



Terminologies Used In CPU Algorithm

- **Arrival Time:**
Time at which the process arrives in the **ready queue**.
- **Completion Time:**
Time at which process completes its execution.
- **Burst Time:**
Time required by process for CPU execution.
- **Turnaround Time:**
This is the how long a process takes to execute a process. It is calculated as the time gap between the submission (Arrival Time) of a process and its completion.

$$\text{Turn Around Time} = \text{Completion Time} - \text{Arrival Time}$$

- **Waiting Time:**
Waiting time is the sum of the time periods spent in waiting in the ready queue. Time Difference between turn around time and burst time.

$$\text{Waiting Time} = \text{Turn Around Time} - \text{Burst Time}$$

- **Response Time:**
Response time is the time it takes to start responding from submission time. It is calculated as the amount of time it takes from when a request was submitted until the first response is produced.

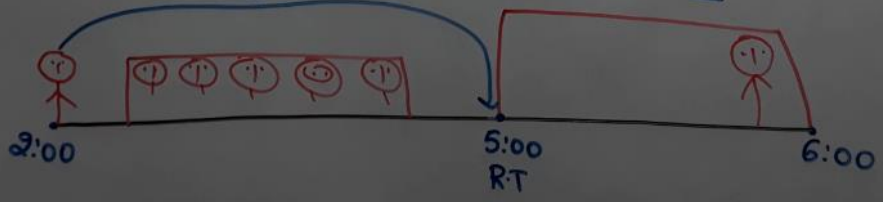
OPERATING SYSTEM PROCESS/CPU SCHEDULING

www.tutorialspace.com
B.Tech/BE-BCA-MCA-CSE-IT
GATE-UGC-NET-PSU UNIV-EX

TERMINOLOGY USED IN SCHEDULING ALGORITHMS

- 1) **ARRIVAL TIME** :- Time At which Process Arrives in 'Ready Queue' (A.T)
Process CPU लेने कब आया Main Memory में
- 2) **COMPLETION TIME** :- Time at which Process Completes Its Execution (C.T)
Process का Execution 'Finally' कब खत्म हुआ
- 3) **BURST TIME** :- Time Required by Process for CPU Execution (B.T)
कितनी देर में अपना काम खत्म कर लेगा Process
- 4) **RESPONSE TIME** :- Time it takes to Start Responding CPU कब मिला - CPU लेने कब आया
- 5) **TURN AROUND TIME** :- How Long a process takes to execute.
TAT = CT - A.T
काम कब खत्म हुआ - CPU लेने कब आया Process MM में
- 6) **WAITING TIME** :- Sum of all times Spent in Waiting Queue
W.T = TAT - B.T
Total कितना Time खराब हुआ

PATIENT-DOCTOR VISIT



A.T = 2:00 Hour
 C.T = 6:00 Hour
 B.T = 0:20 Min
 R.T = 3:00
 TAT = (5:00 - 2:00)
 = 3:00
 W.T = 4:00 - 0:20
 = 3:40