**Q1: Calculate the time for each process, define the priority?**

**Answer :**

**A program begins at t=0s . at t =10s , a printer interrupt occurs ; user information is placed on the system stack and executing continues at the printer interrupt service routine (ISR) . while this routine is still executing at t=15s, a communications interrupt occurs . because the communication line has higher priority than the printer , the interrupt is honored. The printer ISR is interrupted ,its state is pushed onto the stack, and executing continues at the communications ISR .while this routine is executing , a disk interrupt is occurs at t=20s ,because this interrupt is lower priority t, it is simply held ,and the communications ISR runs to completion. When the communications ISR is complete at t=25,the previous processor state is restored ,which is execution of the printer ISR . however , before even a single instruction in that routine can be executed, the processor honors the higher priority disk interrupt and control transfer to the disk ISR . only when that routine is complete at t=35s is the printer ISR resumed , when that routine completes at t=40s , control finally returns to the user program .**