

# UNIVERSITI KUALA LUMPUR BUSINESS SCHOOL

# FINAL EXAMINATION MARCH 2025 SEMESTER

COURSE CODE

: EEB20703

**COURSE NAME** 

: MANAGERIAL ECONOMICS

PROGRAMME NAME

: BACHELOR OF BUSINESS ADMINISTRATION (HONS)

INTERNATIONAL BUSINESS

**DATE** 

: 2 JULY 2025

TIME

: 9.00 AM - 12.00 PM

**DURATION** 

: 3 HOURS

## INSTRUCTIONS TO CANDIDATES

- 1. Please CAREFULLY read the instructions given in the question paper.
- 2. This question paper has information printed on both sides of the paper.
- 3. This question paper consists of TWO (2) Sections; Section A and Section B.
- 4. Answer ALL questions in Section A and Section B.
- 5. Please use the objective answer sheets for Section A and answer booklet for Section B.
- 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.
- 8. Only non-programmable calculators are allowed.

THERE ARE FIFTEEN (15) PAGES OF QUESTIONS, INCLUDING THIS PAGE.

SECTION A (Total: 30 marks)

**INSTRUCTION:** Answer ALL questions.

Please use the objective answer sheet provided.

1.	The primary cause	of the princip	al-agent probler	n is
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- A. perfect information between both parties
- B. both parties have equal bargaining power
- C. excessive competition in the market for labour
- D. asymmetric information between the principal and agent
- 2. What is the implication of a firm earning zero economic profit?
  - A. The firm's accounting profit is zero or negative.
  - B. The firm is incurring losses and should shut down.
  - C. The firm is earning more than a normal return on its capital:
  - D. The firm is covering all its costs, including opportunity costs.
- Economic profit is the difference between \_\_\_\_\_\_
  - A. accounting profit and explicit costs
  - B. total revenue and the implicit costs of using owner-supplied resources
  - C. total revenue and the opportunity cost of all of the resources used in production
  - D. accounting profit and the opportunity cost of the market-supplied resources used by the firm
- 4. A firm is expected to earn economic profits of \$150,000 in the first year, \$130,000 in the second year, and \$110,000 in the third year. After the end of the third year, the firm will cease operation. If the firm can be sold today at the price of \$345,789.00, what is the present value of the firm?
  - A. \$49,478.00
  - B. \$345,789.00
  - C. \$360,000.00
  - D. \$390,000.00

- 5. When a decision maker decides to choose an activity where marginal benefit at that activity level equals to the marginal cost, then \_\_\_\_\_\_.
  - A. this level minimises net benefits
  - B. this level maximizes net benefits
  - C. if the activity is increased by one unit, net benefits will increase
  - D. if the activity is decreased by one unit, net benefits will decrease
- 6. Activity A has the following marginal benefits and marginal cost functions:

$$MB = 200 - 5A$$

$$MC = 40 + 3A$$

The optimal level of A\* is \_\_\_\_\_

A. 40

C. 20

B. 30

- D. 10
- 7. Referring to figure 1, what does the R-Square value imply?

Figure 1. A computer printout

DEPENDENT VA	RIABLE: Y	R-SQUARE	F-RATIO	P-VALUE ON F
OBSERVA	TIONS: 12	0.7542	13.80	0.0018
	PARAMETE	R STANDAR		
VARIABLE	ESTIMATE	ERROR	T-RATIO	P-VALUE
INTERCEPT	140.08	16.80	8.34	0.0001
X	-19.51	4.05	-4.82	0.0010
Z	1.01	0.20	5.05	0.0006

- A. The model is significant with a p-value of 0.0018.
- B. 75% of the independent variables are significant.
- C. The model has a 75% chance of making correct predictions.
- D. 75% of the variation in the dependent variable is explained by the model.

8. A multiple regression output is given as

Sales = 120 + 15Advertising - 8Price, where

Sales: monthly sales (in RM thousands)

Advertising: advertising spending (in RM thousands)

Price: price (in RM)

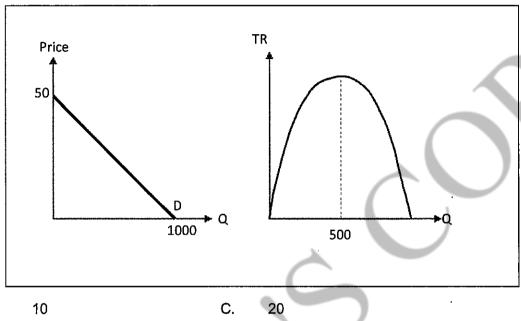
#### Choose the CORRECT statement.

- A. The coefficient of price indicates a positive relationship between sales and price.
- B. A RM1 increase in price is associated with an RM8,000 decrease in sales.
- C. An increase in advertising spending is expected to reduce sales by RM15,000.
- D. The intercept means that when advertising and price are zero, sales will be RM8,000.
- 9. A product that has many close substitutes is likely to exhibit:
  - A. inelastic income elasticity of demand.
  - B. a low cross price elasticity with related goods.
  - C. a weak response in quantity demanded to a price change.
  - D. a highly responsive quantity demanded when its price changes.
- 10. Income elasticity of demand measures
  - A. the responsiveness of quantity demanded to change in income, holding other factors constant
  - B. the responsiveness of quantity supplied when income changes, assuming price remains constant
  - C. how much income will change when the price of a product changes, ceteris paribus.
  - whether income is influenced by consumer preferences for normal or inferior goods

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11. Figure 2 shows a linear demand curve and the associated total revenue curve. The price at which total revenue is maximised is

Figure 2. Demand curve and the associated total revenue curve



- A.
- В. 15

- D. 25
- 12. A local dental clinic introduces a promotion where patients who book appointment online are charged RM60 for teeth cleaning instead of the usual RM100. After launching this promotion, the clinic reports an increase in both the number of bookings and total revenue from teeth cleaning services. Which of the following is most likely TRUE?
  - The demand for teeth cleaning is price elastic. A.
  - B. The demand for teeth cleaning is price inelastic.
  - C. The demand for online booking is price inelastic.
  - D. There is no relationship between elasticity and total revenue in this case.
- Consider two products A and B which are related. When price of good A increases from \$12 to \$14, quantity demanded of good B increases from 750 to 800. The cross price elasticity is \_\_
  - 0.42 A.

C. -2.0

B. 0.20 D. 15.38

- 14. A production function measures the relation between \_\_\_\_\_
  - A. input prices and output prices
  - B. the quantity of inputs and input prices
  - C. input prices and the quantity of output
  - D. the quantity of inputs and the quantity of output

Refer to table 1 and answer question 15 and 16.

Table 1. Total output from various combinations of labour and capital

	Units of Capital			
	1	2	3	
1	80	100	120	
2	180	220	260	
3	270	330	390	
4	340	420	500	
5	390	490	590	
6	410	530	650	
	2 3 4 5	1 80 2 180 3 270 4 340 5 390	1 2   1 80 100   2 180 220   3 270 330   4 340 420   5 390 490	

15.	If labour is fixed a	at 3 units, how much	does the se	econd unit of	capital add to total
	output?				

A. 490

C. 60

B. 390

D. 100

16. If capital is fixed at three units, what is the marginal product of the fourth unit of labour?

A. 60

C. 90

B. 80

D. 110

17. A firm produces 4,000 units of output using 500 workers. Marginal cost is \$10, the wage rate is \$160, and total fixed cost is \$100,000. When output is 4,000 units

A. average variable cost is decreasing

B. average variable cost is increasing

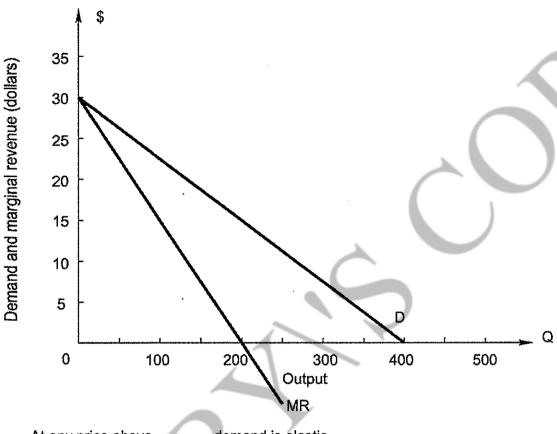
C. average total cost is increasing.

D. average total cost is constant.

18.	The m	arginal rate of technical substitution is
	A.	the slope of the isocost curve
	В	the slope where two isoquants cross each other
	C.	the rate at which the firm can substitute labor for capital while holding output
		constant
	D.	the rate at which the firm can substitute labor for capital while holding total
		cost constant
19.	Which	of the following is <b>NOT</b> a characteristic of long-run equilibrium for a perfectly
	compe	etitive firm?
	A.	Economic profit is zero.
	В.	Price is equal to long-run marginal cost.
	C.	Price is greater than long-run average cost.
	D.	The firm produces the output level at which long-run average cost is at its
		minimum.
20.	For a	price-taking firm, marginal revenue
	A.	is perfectly inelastic
	B.	decreases as the firm produces more output
	C.	is equal to market price at any level of output
	Ð. `	is the addition to total revenue from using one more unit of input
21.	Which	of the following is a characteristic of a monopoly market?
	A.	Entry into the market is easy.
	B.	The firm decides the market price.
	C.	The firm always make economic profit.
	D.	One firm is the only buyer of all the resources in the market.
	•	
22.	To ma	ximize profit, a firm with market power will employ an input up to the point
X	where	the
	Α.	marginal product of the input is at its maximum
	В.	input's contribution to total output is equal to its purchase price
) '	C.	total cost of the input equals the total revenue generated by its use
	D.	marginal revenue product of the input equals the marginal cost of hiring the
		input

23. Refer to figure 3, which shows demand and marginal revenue for a monopoly.

Figure 3: Demand and marginal revenue for a monopoly



At any price above \_\_\_\_\_, demand is elastic.

A. \$5

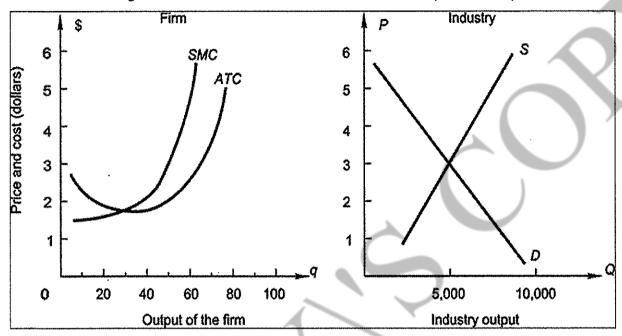
C. \$15

B. \$10

D. \$20

24. Referring to figure 4, the graph on the left shows the short run cost curves for a firm in a perfectly competitive market, and the graph on the right shows the current market conditions in this industry. What is the maximum amount of profit the firm can earn?

Figure 4. Short run cost of a firm in the market of perfect competition



- A. \$45
- B. \$50

- C. \$100
- D. \$150

25. The market demand for a monopoly firm is estimated to be:

$$Q_d = 100,000 - 500P + 2M + 5000P_R$$

where  $Q_d$  is quantity demanded, P is price, M is income, and  $P_R$  is the price of a related good. The manager has forecasted the values of M and  $P_R$  will be \$50,000 and \$20, respectively, in 2025. For 2025, the forecasted demand function is

A. 
$$Q_d = 300,000 - 500P$$

B. 
$$Q_d = 100,000 - 100P$$

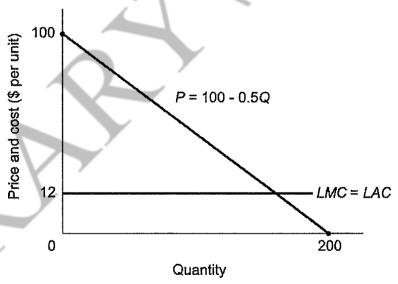
C. 
$$Q_d = 600,000 - 100P$$

D. 
$$Q_d = 200,000 - 500P$$

26. When firms in an oligopoly market make decisions while anticipating and responding to the potential actions of their competitors, this is known as

- A. game theory
- B. independence
- C. strategic behavior
- D. cooperative behavior
- 27. A firm may deliberately set a price below the level that maximizes short-run profit in order to
  - A. avoid government regulation
  - B. signal low production costs to consumers
  - C. create a perception of high market efficiency
  - D. deter potential competitors from entering the market
- 28. A firm faces the demand curve for its product, P = 100 0.5Q, as shown in figure 5 below. It produces under conditions of constant costs in the long run, and LMC = LAC = \$12 per unit.

Figure 5. Constant costs



If the firm can practice first degree price discrimination, how much is the total revenue?

A. \$1872

C. \$7744

B. \$1936

D. \$9856

29. A firm produces two goods (X and Y) that are related in consumption. The demand function for X is:

$$Q_d = 120 - 4P_X - 10P_Y$$

Which of the following pairs of goods might the firm be producing?

- A. Cola and caffeine-free coke
- B. Newspapers and tennis balls
- C. Electric car and charging station
- D. Bran cereal and sugar-frosted corn flakes
- 30. RapidKL offers a discount on train rides to senior citizens. This suggests that the absolute value of elasticity of demand for senior citizens is
  - A. less than one
  - B. greater than zero
  - C. less than the elasticity of demand for other customers
  - D. greater than the elasticity of demand for other customers

**[THIS SECTION IS INTENTIONALLY LEFT BLANK]** 

**SECTION B (Total: 70 marks)** 

INSTRUCTION: Answer all questions.

Please use the answer booklet provided.

### Question 1 (10 marks)

- You are hiring a part-time promoter to your dried otak-otak chips at a weekend booth. Based on trial performances, you estimate the following daily output and wages demanded.
  - Ah Chong can sell 800 units and asked for RM400/day
  - Beila can sell 700 units and asked for RM280/day
  - Carlos can sell 600 units and asked for RM200/day

Explain how you decide who to hire.

(6 marks)

(b) A contact lenses manufacturer knows that if they conduct inspection before sending out the lenses, the returned lenses which are flawed (F) will be lower. The manufacturer estimated the regression for returned lenses as below:

F = a + bH, where H is the number of hours inspecting the newly manufactured lenses, F is the number of flawed lenses.

The regression output is given in figure 6 as below:

Figure 6. Computer printout

Dependent variable	F	R-square	F-ratio	p-value of F
Observation	22	0.4527	16.54	0.001
Variable	Parameter estimate	Standard Error	t-ratio	p-value
Intercept	90.0	28.13	3.20	0.004
Н	-0.80	0.32	-2.50	0.021

Write the regression equation based on the computer printout. What is the expected number of lenses returned if only 10 hour of inspection is done on the newly manufactured lenses?

(4 marks)

### Question 2 (15 marks)

Table 2 shows the demand schedule for an exhibition hall. As the manager, you are tasked to maximise the total revenue.

Table 2. Demand schedule for an exhibition hall

Price	Quantity demanded
(RM per admission)	(thousands of visits per week)
10	120
8	240
6	350
4	500
2	600

- (a) Using the midpoint approach, compute the price elasticity of demand for the following price ranges. Clearly show the formula and working.
  - i. Between RM 4.00 and RM 6.00
  - ii. Between RM 8.00 and RM 10.00

(7 marks)

(b) Being a manager, when you realised the ticket price is currently within the elastic price range, would you increase your ticket price to increase the total revenue? State your decision clearly based on the relationship between price elasticity of demand and total revenue with respect to changes in price.

(8 marks)

### Question 3 (15 marks)

(a) Explain the difference between 'short run' and 'long run' in production.

(4 marks)

(b) A factory currently has two machines. Due to financial constraints, they are not able to install more machine however, they are able to hire more workers. Refer to table 3 and calculate the average product and marginal product for L = 3 and L = 6. Show the formula and the steps of calculation. Write the answers to m, n, p and q.

Table 3. Change in total product and change in number of workers using two machines for production.

Number of workers	Total product (Q)	Average product	Marginal product
(L)			)
0	0	- ,	-/
1	52	52	52
2	112	56	60
3	170	m	n
4	220	55	50
5	230	51.6	38
6	220	р	q

(8 marks)

(c) There are two possibilities to produce 220 units by employing 4 workers or 6 workers. What is the economically efficient amount of labour to hire in this case? Explain.

(3 marks)

#### Question 4 (15 marks)

A firm in a perfectly competitive market is facing a market price of RM12 per unit. The firm is currently producing 50 units of output. At this output level, the marginal cost (MC) is RM15, average total cost (ATC) is RM14, and average variable cost (AVC) is RM7.

(a) What is the marginal revenue (MR) of this firm?

(1 mark)

(b) Sketch a diagram showing the MC, ATC, AVC and MR.

(5 marks)

(c) Is the firm maximising profit at this level of output? Explain.

(5 marks)

(d) If you are the manager, would you shut down or continue to produce? Justify your answer.

(4 marks)

#### Question 5 (15 marks)

(a) Define the concept of 'price discrimination' as applied by a monopoly firm.

(2 marks)

(b) Explain **TWO** main reasons why a monopolist is able to engage in price discrimination, whereas a firm in a perfectly competitive market cannot.

(8 marks)

(c) Describe the concept of 'third degree price discrimination' with a relevant example.

(5 marks)

#### **END OF EXAMINATION PAPER**