



CII Institute of Logistics
 PGDSCM & Certificate Programs
 Semester-end Examination – June 2010

DEMAND PLANNING AND FORECASTING

Time: Three Hours

Marks: 100

Part A

Answer all questions

(10 x 1 = 10 Marks)

1. Utility varies form_____
 - a) Person to person
 - b) Place to slope
 - c) Both upward and downward
 - d) None of the above
2. A demand curve has_____
 - a) Downward Slope
 - b) Upward Slope
 - c) Both upward and downward
 - d) None of the above
3. An increase in inputs costs shifts the supply curve to the_____
 - a) Left
 - b) Right
 - c) Straight
 - d) None of the above
4. If size of the industry shrinks the supply curve will shift to the ____
 - a) Left
 - b) Right
 - c) Straight
 - d) None of the above
5. A price floor is a _____ that can be charged for a good.
 - a) Legal minimum
 - b) Legal Maximum
 - c) cost of production
 - d) Marketing cost
6. Price elasticity of supply = _____
 - a) $P/Q \times QP$
 - b) $q/P \times P/Q$
 - c) $q/P \times Q/P$
 - d) $q+p / P+Q$
7. Price elasticity of supply for inelastic goods is _____
 - a) Less than one
 - b) Greater than one
 - c) equal to one
 - d) Zero
8. Forecasting sales on internet is an example for _____
 - a) Qualitative methods none
 - b) Quantitative Method
 - c) Both a & b
 - d) None
9. Asking customer feedback is _____
 - a) Executive opinion
 - b) Sales force composite
 - c) Delphi method
 - d) Consumer market survey

10. The native forecast is a moving average where “M” is equal to _____
- a) One
 - b) Two
 - c) Three
 - d) Four

Part B

Answer all FOUR (15 x 4 =60 Marks)

1. Explain the law of demanding with table and diagram.
2. Explain the different types of elasticity of supply.
3. Explain the features of price elasticity of demand.
4. Explain the need for demand forecasting.
5. Describe the steps of Delphi method.
6. Explain the time series components.

Part C

Answer all questions:

1. An aluminum extrudes forecasted the demand for a shower stall extrusion to be 500 per month each of the three months. The actual demands turned out to be 400, 560 and 700. Calculate his forecast errors:-
 a) MAD b) Bias **(10 Marks)**

2. A paper box company makes carryout pizza boxes. The operations planning department knows that the pizza sales of a major client are a function of the advertising rupees the client spends an account of which they can receive in advance of the expenditure. Operation planning is interested in determining this relationship between the clients’ advertising and sales. The amount of pizza boxes the client will order, in rupee volume. Find out the estimated regression line between future sales and advertising given in the following historical data: **(20 Marks)**

Quarter	Advertising (Rs.100,000)	Sales (Rs. 1,000,000)
1	4	1
2	10	4
3	15	5
4	12	4
5	8	3
6	16	4
7	5	2
8	7	1
9	9	4
10	10	2
