

JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA
PGDM / PGDM (GEN/ M / SM)
THIRD TRIMESTER (Batch 2017-19)
END TERM EXAMINATIONS, APRIL - 2018

Course Name	Operations Management	Course Code	OP-301
Max. Time	2 Hour	Max. Marks	40 Marks

INSTRUCTIONS: Answer all questions.

Q1. "Snow-Fun Limited" assembles speciality snow scooters used for fun activities in snow ski resorts. They received a confirmed order to make 30 snow scooters for a Himalayan ski resort. The customer agreed for the final price discussion after a trial manufacture of four scooters. In case if the final price is not accepted by the customer, then the remaining order of 26 snow scooters can be cancelled and customer will buy the four snow scooters which were already assembled (during trial assembly) at the actual price quote by "Snow-Fun Limited". During trial assembly, it was observed that the second scooter took 40 hours to assemble while the fourth scooter took 36 hours to assemble. The material cost for each of the scooter is Rs 30,000/- and labour cost is Rs 500/- per hour. Assume that no other cost is involved. The company has a policy of earning 15 % profit on the total cost. Estimate the total cost of this order for "Snow-fun Limited" and the total price of the order to be quoted to the customer? Also estimate the price for each snow scooter if full order is completed? **(7 Marks)**

Q2. "Avon Garments" manufactures different type of ladies apparels. These apparels move through many departments during the manufacturing process. The manufacturing sequence for making apparels along with annual demand is given below. The company is planning to expand and so it has shortlisted following two layouts (The manufacturing departments in each layout are numbered on top corner). Evaluate both the layouts on a "Load-Distance" criteria and suggest the better layout. The dimension of each department is 10 x 20 Meters. **(7 Marks)**

Product	Annual Demand	Product movement through manufacturing departments (Processing Sequence)
Ladies Dress	1200	1-3-2-4-6-5
Party Gown	1750	2-4-3-6-5-1
Casual Wear	2290	1-3-6-4-5
Formal Suit	3100	4-5-3-2-6-1

Layout A

1	3	6
2	5	4

Layout B

2	6	5
3	4	1

Q3. "Exclusive Electronics Limited" assembles FMCG Durable electronic products and requires a large number of components. The annual demand of refrigerator compressors is 60,000. The price of each compressor is Rs 4,000/-. The ordering cost is Rs 3000/- per order and the carrying cost is 1% of the unit price per year. The company works for 300 days per year. Find out Economic Order Quantity, Duration of the Inventory Cycle and Total Annual Cost of inventory. **(7 Marks)**

Q4. Discuss the importance of location decisions in operations management. Explain the factors which affect location decision for a milk processing dairy plant. **(7 Marks)**

Q5. Write short notes on

a) Selective Inventory Control Techniques

b) Kaizen

c) Lean Operations

(4 x3 = 12 Marks)