

HONG KONG DIPLOMA OF SECONDARY
EDUCATION EXAMINATION MOCK PAPER

ECONOMICS
PAPER 2: STRUCTURED AND ESSAY
QUESTIONS (2027)

Time Allowed: 2 hr 30 min

Total Marks: 120

INSTRUCTIONS TO CANDIDATES:

1. This paper consists of multiple sections.
2. Answer all compulsory questions. Follow the choice instructions for optional questions.
3. Write your answers in the spaces provided.
4. Unless otherwise specified, all working must be clearly shown.
5. Unless otherwise specified, numerical answers should be either exact or correct to 3 significant figures.

A

QUESTION 1

Which statement best illustrates the economic problem of scarcity?

(4 marks)

- A. A consumer chooses between two goods because income is limited.
- B. A firm earns an accounting profit after selling its output.
- C. A government collects tax revenue from households.
- D. A rise in price causes quantity supplied to rise.

QUESTION 2

A workshop increases its employment of workers while keeping its machinery fixed. The marginal product of labour eventually falls.

Which explanation is most appropriate?

(4 marks)

- A. Workers become less skilled as the number employed increases.
- B. The fixed factor becomes increasingly limiting relative to the variable factor.
- C. The workshop's total product must fall immediately.
- D. The workshop has necessarily moved to a lower average-cost curve.

QUESTION 3

Suppose consumers regard tea and coffee as substitutes. A rise in the price of coffee, other things being equal, is most likely to cause which change in the market for tea?

(4 marks)

- A. A movement along the tea demand curve, with quantity demanded of tea falling.
- B. A rightward shift of the tea demand curve.
- C. A leftward shift of the tea supply curve.
- D. A rightward shift of the tea supply curve.

QUESTION 4

The price elasticity of demand for a product is -0.5 . If its price rises by 8%, what is the approximate percentage change in quantity demanded?

(4 marks)

- A. A fall of 16%.
- B. A fall of 4%.
- C. A rise of 4%.
- D. A rise of 16%.

QUESTION 5

A perfectly competitive firm is producing where price equals marginal cost. At the current output, price is below average variable cost. In the short run, the firm should (4 marks)

- A. continue producing because price equals marginal cost.
- B. shut down because revenue cannot cover variable cost.
- C. raise its price to the level of average variable cost.
- D. leave the industry immediately because it is making an economic loss.

QUESTION 6

A factory's production creates air pollution that harms nearby residents, and the factory does not pay for this harm. Which statement is correct? (4 marks)

- A. The factory's private marginal cost exceeds the social marginal cost.
- B. The market output is likely to exceed the socially efficient output.
- C. The pollution is a positive externality in production.
- D. A per-unit subsidy to the factory must reduce the output of the polluting good.

QUESTION 7

A country's nominal GDP rises by 7% while its GDP deflator rises by 3%. Using the approximate growth-rate method, real GDP growth is (4 marks)

- A. 3%.
- B. 4%.
- C. 7%.
- D. 10%.

QUESTION 8

In a simple closed economy with no government, the marginal propensity to consume is 0.8. A \$10 million autonomous increase in investment will, in the Keynesian model, increase equilibrium income by (4 marks)

- A. \$10 million.
- B. \$20 million.
- C. \$40 million.
- D. \$50 million.

QUESTION 9

Which change is most likely to increase the money-creating capacity of commercial banks, other things being equal? (4 marks)

- A. A higher required reserve ratio.
- B. A lower required reserve ratio.
- C. A rise in households' preference for holding cash rather than deposits.
- D. A fall in banks' willingness to lend.

QUESTION 10

An economy has cyclical unemployment and output below potential. Which policy combination is most directly expansionary in the short run? (4 marks)

- A. Increase government purchases and reduce the policy interest rate.
- B. Reduce government purchases and raise the policy interest rate.
- C. Increase income tax rates and raise the policy interest rate.
- D. Reduce transfer payments and sell government securities.

QUESTION 11

Country X can produce either 12 units of good A or 6 units of good B with the same resources. Country Y can produce either 8 units of A or 8 units of B. Which statement is correct? (4 marks)

- A. X has a comparative advantage in both goods.
- B. Y has a comparative advantage in good A because it can produce fewer units of A.
- C. X has a comparative advantage in good A and Y in good B.
- D. There is no basis for mutually beneficial specialisation because X has an absolute advantage in good A.

B

QUESTION 12

A small manufacturer in Hong Kong uses labour and machinery to produce reusable food containers. The table gives its short-run production and cost information. Assume labour is the only variable factor, wage expenditure is \$200 per worker, and fixed cost is \$600 per period.

Production and cost information

Workers	Total output (units)
0	0
1	20
2	50
3	75
4	92

- (a) Calculate the marginal product of each worker after the first worker, and identify the output range over which diminishing marginal product is observed. (4 marks)
- (b) Calculate total cost and average total cost at an output of 75 units. (4 marks)
- (c) Explain why the firm's average total cost may fall at first as output expands, even though marginal product eventually diminishes. (3 marks)

Question 12 (continued)

- (d) The firm considers replacing some labour with an automated machine. Explain one relevant private cost and one possible external cost or benefit that should be considered in its decision. (3 marks)

QUESTION 13

A local market for a service has the demand and supply schedules shown. The government introduces a per-unit tax collected from sellers. Assume demand and supply are linear between the listed points, and the tax does not change either curve's underlying determinants.

Market schedule before tax

Price (\$ per service)	Quantity demanded	Quantity supplied
10	90	10
20	70	30
30	50	50
40	30	70
50	10	90

- (a) Find the initial equilibrium price and quantity. (3 marks)
- (b) For a \$10 per-unit tax on sellers, derive the post-tax equilibrium quantity, the price paid by consumers and the price received by sellers. (5 marks)

Question 13 (continued)

- (c) Calculate the tax revenue and the tax burden per unit borne by consumers and sellers. Explain the incidence result using the schedules. (4 marks)
- (d) Explain the effect of the tax on total surplus and discuss one equity consideration relevant to the policy. (4 marks)

QUESTION 14

The following figures summarise an economy over one year. Assume the GDP deflator is the relevant measure of the average price level for real-GDP calculations.

Selected macroeconomic indicators

Indicator	Year 1	Year 2
Nominal GDP (index)	100	108
GDP deflator (index)	100	104
Unemployment rate	4.0%	5.5%
Current account balance (% of GDP)	1.0%	0.5%

- (a) Calculate the approximate real GDP growth rate from Year 1 to Year 2 and state what the unemployment figures suggest about the economy. (4 marks)

Question 14 (continued)

- (b) Using the Keynesian expenditure model, explain how an increase in government purchases could affect output and employment when there is spare capacity. (4 marks)

- (c) Explain one reason why the expansionary policy in (b) might also put upward pressure on the price level. (3 marks)

- (d) Assess whether the figures alone establish that expansionary fiscal policy is the appropriate response. (3 marks)

QUESTION 15

Hong Kong firms import many inputs and sell some output abroad. Over a period, the Hong Kong dollar appreciates against trading partners' currencies. At the same time, the banking system experiences stronger demand for credit. Use economic analysis to answer the following.

- (a) Explain the likely effects of the appreciation on the Hong Kong-dollar prices of imports and on the price competitiveness of Hong Kong exports, other things being equal. (4 marks)

- (b) Explain how stronger credit demand may affect commercial-bank lending and aggregate demand, and identify one constraint on this process. (4 marks)

Question 15 (continued)

- (c) Analyse how the appreciation and the credit expansion may jointly affect the price level and real output in the short run. (4 marks)
- (d) The government is concerned about weak export orders and rising household debt. Recommend and justify one policy response, and explain one possible limitation or trade-off. (4 marks)

QUESTION 16

Answer ONE alternative only. Each alternative is worth 16 marks. Do not answer both alternatives.

Alternative 1

(16 marks total)

Elective 1: Monopoly pricing, anti-competitive behaviours and competition policy. A dominant online platform faces the inverse market demand $P = 120 - 2Q$ and constant marginal cost of 20. Ignore fixed cost. Assume the firm chooses a single price and output to maximise profit.

- (a) Derive the marginal revenue function and calculate the monopoly output, price and profit. (4 marks)

- (b) Calculate the competitive output and price under the assumption that price equals marginal cost. Compare monopoly and competitive outcomes in terms of consumer surplus and allocative efficiency. (4 marks)

- (c) Explain how a two-part tariff or effective price discrimination could allow the platform to increase profit, and state one condition needed for such a pricing strategy. (4 marks)

- (d) Assess whether competition authorities should prohibit the platform from tying access to its marketplace to use of its own payment service. (4 marks)

Question 16 (continued)

Alternative 2

(16 marks total)

Elective 2: Extension of trade theory, economic growth and development. A lower-income economy is considering joining a regional trade agreement. Its exports are concentrated in a few primary commodities, and it has limited transport infrastructure and worker training.

- (a) Explain how comparative advantage and specialisation can create gains from trade for this economy. (4 marks)

- (b) Explain two reasons why trade liberalisation might fail to produce broad-based economic development in this case. (4 marks)

- (c) Analyse how investment in transport infrastructure and worker training could affect productivity, exports and long-run economic growth. (4 marks)

- (d) Evaluate whether joining the trade agreement should be accompanied by policies to diversify production. Support your conclusion with benefits and costs. (4 marks)