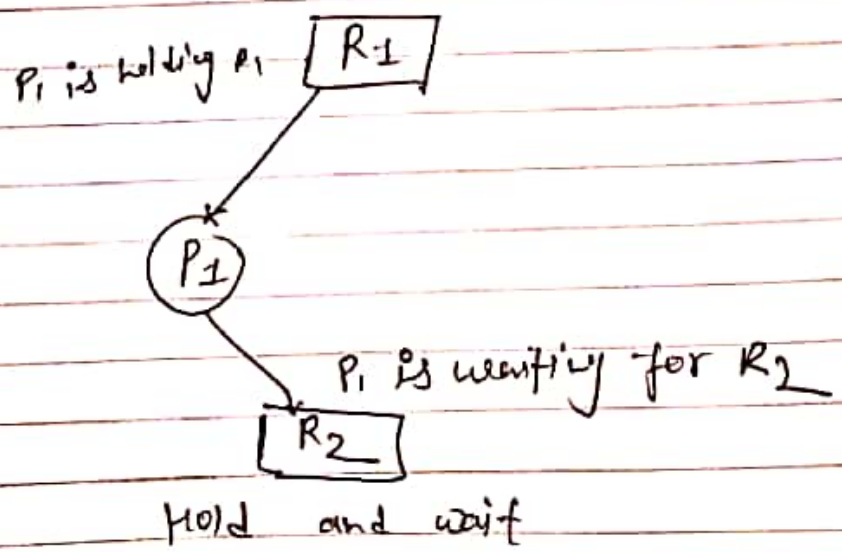
Ans :- Four necessary and sufficient conditions for deadlock.

- ① Mutual exclusion - The resource involved must be unsharable; otherwise, the process would not be prevented from using resources when necessary.
- ② Hold and wait or partial allocation.
- ③ No pre-emption
- ④ 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 resource types".

Then each process can only request resource in an increasing order of priority with these priorities. If process P wants to use r_1 and r_3 , it should first request r_3 then r_1 .



Teacher's Signature.....