CONFIDENTIAL

UNIVERSITI KUALA LUMPUR
BUSINESS SCHOOL

FINAL EXAMINATION
MARCH 2025 SEMESTER

COURSE CODE	:	EGB10403
COURSE NAME	:	INTERMEDIATE MICROECONOMICS
PROGRAMME NAME	:	BACHELOR OF SCIENCE (HONOURS) IN ANALYTICAL ECONOMICS
DATE	:	24 JUNE 2025
TIME	:	2.00 PM – 5.00 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 **THREE (3) Sections; Section A, Section B and Section C.**
4. Answer **ALL** questions in **Section A and Section C, and ONE question in Section B.**
5. Please write your answers on the OMR answer sheet and 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.**
8. **Only non-programmable calculators are allowed.**

THERE ARE TEN (10) PAGES OF QUESTIONS, INCLUDING THIS PAGE.

SECTION A (Total: 25 marks)

INSTRUCTION: Answer ALL questions.
Please use the objective answer sheet provided.

1. A widespread flood has affected a large area of oil palm plantations affecting the crops. What is the likely short-run effect on the market for palm oil?
   A. Both price and quanity traded will decrease.
   B. Price will increase while quantity traded will decrease.
   C. Price will increase but the quantity traded is indetermate.
   D. Quantity traded will decrease but price is indeterminate.

2. Malaysia is launching subsidies and tax exemptions for hybrid car purchases, while projections show a 5% annual increase in consumer interest in hybrids over the next 5 years. What is the likely result in the hybrid car market?
   A. Price and quantity traded will both increase.
   B. Price will increase while quantity traded will decrease.
   C. Price will increase but quantity traded is indeterminate.
   D. Quantity traded will increase but price is indeterminate.

3. A firm has production function f(x_1, x_2) = $(\sqrt{x_1}+3\sqrt{x_2})^2$, the price for both factors are RM1. The firm decides to produce 16 units of output. At the optimum, calculate the values of x_1, and x_2 .
   A. x_1 = 16, x_2 = 14.4
   B. x_1 = 0.16, x_2 = 1.44
   C. x_1 = 8, x_2 = 25
   D. x_1 = 0.11, x_2 = 0.77

4. A firm has the production function f(L, K) = $\sqrt{LK}$. Determine the returns to scale for this function.
   A. Constant returns to scale
   B. Increasing returns to scale
   C. Diminishing returns to scale
   D. Economies of scale

5. A monopoly firm faces demand of P = 60 – 4Q, and marginal cost (MC) = average cost (AC) = RM12. Calculate the profit maximization quantity and price for this firm.

A. Q* = 6, P* = 12
B. Q* = 4, P* = 44
C. Q* = 6, P* = 36
D. Q* = 4, P* = 12

6. What explains why a monopoly firm always chooses to produce in the elastic portion of the demand curve?

A. Marginal revenue and price are equal when demand is inelastic.
B. Producing in the elastic range ensures marginal revenue remains positive.
C. Profit is maximise when the firm operates where total revenue is decreasing.
D. The inelastic portion of the demand curve leads to higher prices and higher output.

7. A firm practices price discrimination in two regions:
Region 1: $P_1 = 400 - 4Q_1$
Region 2: $P_2 = 300 - 5Q_2$
Total cost: TC = 8000 + 10Q where $Q = Q_1 + Q_2$.
What are the optimal prices in each regions?

A. $P^*_1 = 205$, $P^*_2 = 155$
B. $P^*_1 = 120$, $P^*_2 = 240$
C. $P^*_1 = 240$, $P^*_2 = 120$
D. $P^*_1 = 155$, $P^*_2 = 250$

8. Choose the statement that **BEST** define dominant strategy.

A. A strategy to analyse the behaviour of firms in a perfectly competitive market.
B. A strategy that yields the best result no matter what an opponent does.
C. A plan to calculate the possibility of suffering loss in a business.
D. An action taken by a firm to force competitors out of the market.

9. A market has many sellers of bottled water, each offering a slightly unique brand. Each firm earns profit in the short-run but in the long run only normal profits remain. Choose the market structure that best fits this description.

A. oligopoly
B. monopsony
C. perfect competition
D. Monopolistic competition

10. Refer to the game matrix between two firms selling similar products as shown in Diagram 1.

Diagram 1: Price Strategies for Two Firms

		Firm B	
		RM5	RM10
Firm A	RM5	50, 50	100, 0
	RM10	0, 100	90, 90

Which price will firm A choose under a non-cooperative game? What is the corresponding profit at equilibrium?

A. P = RM5, profit = 50
B. P = RM10, profit = 0
C. P = RM5, Profit = 100
D. P = RM10, Profit = 90

11. In a Cournot duopoly, what does the intersection of best-response curves represent?

A. Bertrand equilibrium
B. Collusive agreement
C. Nash equilibrium
D. Price-taking equilibrium

12. A firm maximises profit when it hires labour until ______________.

A. wage paid to the last worker equals the market wage rate
B. total revenue generated equals the total cost of employing all the workers
C. marginal product of the last worker exactly equals the wage of employing that worker
D. marginal revenue product of the last worker exactly equals the wage of employing that worker

13. If utility depends on consumption (C) and hours of leisure (L), and w is the wage received per hour of work. What is the budget constraint to achieve maximum utility?

A. $C = 24L$
B. $C = 24w$
C. $C = 24/w$
D. $C = w(24 - L)$

14. Which of the following is **NOT** a valid reason for wage difference?

A. Market power of employers
B. Differences in human capital
C. Compensating differentials
D. Job seekers agree to wage equals their marginal cost

15. In the labour market, if real wage is below the market equilibrium wage,
    A. there will be surplus of workers.
    B. there will be shortage of workers.
    C. the low wages will persists because wages are sticky.
    D. job matching will improve.

16. In the Edgeworth Box Diagram, efficient allocation of resources occurs when __________.
    A. one firm produces all output
    B. isoquants for two goods from opposite corners intersect
    C. marginal rate of technical substitution is equal across firms
    D. all the resources including capital and labour input are fixed

17. "Pareto efficiency" is best described as ___________.
    A. a situation when one's utility is maximized at the expense of another
    B. No one can be made better off without making someone else worse off
    C. Everyone enjoys the same portions of output regardless of social status
    D. government-imposed allocation in the free market to ensure equal distribution of goods

18. In the context of general equilibrium, Walrasian equilibrium occurs when ___________.
    A. demand equals supply in a single market
    B. government set prices and allocate output in every market
    C. all markets clear simultaneously through price adjustment
    D. consumers and producers operate without taxes or subsidies

19. Asymmetric information refers to:
    A. Consumers and suppliers both have access to information about a product.
    B. A situation where one party has more information about a transaction than the other party.
    C. The presence of government regulations that ensure transparency in the market.
    D. A situation where prices are adjusted to reflect all available information in the market.

20. Which example **BEST** illustrates "adverse selection" due to asymmetric information?
    A. Honest disclosure in health insurance
    B. Smokers pretending to be non-smokers in insurance
    C. High-income workers hiding actual income in transactions
    D. Banks denying loans to applicants based on their ethnicity

21. Which action is **NOT** a way insurance companies address asymmetric information?
    A. Age-based discounts
    B. Premium adjustment
    C. Liability unlimited coverage
    D. Deductibles and copayments

22. Which example illustrates a public good?
    A. Private toll road
    B. Solar-powered public park lights
    C. Online course with paid access
    D. Government grants for agriculture

23. How can externalities influence firm's performance?
    A. Externalities have minimal impact on firm performance, as firms can internalize external costs and benefits through market mechanisms.
    B. Externalities arise when firms neglect to consider the societal impacts of their production or consumption activities, leading to suboptimal outcomes.
    C. Firms are generally insulated from externalities as government regulations and interventions ensure that market outcomes remain efficient.
    D. Externalities create opportunities for firms to exploit market inefficiencies and gain competitive advantage, regardless of societal consequences.

24. Why does a competitive market fail to allocate resources efficiently in the presence of public goods?
    A. Public goods lack market prices, making it difficult for firms to capture consumer willingness to pay and leading to underprovision.
    B. Excessive government control over public good allocation distorts price signals and leads to inefficiency.
    C. Consumers and producers in competitive markets internalise all benefits, but public goods impose high marginal costs.
    D. Private firms tend to oversupply public goods in pursuit of economies of scale, resulting in deadweight loss.

25. Which of the following **BEST** illustrates an interfirm externality?
    A. A manufacturing firm reduces emissions after installing clearner technology, benefiting nearby residents.
    B. A bakery's pleasant aroma increases customer traffic to a nearby café without any agreement between the firms.
    C. A company lowers its prices to gain market share, forcing competitors to respond with discounts.
    D. A firm advertises heavily, leading to increased brand awareness and higher profits within the same firm.

SECTION B (Total: 15 marks)

INSTRUCTION: Answer ANY ONE question.
Please use the answer booklet provided.

Question 1a

(a) Define public goods and explain how their characteristics lead to market failure. Provide **TWO** real-world examples to support your explanation.

(7 marks)

(b) Identify **TWO** approaches that governments may use to ensure efficient provision of public goods. Discuss the effectiveness and challenges of each approach.

(8 marks)

[Total: 15 marks]

Question 1b

(a) Define negative externalities and provide **TWO** real-word examples that illustrate them.

(7 marks)

(b) Identify **TWO** government policies to mitigate negative externalities. Compare their impact and drawbacks.

(8 marks)

[Total: 15 marks]

[This section is intentionally left blank.]

SECTION C (Total: 60 marks)

INSTRUCTION: Answer ALL questions.
Please use the answer booklet provided.

Question 2

Explain the problem of "moral hazard" in employment relationship. Describe **TWO** mechanisms for firms to reduce this problem.

[Total: 20 marks]

Question 3

(a) Using the marginal productivity theory, explain how a competitive firm determines the optimal number of workers to hire. Illustrate your answer with a suitable diagram.

(8 marks)

(b) Consider an individual deciding how to allocate time between work and leisure. An increase in the real wage affects this decision through the substitution and income effects. Using **separate diagrams**, explain the following two cases:

i. when the substitution effect dominates the income effect, and

(6 marks)

ii. when the income effect dominates the substitution effect.

(6 marks)

For each case, describe the change in the individual's hours of work and hours of leisure.

[Total: 20 marks]

Question 4

Generally, a monopoly firm is the only supplier in a market and it has high market power. However, it is possible for a monopoly firm to earn economic profit or suffer economic loss.

(a) Explain how a monopoly determines output and price for profit maximization. Sketch a diagram to illustrate when such decision results in an economic loss.

(10 marks)

(b) If the government imposes marginal cost pricing on a natural monopoly with declining average costs, the firm may incur a loss. What can the government do to reduce these losses? You may use suitable diagram(s) to help in your explanation.

(10 marks)

[Total: 20 marks]

END OF EXAMINATION PAPER