

**MID-WESTERN UNIVERSITY**  
**SCHOOL OF MANAGEMENT (MUSOM)**  
**(An Autonomous Institution)**  
**FINAL EXAMINATION: 2021**  
**MASTER OF BUSINESS ADMINISTRATION (MBA)**  
**SEMESTER –II**

**Subject: Managerial Economics**  
**Full Marks: 100**

**Course Code: MGT 523**  
**Time: 4 Hrs.**

*You are required to answer in your own words as far as applicable. The figures in the margin indicate the full marks.*

**Section – B: Short Answer Questions (6 × 5 = 30 Marks)**

**Answer any five questions:**

1. How does the Managerial economics provide tools to manager for decision making? Discuss. [6]
2. Elaborate the prerequisites of capital budgeting. [6]
3. Why long run average cost curve is L shape in modern theory of cost? Explain. [6]
4. Suppose market demand for MOMO is given by  $Q_d = 300 - 5P$  and market supply for MOMO is given by  $Q_s = 20P - 100$ , where P of the price (per plate). In equilibrium how many MOMO would be sold and at what price? [3+3]
5. You are given the following information:

	% change in price	% change in quantity	elasticity
Demand for Ben & Jerry's Ice Cream	+10%	-12%	P
Demand for beer at San Francisco 49ers football games	-20%	Q	-0.5
Demand for Broadway theater tickets in New York	R	-15%	-1.0
Supply of chickens	+ 10%	S	+ 1.2
Supply of beef cattle	-15%	-10%	T

**Required:**

- a) Find the value of P, Q, R, S and T. [2]
- b) Would you recommend that Ben & Jerry's move forward with a plan to raise price if the company's only goal is to increase revenues? [2]
- c) Would you recommend that beer stands cut price to increase revenues at 49ers football games next year? [2]
6. A shoe manufacturing company located in Birendranagar-7, Surkhet, Karnali Province has the following cost function:  
 $TC = 1000 + 10Q - 0.9Q^2 + 0.04Q^3$ , where Q= number of shoes produced per day.
  - a) Find MC, TVC, AVC functions. [3]
  - b) Also find AC, TC and MC to produce 5 unit of output. [3]
7. You are given the following data of total product at different variable factors:

Units of Variable factors	0	1	2	3	4	5	6	7
Total product	0	10	30	60	80	90	90	80

- a) Calculate marginal product and average product from the above information. [3]
- b) If the Price of the Product is Rs. 60 and wage rate is 600, then find the optimum size of labor in production. [3]

**Section – C: Long Answer Questions (2 × 15 = 30 Marks)**

Answer any two question:

8. Define dead-weight loss. Why government intervention (price ceiling, price floor, tax) in the market create inefficiency in market (Both demand and supply side)? explain with the concept of dead-weight loss. [3+4+4+4]
9. What is substitution effect? How we decompose price effect into income effect and substitution effect of Inferior goods by Hicksian and Slutsky approach? Explain with graph. [3+6+6]
10. Assume that there is cartel in the transportation industry. The market demand of the industry is  $P = 200 - 0.5Q$  where  $Q = Q_1 + Q_2$   
And the two collusion firms have cost given by  $C_1 = 10Q_1$  and  $Q_2 = 0.5Q_2$ 
  - a) How would the central agency allocate the outputs to the two firms so as to maximize the joint profits? [10]
  - b) What would the profit of the respective firms? [5]

**Section – D: Case Study (20 Marks)**

11. Read the following case carefully and answer the questions:

In some industries, securing the adoption of an industry standard that is favorable to one's own product is an enormous advantage. It can involve marketing efforts that grow more productive the larger the product's market share. Microsoft's Windows is an excellent example. The more customers adopt Windows, the more applications are introduced by independent software developers, and the more applications that are introduced the greater the chance for further adoptions. With other products the market can quickly exhibit diminishing returns to promotional expenditure, as it becomes saturated. However, with the adoption of new industry standards, or a new technology, increasing returns can persist. Microsoft is therefore willing to spend huge amounts on promotion and marketing to gain this advantage and dominate the industry. Many would claim that this is a restrictive practice, and that this has justified the recent anti-trust suit against the company. but at this point there is another side to the situation regarding returns that should be considered.

Microsoft introduced Office 2000, a program that includes Word, Excel, PowerPoint and Access, to general retail customers in December 1999. It represented a considerable advance over the previous package, Office 97, by allowing much more interaction with the Internet. It also allows easier collaborative work for firms using an intranet. Thus many larger firms have been willing to buy upgrades and pay the price of around \$230.

However, there is limited scope for users to take advantage of these improvements. Office 97 was already so full of features that most customers could not begin to exhaust its possibilities. It has been estimated that with Word 97 even adventurous users were unlikely to use more than a quarter of all its capabilities. In this respect Microsoft is a victim of the law of diminishing returns. Smaller businesses and home users may not be too impressed with the further capabilities of Office 2000. Given the enormous costs of developing upgrades to the package, the question is where does Microsoft go from here. It is speculated that the next version, Office 2003, may incorporate a speech-recognition program, making keyboard and mouse redundant. At the moment such programs require a considerable investment in time and effort from the user to train the computer to interpret their commands accurately, as well as the considerable investment by the software producer in developing the package.

**Questions:**

- a) Is it possible for a firm to experience both increasing and diminishing returns at the same time?
- b) What other firms, in other industries, might be in similar situations to Microsoft, and in what respects?
- c) What is the nature of the fixed factor that is causing the law of diminishing returns in Microsoft's case?
- d) Are there any ways in which Microsoft can reduce the undesirable effects of the law of diminishing returns?