

**Subject:** Business Economics - Micro

**Chapter:** 

Category: Assignment 2 – Questions

1.

- i. Describe the characteristics of an oligopolistic market structure.
- ii. Explain four characteristics of an oligopolistic market structure that differ from the characteristics of a monopoly market structure.
- 2. Consider the following Companies A to E where each is an individual firm operating under a specific market structure.

Company	Marginal	Average	Average	Marginal
Company	cost	cost	revenue	revenue
A	10	10	10	10
В	12	9	12	12
С	15	18	20	15
D	9	14	20	14
Е	25	20	20	10

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

3.

- 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.
- 4. Explain why perfect competition and economies of scale are incompatible in practice.

5.

i. Explain why a rational consumer may choose to hire a private taxi rather than travel by bus, given that hiring a private taxi is likely to cost more than taking a bus.

ii. Draw a marginal utility curve and show the total utility, consumer surplus and total expenditure derived from travelling by private taxi.

6.

- 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.

7.

- i. Describe the law of diminishing returns.
- ii. Describe with the aid of a diagram the implications of the law of diminishing returns for the marginal physical product and average physical product curves.
- iii. Explain the relevance of the law of diminishing returns to the shape of the short run marginal and average cost curves.

8.

- 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 QB. 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).
- 9. Describe with the aid of a diagram (or diagrams) why a firm operating in a monopolistic competition environment will make only normal profits in the long run, even though it is making excess profits in the short run.

10.

i. Explain the difference between the law of diminishing returns and the law of diminishing marginal utility.

- ii. Draw a marginal product curve for Good X that you would expect from the laws of diminishing returns (assume initially there is some increasing returns). Clearly indicate on the curve a region of negative marginal product and label your axes carefully.
- iii. Draw a marginal utility curve for Good X that you would expect from the law of diminishing marginal utility. Indicate on the curve a region of negative marginal utility and label your axes carefully.
- 11. Describe how diminishing marginal returns may arise within a restaurant.

12.

- 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.
- 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. 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.

15. 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.

16. Company ABC faces a downward- sloping (straight-line) demand curve as shownin the table below. Its fixed costs of production are zero and the marginal costs of production are £5 per unit produced.

	Price per unit (£)	Quantity Demanded (units)	Total Profit (£)	Marginal Revenue (£)
P.	1.7	(unus)	(L)	(2)
	20	0	-	•
	18	1		
	16	2		
	14	3		
	12	4		
	10	5		
	8	6		
	6	7		



- i. Prepare a table showing the total profit and marginal revenue at each price level
- ii. Calculate the price elasticity of demand using the average formula when the price falls from £10 to £8
- iii. State over what price range the absolute value of price elasticity of demand is equal to, or greater than 1.
- 17. 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

		B's price		
		£15	£10	
	£15	£12 million each	£6 million for Company A	
s,			£18 million for Company B	
A T	£10	£18 million for Company A	£8 million each	
		£6 million for Company B		

- 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.
- ii. State the price Company A should charge if it makes its pricing decision completely independently of Company B
- iii. Explain why this situation is known as dominant strategy game
- iv. State the Nash equilibrium in terms of the price and profits of both firms, if the game is played only once.
- 18. Describe in words the differences between a market structure characterised by monopolistic competition and one characterised by monopoly. In your answer refer to both the short and the long run. (No diagrams are required in your answer.)

& QUANTITATIVE STUDIES