



Subject: Business
Economics

Chapter:

Category: Assignment 1 –
Questions

1. Describe using examples the impact of government intervention in the market by imposing price ceilings and price floors.

2. A. Calculate the price elasticity of supply when the price of a product increases from £5 to £8 and the quantity supplied increases from 200 units to 400 units.

B. Describe three factors that would alter the elasticity of supply in an industry.

3. Draw a diagram for each of (i) to (iv), to illustrate the impact of the change on the quantity of a Good X demanded and supplied. Good X is a normal good. Each change should be considered in isolation.
 - i. a fall in the price of a complementary good
 - ii. a government tax on the production of Good X
 - iii. a fall in consumers' incomes
 - iv. a rise in labour productivity in the industry that produces Good X

You should label the demand curve as D1, the supply curve as S1 and price and quantity as P1 and Q1 respectively, when illustrating the position before the introduction of the change. You should label any new supply and demand curves as S2 and D2 respectively and the new price and quantity as P2 and Q2.

4.

The table below shows two points on the demand curve for Good X.

	Point 1	Point 2
Quantity demanded of Good X	250	300
Price of Good X	50	45

- (i) Calculate the own price elasticity of demand to two decimal places using the average formula.

The table below shows two points on the supply curve for Good X.

	Point 3	Point 4
Quantity supplied of Good X	100	110
Price of Good X	60	65

(ii) Calculate the own price elasticity of supply to two decimal places using the average formula.

The table below shows how demand for Good X changes in response to a rise in consumer's income.

	Point 5	Point 6
Quantity demanded of Good X	250	280
Consumer's income	50	70

(iii) (a) Calculate the income elasticity of demand to two decimal places using the average formula.

(b) State if the good is a normal or inferior good.

The table below shows how demand for Good X changes in response to a change in the price of Good Y.

	Point 7	Point 8
Quantity demanded of Good X	250	220
Price of Good Y	60	65

(iv) (a) Calculate the cross price elasticity of demand for Good X with respect to the price of Good Y to two decimal places using the average formula

(b) State if Good X and Good Y are substitutes or complements.

5.

- i. State the factors of production that exist within an economy.
- ii. Describe how scarcity arises in the context of these factors.

- 6.
- Describe the difference between uncertainty and risk.
 - Describe, with the use of an example, how firms might seek to reduce uncertainty.

7. You are given the following data for Good X:

<i>Price of Good X (\$)</i>	<i>Demand for Good X</i>
18	1
16	2
14	3
12	4
10	5
8	6
6	7

- Calculate the point price elasticity of demand at the price of \$16.
 - State the price range over which the price elasticity of demand is equal to or less than one (in absolute value).
 - Calculate the arc price elasticity of demand for a price rise from \$8 to \$12.
- A 4% price rise for Good Y leads to a fall in demand for Good X of 2%.
- State whether Good X and Good Y are complementary or substitute goods.
 - Calculate the cross elasticity of demand for Good X with respect to Good Y.

- 8.
- What is the law of diminishing marginal return?
 - What are diseconomies of scale?
 - How are the above two different?

9. i) List the main assumptions under perfect competition?
 ii) Illustrate and discuss the short-term supply curve of a perfectly competitive firm using labelled diagram.
10. i) Is Indian domestic aviation industry an example of Oligopoly? Discuss.
 ii) Describe "dominant firm price leadership" with a help of graph.
11. You are the manager of a monopoly, and your demand and cost functions are given by $P = 200 - 2Q$ and $C(Q) = 2000 + 3Q^2$ respectively
- [i] What price–quantity combination maximizes your firm's profits?
 - [ii] Calculate the maximum profits
 - [iii] Is demand elastic, inelastic, or unit elastic at the profit-maximizing price–quantity combination?
 - [iv] What price–quantity combination maximizes revenue?
 - [v] Calculate the maximum revenues.
 - [vi] Is demand elastic, inelastic, or unit elastic at the revenue-maximizing price–quantity combination?
12. Explain, with the aid of a diagram, how a price-leading oligopoly firm that seeks a constant market share will set its price assuming it faces a linear market demand curve.

Label your diagram as follows:

D – the market demand curve

AR – the average revenue of the leader firm

MR – the marginal revenue of the leader firm

MC – the marginal cost of the leader firm.

Label the price set by the leader firm PL, the output of the leader firm QL and the total market demand QD.

Identify the amount produced by the follower firms.

13. Draw a diagram for each of (i) and (ii) illustrating the profit maximising price and output of a firm operating under conditions of monopolistic competition to show the firm making:

- i. excess profits, clearly indicating the total excess profits.
- ii. a loss, clearly indicating the total loss.

You should label the curves on each diagram as: MR for Marginal Revenue, AR for Average Revenue, MC for Marginal Cost, AC for Average Cost. Price and Quantity should be labelled P1 and Q1 respectively and the average cost per unit as C1.

- iii. Explain whether the firm under monopolistic competition will make excess profits in the long run.

14.

- i. Explain what is meant by a fixed cost and a variable cost giving, for each, an example for a cafe.
- ii. Draw a fully labelled diagram to show the average fixed, average variable and average total cost curves for the cafe. Ensure you also include the marginal cost curve.
- iii.
 - (a) Explain how a cafe may experience diminishing marginal returns.
 - (b) Show on the diagram from part (ii) the point at which the cafe begins to experience diminishing marginal returns, using the letter A.

15.

- i. Define price discrimination.
- ii. Explain why price discrimination can be more effectively used in the medical treatment (service) market in comparison to the pharmaceutical (goods) market.

16.

- i. Describe how each firm in the Cournot model of oligopoly arrives at its demand curve.
- ii. Describe with the aid of a diagram how Firm A, in the Cournot model, will decide on its profit maximising price and output if Firm B decides to produce an output level of Q_B . In your diagram include the market demand curve (DM), the demand curve facing Firm A (DA), the marginal revenue of Firm A (MRA) and the marginal cost of Firm A (MCA).

17.

- i. Describe a collusive oligopoly.
- ii. Two airlines are considering working together. Discuss THREE factors which would create a more favourable environment for a successful collusion.

18.

The table below shows the annual profits for Company A and Company B which produce Good X. The profits vary according to whether each charges £15 or £10.

		<i>B's price</i>	
		£15	£10
<i>A's price</i>	£15	£12 million each	£6 million for Company A £18 million for Company B
	£10	£18 million for Company A £6 million for Company B	£8 million each

- (i) State the price Company A should charge if it were to renege on an agreement previously reached with Company B to maximise their joint profits. [1]
- (ii) State the price Company A should charge if it makes its pricing decision completely independently of Company B. [1]
- (iii) Explain why this situation is known as a *dominant strategy game*. [2]
- (iv) State the Nash equilibrium in terms of the price and profits of both firms, if the game is played only once. [1]

19.

Consider the following Companies A to E where each is an individual firm operating under a specific market structure.

<i>Company</i>	<i>Marginal cost</i>	<i>Average cost</i>	<i>Average revenue</i>	<i>Marginal revenue</i>
A	10	10	10	10
B	12	9	12	12
C	15	18	20	15
D	9	14	20	14
E	25	20	20	10

- (i) State which company has a short run equilibrium output that may be that of a profit maximising monopolist. [1]
- (ii) Give ALL the companies that are making excess profits. [1]
- (iii) Give ALL the companies that could expand their output and increase their profits. [2]
- (iv) Give ALL the companies that could be operating in a perfectly competitive environment. [1]

[Total 5]

20.

- i. Discuss methods by which a supermarket chain can differentiate its product offerings from those of its competitors.
- ii. Assess the factors which have increased the sale of supermarkets' own brands in the past decade.
- iii. Analyse, with reference to appropriate diagrams, the short-run and the long-run effects of advertising on a supermarket's sales and profitability.



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ASSIGNMENT QUESTIONS