

#### **CHARTERED TAX INSTITUTE OF MALAYSIA**

(Institut Percukaian Malaysia)

Registration Number: 199101015438 (225750-T)

## PROFESSIONAL EXAMINATION

**ECONOMICS** 

**JUNE 2023** 

Student Registration No.	Date	
Desk No.	Examination Centre	

Time allowed: 3 hours

#### **INSTRUCTIONS TO CANDIDATES**

- This paper consists of TWO sections. SECTION A contains TWENTY multiple choice 1. questions and **SECTION B** contains **SIX** questions.
- 2. Answer ALL questions in SECTION A and choose any FOUR questions out of SIX from **SECTION B.**
- 3. Each answer should begin on a separate answer template.
- 4. All workings **MUST** be shown as marks will be awarded.

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## **SECTION A: Multiple Choice Questions (Total: 20 marks)**

# Answer all questions in the multiple choice answer sheet provided. Each question is worth one (1) mark.

- 1. A market researcher intends to study the relationship between the pricing behaviour and ticket sales for a cinema operator. The price elasticity of demand for cinema tickets is -2.5. This means that a 5 per cent increase in price will lead to a
  - A. 10% fall in sales of tickets.
  - B. 12.5% fall in sales of tickets.
  - C. 12.5% increase in sales of tickets.
  - D. 10% increase in sales of tickets.
- In winter, energy becomes essential and the demand for energy tends to increase due to the need to keep households warm. This increase in demand can lead to rising energy costs. A rise in energy prices will therefore lead to
  - A. a large fall in demand for energy.
  - B. a large increase in energy demand.
  - C. a small decrease in energy demand.
  - D. a small increase in energy demand.
- 3. The introduction of a minimum wage policy in Malaysia has the effect of
  - A. increasing wage rates above market equilibrium and creating excess supply of labour.
  - B. increasing wage rates above market equilibrium and creating excess demand for labour.
  - C. reducing wage rates below market equilibrium and creating excess supply of labour.
  - D. not changing anything at all in the market.
- 4. To increase housing affordability, the government intends to impose rent controls (hint: This is a price ceiling). The effect of this policy will be to
  - A. have no effect at all.
  - B. push rentals above market equilibrium and create excessive rented accommodation.
  - C. push rentals above market equilibrium and create shortages of rented accommodation.
  - D. push rentals below market equilibrium and create shortages of rented accommodation.
- 5. TGV and GSC are two competing firms in the cinema industry. An increase in ticket prices by TGV will likely lead to
  - A. an increase in demand for GSC tickets, and a fall in price of GSC tickets.
  - B. a fall in demand for GSC tickets, and a fall in price of GSC tickets.
  - C. an increase in demand and prices for GSC tickets.
  - D. no changes at all.
- 6. The government decides to consolidate the supermarket business by making it compulsory for all supermarkets to merge into a single business entity. The following statements are true except:
  - A. Barriers of entry are high.
  - B. Total surplus to society will be reduced.
  - C. Prices will now exceed marginal cost.
  - D. New competitors will be able to enter the market freely in the long run.

- 7. The increase of a specific tax on cigarette consumption will likely lead to.
  - A. a small decrease in cigarette consumption; consumers bear a greater share of the tax burden than producers.
  - B. a small decrease in cigarette consumption; producers bear a greater share of the tax burden than consumers.
  - C. a large decrease in cigarette consumption; consumers bear the same tax burden as producers.
  - D. no change at all.
- 8. Fill up the gaps in the following sentence: A chemical factory is responsible for polluting a river and affecting the livelihood of the fishing community. This is a \_\_\_\_\_\_ externality. The appropriate response from the government will be to impose a \_\_\_\_\_ on the chemical factory.
  - A. negative; tax
  - B. negative; subsidy
  - C. positive; tax
  - D. positive; subsidy
- 9. The state of diminishing marginal returns to labour in the short run corresponds to the following statements except:
  - A. Total physical product is falling.
  - B. Total physical product is rising at a decreasing rate.
  - C. Marginal physical product is falling.
  - D. Marginal cost is increasing.
- 10. In the short run, profit-maximising firms will stop their production activities unless
  - A. price exceeds average variable cost.
  - B. total revenue exceeds total variable cost.
  - C. price exceeds average total cost.
  - D. All of the above.
- 11. The following factors drive long-run economic growth except
  - A. employing more workers.
  - B. employing more machines or increasing factory utilisation rates.
  - C. increasing unemployment benefits to discourage employment.
  - D. increasing labour force participation among women.
- 12. Efficiency wages contribute to
  - A. frictional unemployment and the natural rate of unemployment.
  - B. frictional unemployment but not the natural rate of unemployment.
  - C. structural unemployment and the natural rate of unemployment.
  - D. structural unemployment but not the natural rate of unemployment.
- 13. Money demand will increase if
  - A. interest rate increases.
  - B. income increases.
  - C. price level falls.
  - D. the economy heads to a recession.
- 14. Using the quantity theory of money as the analytical framework, we can predict that an increase in money supply will be associated with
  - A. falling prices.
  - B. falling output.
  - C. rising velocity.
  - D. rising prices.

- 15. The disruption in the supply chain has resulted in supply bottlenecks and rising inflation during the pandemic. To counter these effects on inflation and stabilise prices, the central bank can
  - A. reduce aggregate demand by raising interest rates.
  - B. increase aggregate demand by cutting interest rates.
  - C. increase aggregate demand by cutting money supply.
  - D. reduce aggregate demand by encouraging banks to lend more.
- 16. If inflation is not predictable and unanticipated, the cost of inflation will
  - A. include shoe leather cost, menu cost and additional costs caused by income distribution effects.
  - B. include shoe leather cost.
  - C. include menu cost.
  - D. be zero.
- 17. The adult population of a country is two million. The labour force participation rate is 80 per cent. Presently, the unemployment rate is five per cent. Calculate the number of individuals who are unemployed:
  - A. 50,000
  - B. 70,000
  - C. 80,000
  - D. 100,000
- 18. When several banks declare insolvency and lay off workers due to a financial crisis, this will be an example of
  - A. structural unemployment.
  - B. cyclical unemployment.
  - C. real wage unemployment.
  - D. full employment.
- 19. Assume that Malaysia is the home country, and the MYR-USD exchange rate is fixed. Fill up the gaps in the following sentence:

If at the fixed exchange rate, the Ringgit is $\_$	, Bank Negara Malaysia must
Ringgit and the reserves of USD will	

- A. overvalued; buy; rise.
- B. overvalued; sell; fall.
- C. undervalued; buy; rise.
- D. overvalued; sell; rise.

20. Suppose there are two countries, A and B, and two goods, apples and oranges. The table below gives the number of workers needed to produce a unit of each good in each country (example: it takes 9 workers to produce an apple in country A).

	Country A	Country B
Apples	9	11
Oranges	1	4

Which of the following statements is true?

- A. Country A has absolute and comparative advantage in both apples and oranges.
- B. Country B has absolute advantage in both apples and oranges.
- C. Country A has absolute advantage in both goods; country B has comparative advantage in oranges; while country A has comparative advantage in apples.
- D. Country A has absolute advantage in both goods; country B has comparative advantage in apples; while country A has comparative advantage in oranges.

# **SECTION B: Structured Questions (Total: 80 marks)**

Answer any **FOUR** questions out of **SIX** in this section.

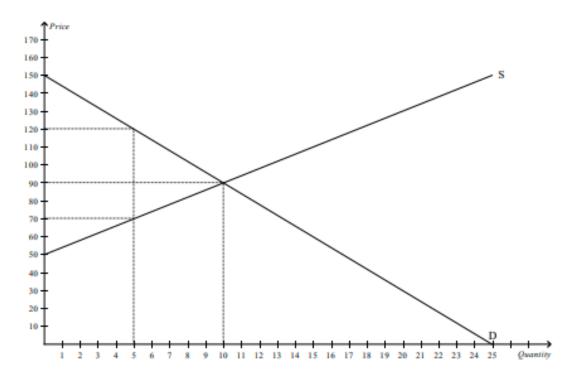
#### **Question 1**

- (a) When people buy video game consoles, they will need video games to play on it. Over the past 30 years, technological advances have reduced the cost of producing video game consoles.
  - (i) Use a diagram to explain how this has affected the market for video game consoles.

    (6 marks)
  - (ii) What is the relationship between video games and video game consoles?
    (4 marks)
  - (iii) Use a diagram to explain how this has affected the market for video games.

    (6 marks)

(b) Refer to the diagram below, and answer the following questions. Show all calculations.



- (i) At the equilibrium price, consumer surplus is \_\_\_\_.
- (ii) If the government imposes a price floor of RM120 in this market, then the new consumer surplus will be \_\_\_\_.

(4 marks)

[Total: 20 marks]

#### **Question 2**

- (a) What are the four key characteristics of a monopolistically competitive market? (4 marks)
- (b) Sparkle is one of many firms in the market for toothpaste, which is operating in the long-run equilibrium. Draw a diagram to show Sparkle's demand curve, marginal revenue curve, average total cost curve and marginal cost curve. Label Sparkle's profit-maximising output and price in the diagram.

(6 marks)

(c) What is the profit maximising criteria for a monopolistically competitive market? Calculate Sparkle's profit in the long run.

(4 marks)

(d) On the same diagram, show consumer surplus derived from the purchase of Sparkle toothpaste. Also, show the deadweight loss relative to the efficient level of output.

(6 marks)

[Total: 20 marks]

## **Question 3**

(a) What are the four characteristics of an oligopolistic market?

(4 marks)

(b) What is a "dominant strategy"?

(3 marks)

(c) There are only two firms, A and B, in the market for a particular product. Each firm can either set a high price or a low price for its product. The profits for each firm based on the combination of their pricing decisions are given in the table below:

Price strategy	Firm B sets high price	Firm B sets low price
Firm A sets high price	A: RM3 million; B: RM3 million	A: RM4 million; B: RM2.5 million
Firm A sets low price	A: RM2.5 million; B: RM4 million	A: RM3.5 million; B: RM3.5 million

(i) What is the dominant strategy for Firm A in this game? Explain your answer.

(4 marks)

(ii) What is the dominant strategy for Firm B in this game? Explain your answer.

(4 marks)

(d) Is it socially desirable for the oligopolists to cooperate?

(5 marks)

[Total: 20 marks]

#### **Question 4**

(a) What is Gross Domestic Product (GDP)?

(2 marks)

(b) List the components of GDP under the expenditure method. Briefly explain each of the components.

(8 marks)

**(c)** Assume that the following data are from an economy that produces only yogurt and honey.

Year	Price of Yogurt	Quantity of Yogurt	Price of Honey	Quantity of Honey
2020	RM1	100	RM2	50
2021	RM1	200	RM2	100
2022	RM2	200	RM4	100

(i) Compute nominal GDP for each year.

(1.5 marks)

(ii) Compute real GDP for each year, using 2020 as the base year.

(1.5 marks)

(iii) Compute the GDP deflator for each year, using 2020 as the base year.

(1.5 marks)

(iv) Calculate the percentage changes in nominal GDP, real GDP, and the GDP deflator in 2021 and 2022 from the preceding year.

(3 marks)

(d) Why do economists use real GDP rather than nominal GDP to gauge economic well-being?

(2.5 marks)

[Total: 20 marks]

#### **Question 5**

(a) Explain four functions of a central bank.

(8 marks)

(b) A bank has RM1 million in deposits and maintains a 15 per cent reserve ratio. Its reserves are RM\_\_\_\_\_\_. Show your calculations.

(4 marks)

(c) What is the change in the money supply when the central bank purchases RM8,000 worth of bonds and the required reserve ratio is 15 per cent, assuming banks hold no excess reserves? Show your calculations.

(4 marks)

(d) Suppose the required reserve ratio is 20 per cent. What is the maximum amount of total money supply that can be created from an initial deposit of RM20,000? Show your calculations.

(4 marks)

[Total: 20 marks]

#### **Question 6**

(a) What happens at the intersection of the aggregate demand and aggregate supply curves, and how does it impact the overall economy? Use a diagram to explain.

(10 marks)

(b) What is the short-run relationship between inflation and unemployment, and how does it relate to the Phillips curve? Suppose that this year, prices are higher than last year, and inflation has been increasing over the past few years. How would this affect expected inflation and the Phillips curve?

(10 marks)

[Total: 20 marks]

(END OF QUESTION PAPER)