Part 3

(1)

schedule pattern: $(4, 10, 1, 2, 6, 7, 11, 12, 16, 17)$

(2)

frame arrival pattern: $(4, 10, 0, 3, 5, 6, 10, 13, 15, 16)$

(3)

starting times of time slots: $(1, 2, 6, 7, 11, 12, 16, 17 \cdots)$

(4)

| k | $\max_{1 \le j \le n} (S_{j+k} - S_j)$ | = | $\min_{1 \le i \le m} (a_{i+k-1} - a_i)$ | = | (Column3-Column1) |
|---|---|---|---|---|---|
| 1 | $\max_{1 \le j \le n} (S_{j+1} - S_j)$ | 4 | $\min_{1 \le i \le m} (a_i - a_i)$ | 0 | 4 |
| 2 | $\max_{1 \le j \le n} (S_{j+2} - S_j)$ | 5 | $\min_{1 \le i \le m} (a_{i+1} - a_i)$ | 1 | 4 |
| 3 | $\max_{1 \le j \le n} (S_{j+3} - S_j)$ | 9 | $\min_{1 \le i \le m} (a_{i+2} - a_i)$ | 3 | 6 |
| 4 | $\max_{1 \le j \le n} (S_{j+4} - S_j)$ | 10 | $\min_{1 \le i \le m} (a_{i+3} - a_i)$ | 6 | 4 |

(5)

$1 + 6 = 7$

Ans: 7