



UNIVERSITI KUALA LUMPUR BUSINESS SCHOOL

FINAL EXAMINATION MARCH 2026 SEMESTER

COURSE CODE	: EGB10903
COURSE NAME	: PRINCIPLES OF MICROECONOMICS
PROGRAMME NAME	: BACHELOR OF SCIENCE (HONOURS) IN ANALYTICAL ECONOMICS
DATE	: 20 JUNE 2026
TIME	: 2.00PM – 5.00PM
DURATION	: 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please **CAREFULLY** read the instructions given on this question paper.
 2. This question paper has information printed on both sides of the paper.
 3. This examination comprises of only **ONE (1)** section.
 4. You are required to answer only **FOUR (4)** questions
 5. Please write your answer in the answer booklet provided.
 6. All questions must be answered in **English** (any other language is not allowed).
 7. This question paper must not be removed from the examination hall.
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THERE ARE SIX (6) PAGES OF QUESTIONS, INCLUDING THIS PAGE.

SECTION A (Total: 100 marks)

INSTRUCTION: Answer only **FOUR (4)** questions. As each question brings in 25 marks, the maximum mark for this examination is 100.

Question 1

- (a) Analyse the effects of entry of the new firms in the long run towards the profitability under the perfect competition theory. You are required to provide relevant diagram(s) to support your answer.

(12 marks)

- (b) Although the profit-maximising rule for monopoly follows the one under every structure of markets, its mechanism however, is different. Examine the properties of monopoly that differentiate it from the other form of market structures. You are required to provide relevant diagram(s) to support your answer.

(13 marks)

Question 2

- (a) Examine the differences between goods that are **complementary** and goods that are **substitutable**. (*Hint: You are to include the algebraic proof of elasticity test on these goods*).

(7 marks)

- (b) Assess the profit-maximising rule for a market that comprises **ONLY** two firms that do not collude. You are required to illustrate appropriate diagram(s) to assist your answer for this question.

(8 marks)

- (c) Consider a firm with the cost function of $C(q) = 2q^2 + 3q + 5$ (in '000 units). The firm belongs in the competitive market, and it takes the market price of RM10 for a unit of a good.

- (i) Express the following cost types:

(1) marginal cost (MC) (1 mark)

(2) average total cost (ATC) (0.5 mark)

(3) average fixed cost (AFC) (0.5 mark)

(4) average variable cost (AVC) (0.5 mark)

- (ii) Determine the profit-maximising output level for the firm (in '000 units).

(1.5 marks)

- (iii) Based on your answer in (c)(ii), calculate the economic profit (if any) for the firm.

(1.5 marks)

- (iv) Based on your answer in (c)(i), (c)(ii), and (c)(iii), illustrate a diagram that can depict the revenue-cost structure of the firm. You **MUST** label the diagram correctly.

(3 marks)

- (v) Suppose that the price of the good falls to RM7 per unit. Determine whether the firm should continue operating or shut it down?

(1.5 marks)

Question 3

- (a) Refer the following phrase:

'The elasticity of market supply is influenced by the role of time'

- (i) How does the supply elasticity differ from the demand elasticity? Explain your answer.

(5 marks)

- (ii) Based on the phrase above, analyse on how time affects the elasticity of a particular market supply curve by including relevant diagram(s) to support your answer. (*Tip: You are encouraged to include a demand curve to serve as a reference point of an equilibrium*).

(9 marks)

- (b) A market demand function is given as $Q = 400 - 5P$ and the market consists of only one firm. The firm's total cost function is $C(Q) = 0.125Q^2 + 15Q + 30$ (in '000 units).

- (i) Determine the firm's total revenue (TR) function.

(1.5 marks)

- (ii) Determine the profit-maximising level of output for the firm.

(2 marks)

- (iii) Calculate the profit for the firm.

(1.5 marks)

- (iv) Based on your answers in (a), (b), and (c), illustrate a diagram that depicts the market structure of the firm. Analyse the illustration.

(3 marks)

- (v) Based on the illustration you have provided in (b)(iv), calculate the loss of efficiency. Briefly explain what kind of efficiency is lost in this market structure.

(3 marks)

Question 4

Suppose that the function of a market demand is $Q = 60 - 4P$ and the corresponding market supply is $P = 0.25Q + 5$. Assume that the market runs in a purely competitive setting.

- (a) Determine the market clearing price (in \$) and quantity.
(1.75 marks)
- (b) Determine the total surplus (in \$) from this market.
(3 marks)
- (c) Suppose that the government imposes a \$4 tax for each of unit of output produced by the firms in this market.
- (i) Calculate the new equilibrium price (in \$) and quantity.
(2.5 marks)
- (ii) Based on your answer in (a), (b), and (c)(i), illustrate appropriately the equilibria of this market. Label the diagram appropriately.
(4 marks)
- (iii) How much does the government receive (in \$) from the imposition of this tax?
(1.5 marks)
- (iii) Determine whether the market gains or losses in terms of efficiency (in \$) from the imposition of this tax. Shade the area in the diagram you have illustrated in (c)(ii).
(1.5 marks)
- (d) Based on all your answers in (c), analyse the most affected side of this market from this tax policy.
(5 marks)
- (e) Does the new equilibrium from your answer in (c)(i) achieve both productive efficiency (PE) and allocative efficiency (AE)? Examine your answer concisely.
(5.75 marks)

Question 5

- (a) The following table shows the coordinates of two points for the demand and supply curves in a particular market:

Point	Demand	Supply
(I)	(10,30)	(20,24)
(II)	(6,42)	(30,26)

- (i) Derive the demand and supply functions using the coordinating points given.
(3 marks)
- (ii) Test the elasticity of the demand and supply curves from the coordinating points given using the midpoint formula and write your answer in three decimal points. Analyse the elasticity attributes of your answer.
(3 marks)
- (iii) Suppose that the government is trying to boost the consumption of the goods sold in this market by providing a subsidy that amounts to \$10 per unit. Calculate the cost to the government in providing the subsidy. An illustration of this market is required to assist you for this question.
(8 marks)
- (b) Show the derivation of an individual demand curve using the utility-maximising approach, i.e., $\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$. (Hint: Begin your answer by examining the property of MU_x and MU_y).
(11 marks)

END OF EXAMINATION PAPER