Assignment 3

Due on 2019-09-21, 23:59 BST.

1. Why is concurrent engineering required? (5 points)
   - Increasing global competitive pressure
   - Increasing product variety and technological complexity
   - Need for shorter product life cycle
   - All of the above
   - No, the answer is incorrect.

2. A crew of a certain type of machine was set up to manufacture 100 units. The machine time was 1200 hours and the time per unit was 120 hours. What will be the manufacturing lead time? (5 points)
   - 1000 hours
   - 1920 hours
   - 3600 hours
   - 7200 hours
   - Accepted Answers: 1920
   - Yes, the answer is correct.

3. In case of engine failure, the setup time for machining was 65 min, number of units to be machined are 1200 and time per unit was 12 min. What will be the manufacturing lead time? (5 points)
   - 166 min
   - 1665 min
   - 200 min
   - 250 min
   - No, the answer is incorrect.
   - Accepted Answers: 1665
   - Yes, the answer is correct.

4. In case of an engine after the setup time for machining was 235 min, number of units to be machined are 2000 and time per unit was 1 min. What will be the manufacturing lead time? (5 points)
   - 235 min
   - 2000 min
   - 350 min
   - 3600 min
   - No, the answer is incorrect.
   - Accepted Answers: 235
   - Yes, the answer is correct.

5. The manufacturing lead time for a funnel lattice and engine lattice are 2000 min and 750 min, respectively. What will be the percentage improvement in the manufacturing lead time? (5 points)
   - 6.87
   - 6.14
   - 6.00
   - None of the above
   - Accepted Answers: 6.14
   - Yes, the answer is correct.

6. The goal of concurrent engineering is to (5 points)
   - Increased cost
   - Increased quality
   - Improved delivery performance
   - All of the above
   - No, the answer is incorrect.
   - Accepted Answers: 2
   - Yes, the answer is correct.

7. The unit cost of non-material salvage value and processing are $10; $3, and $7, respectively. The technological coefficients of scrap and input are 0.0 and 1.5, respectively. What will be the unit output cost? (5 points)
   - 0.5
   - 1.5
   - 2.0
   - None of the above
   - No, the answer is incorrect.
   - Accepted Answers: 0.5
   - Yes, the answer is correct.

8. If a company requires 5000 units of turned stunts and the technological coefficient of scrap is 0.7. What will be the number of units scrapped? (5 points)
   - 1000
   - 1400
   - 1500
   - 2000
   - Accepted Answers: 1400
   - Yes, the answer is correct.

9. If a company requires 5000 units of turned stunts and the technological coefficients of scrap and input are 0.0 and 1.5, respectively. What will be the number of two units required? (5 points)
   - 1000
   - 1500
   - 1600
   - 2000
   - Accepted Answers: 2000
   - Yes, the answer is correct.

10. If the cost units for turning a single engine lathe and automatic screw machine are 26 and 37 units, respectively. Which machine will benefit? (5 points)
    - The automatic screw lathe
    - The engine lathe
    - The automatic screw lathe
    - None of the above
    - No, the answer is incorrect.
    - Accepted Answers: The automatic screw lathe
    - Yes, the answer is correct.