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Professor Li

CSCI 114

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4.)

| A1 | | | | | | | | |
|----|------|------|--------|--------------|-----------------|---------------|---|---|
| | A | B | C | D | E | F | G | H |
| 1 | FIFO | Task | Length | Arrival Time | Completion Time | Response Time | | |
| 2 | | | 0 | 85 | 0 | 85 | | |
| 3 | | | 1 | 30 | 10 | 115 | | |
| 4 | | | 2 | 35 | 15 | 150 | | |
| 5 | | | 3 | 20 | 80 | 170 | | |
| 6 | | | 4 | 50 | 85 | 220 | | |
| 7 | | | | | Average | 135 | | |
| 8 | | | | | | 110 | | |
| 9 | RR | Task | Length | Arrival Time | Completion Time | Response Time | | |
| 10 | | | 0 | 85 | 0 | 220 | | |
| 11 | | | 1 | 30 | 10 | 80 | | |
| 12 | | | 2 | 35 | 15 | 125 | | |
| 13 | | | 3 | 20 | 80 | 135 | | |
| 14 | | | 4 | 50 | 85 | 205 | | |
| 15 | | | | | Average | 120 | | |
| 16 | | | | | | 110 | | |
| 17 | SJF | Task | Length | Arrival Time | Completion Time | Response Time | | |
| 18 | | | 0 | 85 | 0 | 85 | | |
| 19 | | | 1 | 30 | 10 | 135 | | |
| 20 | | | 2 | 35 | 15 | 170 | | |
| 21 | | | 3 | 20 | 80 | 105 | | |
| 22 | | | 4 | 50 | 85 | 220 | | |
| 23 | | | | | Average | 135 | | |
| 24 | | | | | | 105 | | |
| 25 | | | | | | | | |
| 26 | | | | | | | | |

8.) Since we know the average response time is equal to the average number of tasks divided by the arrival rate we can plug in the numbers given to us to get $5/1000$ which gives us an average response time of 5 milliseconds per task.

13 c.) In round robin with a 100 ms time slice abc would finish in a time of 50 ms, 66ms, and 74 ms.

