Consider the three item disaggregation problem with $D_1 = 200$, $D_2 = 500$, $D_3 = 300$ and $P = 1000$. Assume $I_1 = 150$, $I_2 = 300$ and $I_3 = 50$. Formulate a LP problem to maximize $T$? Assume $t_A$, $t_B$, $t_C$ be the start times of production of items.

Find $r_A$, $r_B$, $r_C$.

1) $r_A =$

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 0.7, 0.8

2) $r_B =$

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 0.55, 0.65

3) $r_C =$

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 0.15, 0.2
4) Choose the order of produce

☐ B - A - C
☐ A - B - C
☐ C - A - B
☐ C - B - A

No, the answer is incorrect.
Score: 0
Accepted Answers:
C - B - A

5) Let T be the cycle time. The objective is to Maximize T. Choose the correct set of constraints

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

6) ___ is the amount of inventory on hand at which an order is placed

☐ Reorder level
☐ Safety Stock
☐ Lead time demand

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

7) ___ is the buffer and is defined as the difference between the reorder level and the lead time demand

☐ Safety stock
☐ Reorder level
☐ Lead time demand

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

8) What is the relationship between service level and safety stock?

☐ As safety stock increases, service level increases
☐ As safety stock decreases, service level increases
☐ As safety stock increases, service level decreases
☐ As safety stock decreases, service level decreases

No, the answer is incorrect.
Score: 0
Accepted Answers:
As safety stock increases, service level increases

9) The following information about LTD is given. The values are 200, 250, 300, 350 with probabilities 0.2, 0.3, 0.3 and 0.2. Take order quantity Q = 1000 and Co = 300. Find the reorder level from the alternatives for which total cost is minimum if Cc = Rs 4/unit/year and Cs = Rs 2.5/unit/year

- ROL = 200
- ROL = 250
- ROL = 300
- ROL = 350

No, the answer is incorrect.
Score: 0
Accepted Answers:
ROL = 350

10) What is the expected lead time demand?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 275

11) The following information about LTD is given. The values are 300, 350, 400, 450 and 500 with probabilities 0.2, 0.25, 0.3, 0.2 and 0.05. What is the expected lead time demand?

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 382.5

Based on data, Answer question 12-15

If demand for 8 months is 1000, 600, 700, 1200, 1000, 1200, 900 and 1000, find the first two lot sizes using Silver-Meal heuristic and Part period balancing? Use C0 = 300 and Cc = 4/unit/year

12) Part period balancing

First Lot Size =

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 1000
Based on data, Answer question 16-18

The demand for 8 months is 1000, 600, 800, 1200, 1000, 1200, 900 and 1000. Find the ordering and inventory costs for 8 months using lot for lot heuristic. Use $C_0 = 300$ and $C_c = 4/\text{unit}/\text{year}$.

16\text{Ordering Cost} =

17\text{Inventory Cost} =

18\text{Total Cost} =
No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Range) 3680,3690