

PGDM & PGDM (IB), 2020-2022
Procurement Management
DM-442/IB-442
Trimester IV, End Term Exam: September 2021

Time: 2 hrs 30 mins.
MM :50

Roll No: _____

Section -A (30 marks)

Instruction: Attempt 3 questions from Section-A and Section-B is compulsory

CILO-1

A1a. Describe the “tragedy of the commons” in the context of supply chain sustainability. What are some “mutually coercive” mechanisms that could be implemented to encourage supply chain sustainability.

(10)

OR

A1b (a). What is selective control in inventory management? Discuss any two methods of selective control. (5)

A1b (b). Consider a quantity discount problem where a shopkeeper has a uniform demand at the rate of 50 items per month. He is getting 5% discount on orders above 200 units and 10% discount on orders of 1000 units or above. Given the unit cost of the base case when no discount was provided on orders less than 200 units as 6.00 Rs. The ordering cost is Rs. 10 and holding cost is 20% of the unit cost. Identify the advantageous option for shopkeeper. (5)

CILO-2

A2a (a). Discuss the significance of Learning Curve. Assume that a company will take 12 direct labor hours to construct the 20th unit and 84 percent learning curve will be experienced. What is the expected average time for the 10th unit? (5)

A2a (b). Discuss some of the fixed, variable and semi variable costs of the procurement process. Suppose you are the procurement manager and your company wish to buy an item that has high fixed cost relative to its unit variable cost. Would you recommend to buy in bulk? Explain. (5)

OR

A2b. What are the basic assumptions of Production Order Quantity model? Derive the formula for it. Also explain the following: All things being equal, the production order quantity will be larger than the economic order quantity. (10)

CILO-3

A3a. Inventory is a necessary evil that organizations need to maintain for various purposes. Comment. (10)

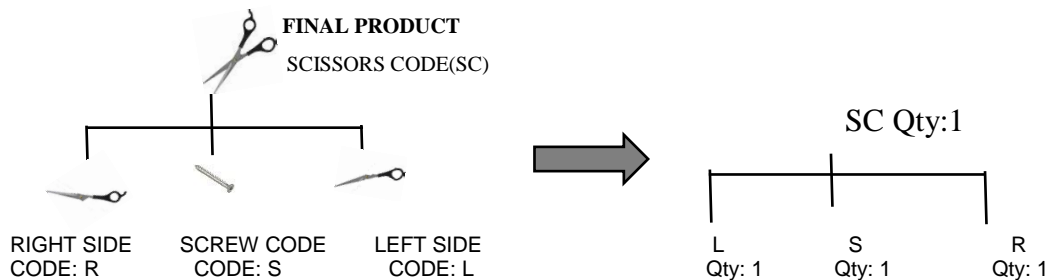
OR

A3b. Discuss the attributes of supplier selection. Generally, all these attributes are not equally important. In this context, discuss the method to obtain the key drivers of supplier selection.

(10)

SECTION B-Case Study

A small-scale industry in Surat, Gujarat, manufactures scissors having the following bill of materials



The master production schedule (MPS) has been estimated or forecasted for scissor. The MPS shows that the small scale unit at Surat has a demand to make 400 scissors during the 3rd week, 600 scissors in the 4th week, 800 in the 6th week, and 300 scissors in the 7th week. The inventory master file indicates that there are 550 scissors in the stock from the first week. Also, there is a management policy of keeping 50 scissors as safety stock in the inventory to handle unexpected demand. We consider that the lead time for the SC is of two weeks. Similarly, the lead time information and safety stock of S, R, and L are given as follows: For R: A=500, LT=1 weeks, SS=0; for L: A=700, LT=2weeks, SS=0; for S: A=300, LT=1 week, SS=125. Answer the following questions:

- 1) What is the basic difference between dependent and independent demand items?
Which items are dependent and which are independent in the given question. (5)
- 2) What is MPS. Discuss the inputs and output reports of the MRP system. (5)
- 3) Create the MRP table for independent and all dependent items. (10)