BRAC University (Department of Computer Science and Engineering) CSE 321 (Operating Systems) for Spring 2025 Semester Quiz 2 (Set A)

Student ID:	
Section:	Full Marks: 20
Name:	Duration: 30 minutes

1. Given the arrival times and burst times for the processes below, draw a gantt chart using multilevel feedback queue scheduling algorithm showing the states of the ready queues of different levels. Then calculate the average waiting time, response time and turnaround time. There are 3 queues with decreasing priority all using round robin scheduling algorithm internally.

Q1 (quantum: 4, priority:0), Q2 (quantum:8, priority: 1), Q3 (quantum:12, priority:2)

7 1 2 3 17 14 14 15 15 17 17 17 17 17 17 17 17 17 17 17 17 17		
Process	Arrival Time	Burst Time
P1	0	12
P2	3	18
P3	7	16
P4	10	20

2. Given the arrival times, burst times and priority values for the processes below. Draw gantt charts and calculate the average waiting time, turnaround time, completion time and response time using the Round - Robin Algorithm.

Time Quantum: 3

Process	Arrival Time	Burst Time
P1	0	8
P2	4	10
P3	14	5
P4	2	7
P5	4	12

BRAC University (Department of Computer Science and Engineering) CSE 321 (Operating Systems) for Spring 2025 Semester Quiz 2 (Set B)

Student ID:	
Section:	Full Marks: 20
Name:	Duration: 30 minutes

1. Given the arrival times and burst times for the processes below, draw a gantt chart using multilevel feedback queue scheduling algorithm showing the states of the ready queues of different levels. Then calculate the average waiting time, response time and turnaround time. There are 3 queues with decreasing priority all using round robin scheduling algorithm internally.

Q1 (quantum: 3, priority:0), Q2 (quantum:7, priority: 1), Q3 (quantum:11, priority:2)

Process	Arrival Time	Burst Time
P1	0	18
P2	2	16
P3	6	20
P4	8	12

10

2. Given the arrival times, burst times and priority values for the processes below. Draw gantt charts and calculate the average waiting time, turnaround time, completion time and response time using the Round - Robin Algorithm.

Time Quantum: 2

Process	Arrival Time	Burst Time
P1	0	9
P2	`12	8
P3	5	7
P4	3	10
P5	7	12