INSTRUCTIONS

1. Read the instructions on the Answer Sheet carefully. Stick a barcode label and insert the information required in the spaces provided.

2. When told to open this book, you should check that all the questions are there. Look for the words ‘END OF PAPER’ after the last question.

3. All questions carry equal marks.

4. ANSWER ALL QUESTIONS. You should use an HB pencil to mark all your answers on the Answer Sheet. Wrong marks must be completely erased.

5. You should mark only ONE answer for each question. If you mark more than one answer, you will receive NO MARKS for that question.

6. No marks will be deducted for wrong answers.
There are 40 questions in this paper. Choose the **BEST** answer for each question.

1. The existence of scarcity implies that
   
   A. human wants are unlimited.  
   B. all goods are economic goods.  
   C. there is a cost in obtaining some goods.  
   D. each and every economic good must have a market price.

2. Mary is choosing between two ways of spending her Christmas vacation: to work for her uncle and earn $3,000 or to join a cultural tour to Beijing.

   Which of the following will lower Mary’s opportunity cost of working for her uncle?
   
   A. Mary’s uncle reduces her wage to $2,000.  
   B. The fee for the cultural tour decreases.  
   C. An attractive section of the cultural tour is canceled.  
   D. Mary’s uncle agrees to employ her best friend to work with her.

3. A positive statement
   
   A. is always true.  
   B. is refutable with facts.  
   C. may contain a value judgment.  
   D. may be the same as a normative statement if certain values are shared by many people.

4. Study the following information about Firm X and Firm Y.

<table>
<thead>
<tr>
<th></th>
<th>Firm X</th>
<th>Firm Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of owners</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>Raising capital in</td>
<td>possible</td>
<td>not possible</td>
</tr>
<tr>
<td>the stock market</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liability</td>
<td>limited</td>
<td>limited</td>
</tr>
</tbody>
</table>

   According to the above information, Firm X is a __________ and Firm Y is a __________.
   
   A. public limited company … private limited company  
   B. private limited company … partnership  
   C. private limited company … public limited company  
   D. public limited company … partnership
5. Which of the following is an example of public good?
   A. a study room provided by a charity organization
   B. a public football court
   C. a poem by Li Bai
   D. an abandoned factory building

6. Which of the following would raise the average labour productivity?
   A. an increase in the number of imported foreign specialists
   B. an increase in the average working hours
   C. a ban on the use of environmentally harmful machines
   D. a cut in government subsidies for continuing education

7. A firm increases all its inputs to double the output. The following table shows the change in total cost after a change in output.

<table>
<thead>
<tr>
<th>Total Output (Units)</th>
<th>Total Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 000</td>
<td>60 000</td>
</tr>
<tr>
<td>20 000</td>
<td>140 000</td>
</tr>
</tbody>
</table>

   Based on the above information, we can conclude that
   A. the firm enjoys economies of scale.
   B. the firm suffers from diseconomies of scale.
   C. the firm cannot cover its cost after doubling the output.
   D. the optimal scale of production is 10 000 units of output.

8. The marginal cost schedule of a firm can be interpreted as its supply schedule in the production of a good because
   A. marginal cost will increase when the output of the firm increases.
   B. we can tell the quantity of the good the firm plans to produce from the marginal cost schedule given the price of the good.
   C. the quantity of the good the firm plans to produce depends positively on the marginal cost of producing the good.
   D. we can tell the price of the good from the marginal cost schedule given the quantity of the good.
9. Suppose a Chinese computer manufacturer takes over a US computer manufacturer. Which of the following is NOT an advantage to the Chinese computer manufacturer in the above takeover?

A. turning a competitor into a partner  
B. diversifying risk of demand fluctuation  
C. building up the goodwill of the company  
D. lowering the average cost of production

10. Peter Pang is an indigenous male resident in the New Territories. Which of the following are guided by price signals?

(1) He buys a concessionary house from his cousin.  
(2) He is given a red packet by the Indigenous Inhabitant Representative during the Lunar New Year.  
(3) He rents one of his concessionary houses to a tenant who is not an indigenous resident.

A. (1) and (2) only  
B. (1) and (3) only  
C. (2) and (3) only  
D. (1), (2) and (3)

11. Suppose the European Union imposes an import surcharge on China-made leather shoes exported to its member countries. In the member countries of the European Union,

A. the price of these goods will rise.  
B. the price of these goods will fall.  
C. the total expenditure on these goods will rise.  
D. the total expenditure on these goods will fall.
Answer Questions 12 and 13 by referring to the following information:

The graph below shows the market situation of Good X when the government provides a per-unit subsidy of $30 to the producers.

12. Suppose the government abolishes the above per-unit subsidy. The new market price would be __________.

   A. $100  
   B. $120  
   C. $140  
   D. $160

13. Within the range of the original and new market prices, the elasticity of supply of Good X is

   A. smaller than its elasticity of demand.  
   B. equal to its elasticity of demand.  
   C. greater than its elasticity of demand.  
   D. unity.
14. During winter, women tend to buy more hydrating facial cream. As a result, the price of bottled hydrating facial cream of a particular brand changed by 20% and its quantity transacted rose from 2,000 bottles to 2,800 bottles per month.

We can conclude that within the above price range this bottled hydrating facial cream had

A. an elastic demand.
B. an inelastic demand.
C. an elastic supply.
D. an inelastic supply.

15. The following diagram shows the hotel accommodation market in London. Point E is the original equilibrium point.

Suppose there is a bomb attack in a tube (subway) station and there is a rise in the operating cost of hotels in London. The new equilibrium point in the diagram would be __________.

A. W  
B. X  
C. Y  
D. Z

16. In order to reduce the number of plastic bags used, the government plans to impose a charge on consumers according to the number of plastic bags that consumers obtain from shops.

Which of the following concepts can be used to explain the above policy?

A. the law of demand  
B. the principle of comparative advantage  
C. diseconomies of scale  
D. the law of diminishing marginal returns
17. A market can be regarded as an oligopoly when
   A. market information is not perfect.
   B. the market is dominated by a few sellers.
   C. the government restricts the entry of sellers into the market.
   D. different sellers sell similar but differentiated products.

18. In which of the following situations will there be NO divergence between private and social costs / benefits?
   A. A chemical factory upstream pollutes a river without considering the damage inflicted upon fish farmers downstream.
   B. A diner smokes in a restaurant without considering the effects on people nearby.
   C. A farmer raises some sheep which damage the crops of nearby farmland owned by the farmer.
   D. A pianist plays the piano at home and receives no payment from his neighbour who enjoys the music.

19. Study the following Lorenz curves of two economies.

   ![Lorenz curve of Country A](image1)
   ![Lorenz curve of Country B](image2)

   From the above diagrams, we can conclude that
   A. the income distribution of Country A is more even than that of Country B.
   B. the income distribution of Country B is more even than that of Country A.
   C. the high-income group in Country A earns a higher income than that in Country B.
   D. the high-income group in Country B earns a higher income than that in Country A.
20. Suppose the government provides a per-unit subsidy to the producers of a good. This would lead to

A. an increase in consumer surplus and a fall in producer surplus, so having an ambiguous effect on efficiency.
B. an increase in producer surplus and a fall in consumer surplus, so having an ambiguous effect on efficiency.
C. an improvement in efficiency because both sellers and buyers would benefit from the subsidy.
D. a deadweight loss because the amount of subsidy provided by the government is greater than the sum of the increase in consumer and producer surpluses.

21. Study the following information of two economies.

<table>
<thead>
<tr>
<th></th>
<th>Per capita Gross Domestic Product (GDP)</th>
<th>Population</th>
<th>Gini Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country A</td>
<td>US$10 000</td>
<td>20 million</td>
<td>0.45</td>
</tr>
<tr>
<td>Country B</td>
<td>US$12 000</td>
<td>10 million</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Based on the above information, we can conclude that

A. the GDP of Country A is higher than that of Country B.
B. the income distribution of Country A is more even than that of Country B.
C. the general living standard of the low-income group in Country A is higher than that in Country B.
D. all of the above are correct.

22. Consider the following information about an economy:

<table>
<thead>
<tr>
<th></th>
<th>Growth rate (relative to previous year) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year 1</td>
</tr>
<tr>
<td>Nominal GDP</td>
<td>−3</td>
</tr>
<tr>
<td>Real GDP</td>
<td>2</td>
</tr>
<tr>
<td>Population</td>
<td>2</td>
</tr>
</tbody>
</table>

Which of the following about the economy is true?

A. The real output decreased in year 2.
B. The per capita nominal GDP decreased in year 2.
C. The nominal GDP in the above two years is the same.
D. The general price level decreased in year 1 but increased in year 2.
23. Suppose the unemployed population of an economy is 300 000 while the unemployment rate is 6%. The employed population is _________.
   A. 1 800 000
   B. 2 100 000
   C. 4 700 000
   D. 5 000 000

24. The diagram below shows the aggregate demand (AD) curve, short run aggregate supply (SRAS) curves and the long run aggregate supply (LRAS) curve of an economy.

In the above diagram, point E is the initial equilibrium point. Which of the following are correct in the long run?

1. If AD₁ shifts to AD₂, SRAS₁ will shift to SRAS₂.
2. If AD₁ shifts to AD₂, AD₂ will shift back to AD₁.
3. If SRAS₁ shifts to SRAS₂, AD₁ will shift to AD₂.
4. If SRAS₁ shifts to SRAS₂, SRAS₂ will shift back to SRAS₁.

   A. (1) and (3) only
   B. (1) and (4) only
   C. (2) and (3) only
   D. (2) and (4) only

25. The short run aggregate supply curve will shift to the left if

   A. the labour cost decreases.
   B. the labour productivity increases.
   C. the general price level increases.
   D. the general price level is expected to increase.
26. With an upward sloping short-run aggregate supply curve, an increase in the desire to import will lead to ________ in real national income and __________ in the price level.
   A. an increase … an increase
   B. an increase … a decrease
   C. a decrease … a decrease
   D. a decrease … an increase

27. Which of the following statements about money is / are correct?
   A. Deflation reduces the purchasing power of money.
   B. Money does not exist in a cashless society where all transactions are settled through an electronic payment system.
   C. With the use of money in exchange, exchange is possible even when trading parties do not have double coincidence of wants.
   D. All of the above are correct.

28. If the nominal interest rate on a one-year bond is 10% and the expected inflation rate is 2%, the nominal rate of return and the expected cost of holding cash are ________ and ________ respectively.
   A. 0% … 8%
   B. 0% … 10%
   C. −2% … 8%
   D. −10% … 10%

29. Mr Chan withdraws HK$4 000 000 from his deposit account in a restricted licence bank in Hong Kong. He then puts HK$3 500 000 as time deposit in a licensed bank in Hong Kong and holds the remaining HK$500 000 as cash.

   The immediate effect of the above actions on the Hong Kong dollar money supply would be:
   A. Both M2 and M3 remain unchanged.
   B. M1 increases while M2 remains unchanged.
   C. M2 increases while M3 remains unchanged.
   D. M2 increases while M3 decreases.
30. Which of the following may cause an increase in money supply?

   (1) The central bank raises the discount rate.
   (2) The central bank lowers the required reserve ratio.
   (3) The central bank purchases government bonds from a commercial bank.

   A. (1) and (2) only
   B. (1) and (3) only
   C. (2) and (3) only
   D. (1), (2) and (3)

31. The table below shows the balance sheet of a banking system. Suppose the public holds $500 cash and the amount of its excess reserves is $600.

<table>
<thead>
<tr>
<th>Assets ($)</th>
<th>Liabilities ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves</td>
<td>1 000</td>
</tr>
<tr>
<td>Loans</td>
<td>1 000</td>
</tr>
<tr>
<td>Deposits</td>
<td>2 000</td>
</tr>
</tbody>
</table>

Which of the following statements about the banking system is correct?

   A. The required reserve ratio is 40%.
   B. The maximum amount of deposits is $4 000.
   C. The maximum banking multiplier is 5.
   D. The monetary base is $2 500.

32. The classical quantity theory of money

   (1) predicts that changes in money supply may have no effect on the general price level.
   (2) predicts that changes in nominal national income are positively related to changes in money supply.
   (3) assumes that the velocity of circulation of money is constant.

   A. (1) and (2) only
   B. (1) and (3) only
   C. (2) and (3) only
   D. (1), (2) and (3)

33. In the long run, a change in money supply will NOT affect

   A. the price level.
   B. the real output.
   C. the nominal demand for money.
   D. all of the above.
34. Growth rate of GDP deflator (%)

The above diagram shows that during the period

A. there is deflation in the economy.
B. the growth rate of money stock is negative.
C. the general price level is rising.
D. the standard of living is rising.

35. During unemployment, an increase in money supply will NOT raise

A. the real national income.
B. the nominal national income.
C. the price level.
D. the potential income.

36. Which of the following can help to solve an inflationary gap?

A. an increase in taxes
B. an increase in budget deficit
C. an increase in transfer payments
D. an increase in government expenditure

37. If Country X is more productive in producing every good than Country Y,

A. the gain from trade of Country X will be greater than that of Country Y.
B. mutually beneficial trade between the two countries is still possible.
C. Country Y will import every good from Country X instead of producing these goods by itself.
D. Country X may have a lower opportunity cost in producing every good than Country Y.
38. If a country is running a current account deficit,

A. it must also be running a trade deficit.
B. its capital and financial account must be in surplus.
C. the foreign exchange reserves of the country must decrease.
D. all of the above are correct.

39. Suppose a country imposes a tariff on an import. The diagram below shows the country’s supply of and demand for the good.

If the domestic price of the good increases from \( P_w \) to \( P_w' \) as a result of the tariff,

A. the total deadweight loss is equal to area 4.
B. the total loss in consumer surplus is equal to the sum of areas 2, 3 and 4.
C. the increase in producer surplus is equal to area 1.
D. the effect on consumer and producer surpluses is uncertain.

40.

<table>
<thead>
<tr>
<th>Year</th>
<th>Exchange rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>€1 = US$1.12</td>
</tr>
<tr>
<td>July</td>
<td>€1 = US$1.35</td>
</tr>
</tbody>
</table>

Under the linked exchange rate system, the above change in the exchange rate between the Euro and the US dollar will lead to

A. a decrease in the number of Europeans visiting Hong Kong.
B. a decrease in the number of Hong Kong people visiting the US.
C. an increase in the quantity of European cars exported to Hong Kong.
D. an increase in the quantity of Hong Kong garments exported to Europe.

END OF PAPER 1
HONG KONG EXAMINATIONS AND ASSESSMENT AUTHORITY
HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION

ECONOMICS PAPER 2

(Sample Paper)

Time allowed: 2 hours

This paper consists of three sections, A, B and C. Answer ALL questions in Section A and Section B. Section C contains two electives. Answer either the question(s) in Elective 1 or the question(s) in Elective 2.
Section A (50 marks)

1. The HKSAR government periodically publishes statistics related to the Hong Kong economy. Some of these statistics can be viewed free of charge on the internet. Explain whether the statistics on the internet are free goods. (3 marks)

2. Give two factors for the existence of income inequality in an economy. (2 marks)

3. The table below shows the input-output relationship of a firm.

<table>
<thead>
<tr>
<th>Worker (Units)</th>
<th>Machine (Units)</th>
<th>Average output per worker (Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>450</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>500</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>450</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>400</td>
</tr>
</tbody>
</table>

State the law of diminishing marginal returns and explain whether the above data illustrate the law. (5 marks)

4. At weekends, there are more customers going to karaoke lounges which services are sold at a higher price than on weekdays.

   (a) Why may the fact that customers have more free time at weekends result in a higher market price for the services provided by karaoke lounges? (4 marks)

   (b) Explain whether the cost to customers of consuming services provided by karaoke lounges is higher or lower at weekends. (5 marks)

Note: The layout is different from that in the Standards-referenced Reporting Handbook which will be published in 2009.
5. The following is the balance sheet of a banking system.

<table>
<thead>
<tr>
<th>Assets ($)</th>
<th>Liabilities ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves</td>
<td>500</td>
</tr>
<tr>
<td>Loans</td>
<td>1 000</td>
</tr>
<tr>
<td></td>
<td>Deposits</td>
</tr>
<tr>
<td></td>
<td>1 500</td>
</tr>
</tbody>
</table>

(a) Suppose the excess reserves of the banks are $275. What is the required reserve ratio? (1 mark)

(b) Suppose there is a cash withdrawal of $300 from the banks. Explain whether the banks still have excess reserves immediately after the withdrawal. (3 marks)

6. (a) (i) What is the difference between nominal and real interest rates? (2 marks)

(ii) Explain under what condition the nominal interest rate would be lower than the real interest rate. (2 marks)

(b) Explain why the nominal interest rate is the cost of holding money. (3 marks)

7. (a) Explain with two reasons why the aggregate demand curve is downward-sloping. (6 marks)

(b) “Expansionary fiscal policy will have no effect on real income in the long run.” Do you agree? Does your answer depend on how the government spends money? Explain. (6 marks)

8. The national income accounting equation states that $Y = C + I + G + NX$, where $Y$, $C$, $I$, $G$, and $NX$ stand for national income, consumption, investment, government expenditure, and net exports (i.e. exports minus imports) respectively.

(a) Define national saving as $S = Y - C - G$. Show that $S - I = NX$. (2 marks)

(b) Define national saving as the sum of private and public savings so that $S = S^p + S^G$, where $S^p$ and $S^G$ stand for private saving and public saving respectively.

(i) Explain why the fiscal deficit of an economy would be equal to its trade deficit when $S^p = I$. (3 marks)

(ii) Explain the condition under which an economy would balance its trade when it has a fiscal deficit. (3 marks)
9. The diagram below shows the market demand and supply of electronic watches. Assume the market of electronic watches is perfectly competitive.

(a) Indicate the consumer surplus and producer surplus in Figure 1. (2 marks)

Suppose there is an improvement in technology that lowers the marginal cost of producing electronic watches.

(b) How would the technological improvement affect the price, quantity transacted, consumer surplus and producer surplus? (5 marks)

(c) The schedule below shows the marginal costs of a firm which produces electronic watches before and after the technological improvement.

<table>
<thead>
<tr>
<th>Output (Units)</th>
<th>Marginal cost ($) before the technological improvement</th>
<th>Marginal cost ($) after the technological improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>600</td>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>700</td>
<td>90</td>
<td>80</td>
</tr>
<tr>
<td>800</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>900</td>
<td>110</td>
<td>100</td>
</tr>
</tbody>
</table>

(i) Is marginal cost a fixed cost or a variable cost? Explain. (2 marks)

(ii) Suppose the market price of electronic watches was $80 before the technological improvement. What is the output of the firm at this market price? (1 mark)

(iii) Suppose the market price of electronic watches fell to $70 after the technological improvement. What is the output of the firm at this market price? (1 mark)

(d) Patrick is one of the owners of ABC Electronic Watches Manufacturing Ltd. He cannot transfer his shares of the company to others in the stock market.

(i) What kind of business ownership does ABC Electronic Watches Manufacturing Ltd belong to? (1 mark)

(ii) As one of the owners of ABC Electronic Watches Manufacturing Ltd, does Patrick need to use his own property to repay the debts of the company if the company goes bankrupt? Explain. (2 marks)
10. Many governments in the world face the problem of running a fiscal deficit for consecutive years. Raising tax rates is one of the ways that these governments may consider in tackling the fiscal problem. Sales tax is a common form of tax in many countries and some governments increase sales tax rates with a view to increasing tax revenue.

(a) An increase in sales tax rates may reduce firms’ willingness to supply goods and services, as well as their willingness to invest. With the aid of a diagram, explain how an increase in the sales tax rates would affect the price level and output of an economy in the short run. (10 marks)

Short-run fluctuations in the price level and output may not be desirable to many governments either. Monetary policy is often employed by central banks to stabilize the price level and/or output.

(b) Based on the answer to (a), do you think central banks could stabilize the price level through monetary policy after the increase in sales tax rates? What would be the effect of such policies on output? Do you think central banks should stabilize the price level through monetary policy after the increase in sales tax rates? Explain. (12 marks)

11. Some Hong Kong politicians have demanded for the introduction of a minimum wage law for low income earners, such as security guards and cleaning workers.

(a) Consider an industry in which the market wage rate is at its equilibrium. With the aid of a diagram, explain how the introduction of an effective minimum wage would affect

(i) the number of workers employed in that industry. (4 marks)

(ii) the total wage earnings of the workers in that industry. (7 marks)

(b) “A minimum wage should be introduced to protect the interests of low-income workers.” Evaluate this proposal. (7 marks)
Section C (16 marks)

Elective 1

12. Mobile phone services in Hong Kong are dominated by several providers. It is said that there is a lack of competition in the market and some of the practices of these service providers are anti-competitive in nature.

(a) Mobile phone service providers in Hong Kong offer various plans with different charges to their customers. Each plan includes a certain amount of airtime and additional services such as voice mail, call forwarding, free intra network SMS, etc. Usually, the per-minute charges for plans with more airtime are lower than those with less airtime.

(i) What is price discrimination? 

(ii) State TWO conditions for practising price discrimination. Do the mobile phone service providers in Hong Kong meet those conditions? 

(iii) Consider that, apart from the amount of airtime, a certain service provider offers the same additional services to all customers. Is this pricing practice (charging a lower per-minute price for plans with more airtime) an example of price discrimination? Explain your answer.

(b) In early year 2000, all mobile phone service providers in Hong Kong announced an increase of $20 in the monthly charges at almost the same time.

(i) Explain why all sellers in a competitive market would charge a higher price when there is an increase in the cost of production.

(ii) Based on the answer to (b)(i), can we conclude that sellers’ behaviour in raising prices at the same time in a market is necessarily anti-competitive? What other evidence would be necessary to draw such a conclusion? Explain.
Elective 2

13. Figure 2 shows the production of Country X. AA’ and point P are the production possibility frontier and the production point without trade respectively.

Suppose the slope of the production possibility frontier at point P is 0.5 and the terms of trade is 1.

(a) Without trade, what is the marginal cost of producing clothing for Country X? (1 mark)

(b) In the production of which good does Country X have comparative advantage? Explain your answer. (3 marks)

(c) Draw on Figure 2 the consumption possibility frontier and production point of Country X when there is trade. Show how Country X can gain from trade. (4 marks)

(d) Suppose there is a technological advance in the production of both clothing and food in Country X.

(i) How will the technological advance affect the production possibility frontier of Country X? In what sense can Country X benefit from such an advance? Illustrate your answer in Figure 2. (4 marks)

(ii) Technological advance will usually raise a country’s per capita real GDP. In addition to the increase in per capita real GDP, give two factors that need to be considered in measuring a country’s level of development. Explain your answer. (4 marks)