Table 1: Task 1.1

Given Values:

- 1. Hand Simulation until Master Clock MC: 50
- 2. The inter-arrival time of RT messages is constant = 10
- 3. The inter-arrival time of nonRT is constant = 5
- 4. The service time of an RT message is constant = 2
- 5. The service time of a nonRT message is constant = 4

| MC | RTCL | non RTCL | Queue RT | Queue Non RT | SCL | Server status | pre-emptive remaining service time |
|----|------|-------------|-------------|-----------------|-----|------------------|------------------------------------------|
| 0 | 3 | 5 | 0 | 0 | 4 | 2 | |
| 3 | 13 | 5 | 0 | 1 | 5 | 1 | 1 |
| 5 | 13 | 10 | 0 | 2 | 5 | 1 | 1 |
| 5 | 13 | 10 | 0 | 1 | 6 | 2 | |
| 6 | 13 | 10 | 0 | 0 | 10 | 2 | |
| 10 | 13 | 15 | 0 | 1 | 10 | 2 | |
| 10 | 13 | 15 | 0 | 0 | 14 | 2 | |
| 13 | 23 | 15 | 0 | 1 | 15 | 1 | 1 |
| 15 | 23 | 20 | 0 | 2 | 15 | 1 | 1 |
| 15 | 23 | 20 | 0 | 1 | 16 | 2 | |
| 16 | 23 | 20 | 0 | 0 | 20 | 2 | |

| 20 | 23 | 25 | 0 | 1 | 20 | 2 | |
|----|----|----|---|---|----|---|---|
| 20 | 23 | 25 | 0 | 0 | 24 | 2 | |
| 23 | 33 | 25 | 0 | 1 | 25 | 1 | 1 |
| 25 | 33 | 30 | 0 | 2 | 25 | 1 | 1 |
| 25 | 33 | 30 | 0 | 1 | 26 | 2 | |
| 26 | 33 | 30 | 0 | 0 | 30 | 2 | |
| 30 | 33 | 35 | 0 | 1 | 30 | 2 | |
| 30 | 33 | 35 | 0 | 0 | 34 | 2 | |
| 33 | 43 | 35 | 0 | 1 | 35 | 1 | 1 |
| 35 | 43 | 40 | 0 | 2 | 35 | 1 | 1 |
| 35 | 43 | 40 | 0 | 1 | 36 | 2 | |
| 36 | 43 | 40 | 0 | 0 | 40 | 2 | |
| 40 | 43 | 45 | 0 | 1 | 40 | 2 | |
| 40 | 43 | 45 | 0 | 0 | 44 | 2 | |
| 43 | 53 | 45 | 0 | 1 | 45 | 1 | 1 |
| 45 | 53 | 50 | 0 | 2 | 45 | 1 | 1 |
| 45 | 53 | 50 | 0 | 1 | 46 | 2 | |

| 46 | 53 | 50 | 0 | 0 | 50 | 2 | |
|----|----|----|---|---|----|---|--|
| 50 | 53 | 55 | 0 | 1 | 50 | 2 | |
| 50 | 53 | 55 | 0 | 0 | 54 | 2 | |

Task 1.2

- 1. Hand Simulation until Master Clock MC: 20
- 2. The inter-arrival time of RT messages is constant = 5
- 3. The inter-arrival time of nonRT is constant = 10
- 4. The service time of an RT message is constant = 4
- 5. The service time of a nonRT message is constant = 2

| MC | RTCL | nonRTCL | Queu e Rt | Queue NonRT | SCL | Server status(s) | pre-empted remaining service time |
|----|------|---------|--------------|----------------|-----|---------------------|-----------------------------------|
| 0 | 3 | 5 | 0 | 0 | 4 | 2 | |
| 3 | 8 | 5 | 0 | 1 | 7 | 1 | 1 |
| 5 | 8 | 15 | 0 | 2 | 7 | 1 | 1 |
| 7 | 8 | 15 | 0 | 1 | 8 | 2 | |
| 8 | 13 | 15 | 0 | 1 | 12 | 1 | |
| 12 | 13 | 15 | 0 | 0 | 14 | 2 | |
| 13 | 18 | 15 | 0 | 1 | 17 | 1 | 1 |

| 15 | 18 | 25 | 0 | 2 | 17 | 1 | 1 |
|----|----|----|---|---|----|---|---|
| 17 | 18 | 25 | 0 | 1 | 18 | 2 | |
| 18 | 23 | 25 | 0 | 1 | 22 | 1 | |
| 22 | 23 | 25 | 0 | 0 | 24 | 2 | |