Tutorial 04

1)b

2)d

3)c

4)a

5)b

6)c

7)b

8)c

9)d

10)b

11)Draw gant chart

| P0 | P1 | P2 | P3 | P4 |

0 8 12 13 14 16

\*)Average Waiting Time:8.8

\*)Average Turnaround Time:11.8

12) To schedule the processes using Round Robin (RR) with a quantum time of 3 units, and calculate the average waiting time, we need to follow these steps:

Execute each process for a time quantum of 3 units until all processes are completed.

Keep track of the waiting time for each process.

Calculate the average waiting time.

Let's schedule the processes using Round Robin with a quantum time of 3 units:

Time Process

0 P0

3 P1

6 P2

9 P3

12 P4

14 P1

17 P2

18 P3

20 P1

21 P2

23 P1

24 P2

26

Now, calculate the waiting time for each process:

Process Arrival Time Execution Time Waiting Time

P0 0 8 0

P1 1 4 2

P2 2 1 6

P3 3 1 8

P4 5 2 9

The average waiting time is calculated as follows:

Average Waiting Time

=

(

0

+

2

+

6

+

8

+

9

)

5

=

25

5

=

5

Average Waiting Time=

5

(0+2+6+8+9)

​

=

5