Name - Protiksha Ramdas Rewatkar.

ROII NO: 220350320110.

Assignment - 1 + 05

Consider the set of 5 processes Whose arrival time and burst time are given below.

| | | | Dimil time |
|---|------------|-----------------|-----------------|
| 1 | Process Id | Arrival time | Burst time |
| | Pi | 3 | 4 |
| | P2 0 | 5 | 3 |
| | 0 | 3 | 2 |
| | 173 | 5 - Television | and Harrish + " |
| | P4 | | 3 |
| | P5 | | - (1.0.00) |
| | i Inv | KAG - GOITOLOGO | |

If the CPU Scheduling policy is FCFS, calculate the average waiting time and average turn around time.

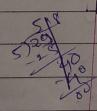
Grantt charts

| | P3 | 8// | PI | P.5 | P2 | P4 | 13 |
|---|----|-----|-----|-----|-----|----|----|
| 0 | | 2 | 3 7 | - 1 | 0 1 | 3 | 14 |

| | the state of the s | | |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------|
| - | Process | Maiting Time (H.T) | Turn around time |
| | 0 | | cot + T cpu (buss+T) |
| | P | 3-3=0 | 0+4=4 |
| | P2 | 10-5=5 | 5+3=8 |
| | Ps | 0-0-0 | 0+2=2 |
| | P4 | 13-5=8 | 8+1=9 |
| | P5 | 7-4 = 3 | 3 + 3 = 6 |
| ı A | Charles on the Control of the Contro | | |

1) Average WoTo - 0+5+0+8+3 = 16 = 3.2 5 = 5 unit

2) Turn around - 4+8+2+9+6 - 29 - 5.8 Unit. Time average 5 5



Problem - 02

consider & the set of 5 processes whose arrival time and burst time are given below-

| | | | | the transfer of the state of th | | ı |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---|
| | process | DI | Arrival | time | Burst time. | |
| | Pi | 8 | 3 | C | 1-x | |
| 10000 | ₽2 | 1 |) | T Z | 4 -> 3 | |
| | P3 | 2 | 4 | AND THE | 271 | |
| Section of the last | P4 | 1 | 0 | | 6 75 | |
| Post of the latest designation of the latest | P5 | | 2 | | 3 72. | |
| | Hell | | 29/81/ | 9 19 | 11/4/pg | |

If the CPU scheduling policy of SIF preemtive, calculate the average waiting time and average turn around time.

| | | | | | | | | 1 | | |
|---|----------------------------------------------|----------------|---------------|-----------------------------|--------|------|-------|----------------------|------|---|
| | P4 | P ₂ | P5 | Pi | P3 | - | | P2 | P4 | |
| 1 | 0 1 | | 2 | 5 | 94 E | 5 | 5 | 3 | 1 | 6 |
| | Process | | Chait | ing | Sta | TY | urna | round | | |
| | Td | 1 = 1 | Tim | je O | | 2 23 | tin | ne. | | |
| | P, | | 4- | 3=1 | DE! | | 1- | 1=0 | | |
| | P ₂ | | 11- | 1=10 | - | 1-1 | 10 | -4=6 | | |
| | P3 | | 6- | 4=2 | 1=1 | 8-8 | . 2 - | 2=0 | | |
| - | P4 | 4 | 16. | -0=16 | 0 = | 1-1 | 16 | -6=10 | | |
| | Ps Ps | | 8 | -2=6. | 1-12-1 | 110 | 6 | -3=3 | . (1 | |
| | P ₁ P ₂ P ₃ | | 4- 11- 6- 16. | 3=1 1=10 4=2 -0=16 | JE I | | 10-2- | -4=6 2=0 -6=10 | | |

| | | R |
|----|------|---|
| 5 | Date | |
| () | Page | |
| 12 | 10 | |

| Diral | _1 | 0,00 | . 7 |
|-------|----|------|-----|
| Prot |) | (11) | |

Q

| | | | Dinet | |
|-------|---------------|-----------------|----------------|--------------|
| 3) | Process | hrrival Time | Burst Time. | |
| | Jd 1 | 0 | 7 2000081 | |
| T No. | 911 P2 1211 D | 9 1913- 101 | 3 | |
| | P8 | 2 | 1 9 | - |
| | P4 P | 4 | 2 | |
| | P6 | 5 | 29 | The state of |
| | The Car X | | | |

P2 P5 P1 P8 P3

| 0 | 1 2 |) | 7 | 11/13/15 | 2 | 1 1 1 | 70.47 | 10 | |
|--------|------|------|-----|----------|-----|--------|-------|----|--|
| s bain | emir | patt | T p | To | TPE | I by I | Pa | Pı | |

P1 P2 P3 P4 P8 P6 P5 P8 P2 P1 0 1 2 3 4 5 8 7 9 13 19

| | process | Walting Time. | Turnaround | time. |
|---|----------------|---------------|------------|--------------|
| | P | 19-7=12 | 19-0=19 | Jana 191 |
| | P ₂ | 12-5=7 | 13 -1 = 12 | |
| | P ₃ | 7-3=4 | 9-2 27 | a d |
| 1 | 30000 | 1-120 | 4-3=1 | 9 |
| 1 | P4 P5 | 3-2=1 | 7-4=3 | The state of |
| 1 | PC | 1-1=0 | 6-5=1 | and t |
| | 16 | 1 - 0 | 0 0 - 1 | |

- 1) A.W.T = 12+7+4+0+1+0
- A.WiT = 4 UDH.
- 2) A.T.A.T = 19+12+7 +1+3+1
 6

A, T'A .T. = 7-16. Unit

Problem -4 110- 91012

| 0 | Date Page | | 0 |
|---|--------------|--------|---|
| 8 | |) 9 1A | 1 |

| Q.4) | Process 1 | Arrival time | Burst time. |
|------|-----------|--------------|-------------|
| | D | 0 | 5 |
| X I | P2 | | 3 |
| | Px | 2 | 109 |
| | P4 | 3 | 2 29 |
| | P5 | 4 3 | 3 89 |

Gantt chart >

| 6 | PI | T | P2 | Px | Pil | P4 | PS | P ₂ | Pi | 1 PS | 10 |
|---|----|---|----|----|-----|----|----|----------------|----|------|----|
| | 0 | 2 | 4 | 5 | 7 | 9 | 11 | 1 | 2 | 13 | 14 |

| | Process | Turnground | chaiting |
|-----|------------|------------|----------|
| | Id | ine in | time. |
| | La Piran + | 13-0 = 13 | 13-5-8 |
| | P2. | 12-1=11 | 11-2=8 |
| | Ps | 5-2=3 | 3-1=2 |
| 1 | P4 | 9-3=6 | 6-2=4 |
| | Ps | 14-4210 | 10-3=7 |
| - 3 | | | |

Daverage Wolfing

time = 8+8+2+4+7

5

A.W.T = 5.8. Unit

A.T.A.T = 8.6 Unit