Assignment 9

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Due on 2019-04-03, 23:59 IST.

1) Which is of the following is not class of production systems based on the arrangement of machines?

- single machine shops
- flow shops
- job shops
- none of the above

No, the answer is incorrect.
Score: 0
Accepted Answers: none of the above

2) What are the general assumptions in sequencing and scheduling?

- a. All jobs are available at the start of the scheduling period.
- b. All machines are available right through the period.
- c. Processing times are known and deterministic.
- d. No job splitting.
- e. A machine processes at most one job at a time.
- f. A job once taken is completed fully before another job is taken up.

No, the answer is incorrect.
Score: 0
Accepted Answers: All of the above

All except (d)
4) Consider a job shop scheduling problem with three jobs and three machines. The routes and processing times (in the usual notation) for the jobs are J1 – M1 (8), M3 (12), M3 (8). J2 – M3 (9), M1 (9), M2 (10), and J3 – M3 (14), M1 (12), M2 (15). Solve the job shop scheduling problem using SPT rule as the dispatching rule and FIFO as tie breaking rule. Find the makespan.

No, the answer is incorrect.
Score: 0
Accepted Answers:
49

5) What is the mean flow time in the above question?

No, the answer is incorrect.
Score: 0
Accepted Answers:
37

6) Consider a job shop scheduling problem with three jobs and three machines. The routes and processing times (in the usual notation) for the jobs are J1 – M1 (8), M3 (12), M3 (8). J2 – M3 (9), M1 (9), M2 (10), and J3 – M3 (14), M1 (12), M2 (15). The due dates are 40, 50 and 45 for the three jobs. Solve the job shop scheduling problem using EDD rule as the dispatching rule and FIFO as tie breaking rule. Find the makespan.

No, the answer is incorrect.
Score: 0
Accepted Answers:
51

7) What is the mean flow time in the above question?
8) What is the makespan in the above question using $1/r_i/L_{\text{max}}$ problem on M2?

   - 41
   - 50
   - 61
   - 30

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: 41 

9) What is the makespan in the above question using $1/r_i/L_{\text{max}}$ problem on M2?


   No, the answer is incorrect.
   Score: 0

10) What is the maximum tardiness in the above question?

   - 4
   - 5
   - 6
   - 7

   No, the answer is incorrect.
   Score: 0
   Accepted Answers: 6