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## Exemplar 1 Paper 2

### Section A (44 marks)

1. (a) Mary was the major shareholder of a private limited company which operated a restaurant chain. She planned to change the form of business ownership to a listed company. List **ONE** advantage and **ONE** disadvantage of the change. (2 marks)
- (b) After opening some new restaurants, Mary found that the average cost of production of her company had increased. Explain the change in average cost with **ONE** reason. (2 marks)

(a) One advantage is Mary can issue share to the public and a larger source of capital. One disadvantage is Mary has to disclose her restaurant's financial information to the public.

(b) By opening more restaurant, the cost of production can be spread to different restaurants, therefore lowering average cost.

2. There are two kinds of food deliverers: 'riders' delivering food by self-provided motorbikes and 'walkers' delivering food on foot. Why do 'riders' usually have a higher income per order than 'walkers'? Suggest **ONE** demand-side factor and **ONE** supply-side factor to explain your answer. (4 marks)

One demand-side factor is 'riders' can provide services in a faster pace than 'walkers'.

~~The number of order they can provide are larger.~~ Customers <sup>usually</sup> prefer a faster delivery service. Therefore demand more 'riders' deliverers and willing and able to pay more for 'riders' in tips.

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One supply-side factor is 'riders' motorbikes are self-provided. The cost of them delivering per order is higher. Therefore they may require higher service charge for faster delivery service.

3. Refer to the following data about Country A.

Year	2019	2020
Per capita disposable income	\$15 000	\$20 000
Gini coefficient (based on household income)	0.51	0.56
Gini coefficient (based on household disposable income)	0.51	0.44

- (a) State **TWO** reasons to explain why the increase in per capita disposable income may lead to an over-estimation of the improvement in living standard of Country A. (2 marks)
- (b) Based on household disposable income, did income inequality of Country A improve or worsen in 2020? Suggest **ONE** policy which may have caused such a change. (2 marks)

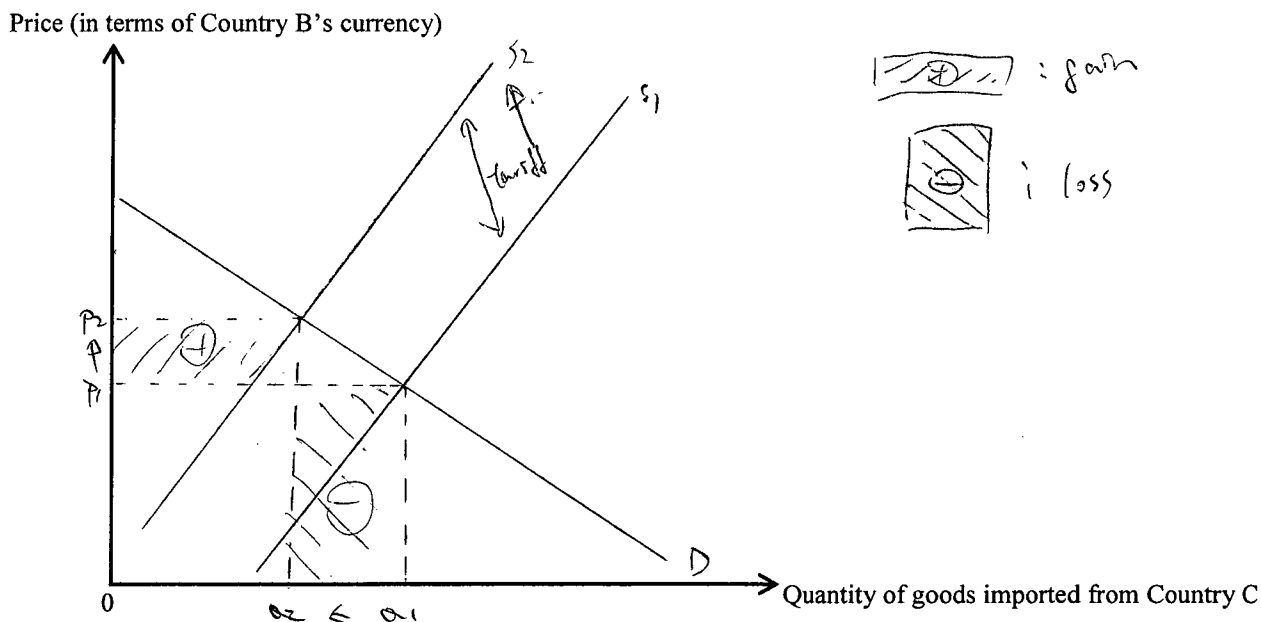
(a) The first reason is there may be population difference between 2019 and 2020.

The second reason is the increase in disposable income may due to introduce of an indirect tax that is regressive in nature.

(b) Income inequality improved. One policy may be increase standard rate of salaries tax.

4. Country B and Country C are two large open economies. Facing a huge visible trade deficit, Country B imposes a per-unit tariff on goods imported from Country C. Suppose Country B's demand for goods imported from Country C is elastic.
- (a) With the aid of Figure 1, explain how the tariff would affect the total expenditure of Country B on goods imported from Country C. (6 marks)
- (b) "Devaluation of a country's currency against its trading partners' may have the same effect on imports as tariff." Use Country B as an example to justify this statement. (2 marks)
- (c) Apart from the effect on the country's visible trade balance, explain **ONE** other effect of devaluation on its balance of payments. (2 marks)

**Figure 1: Goods imported from Country C by Country B**



As imposing per-unit tariff, where  $S_1$  decreases to  $S_2$ . The demand for goods imported from Country C is elastic. The decrease in quantity,  $Q_1$  to  $Q_2$  is larger than increase in price,  $P_1$  to  $P_2$ . There is a loss of total expenditure.

(b) If the currency of country B devaluates against country C, goods imported from country C will be fewer. Country B needed to pay extra price for the original quantity.

(c) There will also be an effect on visible trade balance. As one country's <sup>(B)</sup> currency depreciates against its <sup>(C)</sup> trading partner, there will be more people of the other <sup>(C)</sup> country come for <sup>(B)</sup> touring in the country. There will be increase of export of services in the domestic <sup>(B)</sup> country.

5. Country D introduced a short-term capital gains tax (STCGT) on property market.

Capital gains (\$)	STCGT rate (%)
10 000 or below	8
10 001 to 50 000	16
50 001 to 100 000	24
100 001 or above	32

STCGT is a tax on capital gains from the sale of a property held for less than 1 year.

A spokesman of the tax department said that a new computer system had been developed for STCGT. Although the system cost more than 1 billion dollars, it allowed tax payers to check and pay the amount of STCGT online easily.

- (a) Evaluate the new tax in terms of **TWO** principles of taxation put forward by Adam Smith. (4 marks)
- (b) 'The introduction of STCGT would not relieve the problem of rising property prices.' Explain whether this is a positive statement or a normative statement. (2 marks)

(a) New tax do not follow Adam Smith's equity principle. The STCGT rate is not of a proportional rate.

New tax follows Adam Smith's convenience principle. New computer system had been developed for easier payment method for tax payers.

(b) It is a positive statement. The statement is testable and refutable by facts.

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6. (a) 'Deflation will occur if the amount of goods and services produced is growing faster than money supply.' Explain this statement in terms of the quantity theory of money. (4 marks)
- (b) 'If deflation is expected, the real interest rate will be higher than the nominal interest rate.' Why? (2 marks)

(a) According to the quantity theory of money,  $MV = PY$ .  $M$  stands for money supply,  $V$  is the velocity of circulation of money,  $P$  is the general price level and  $Y$  is the real output. In long run, holding  $V$  and  $Y$  constant,  $M$  decreases in percentage leading to a <sup>same</sup> decrease in  $P$ . Therefore, deflation will occur.

(b) nominal interest rate = real interest rate + inflation rate.  
Let the inflation rate is a negative number and nominal interest rate same as expected.  
Real interest rate will be higher than the nominal interest rate.  
For example,  $n\% = r\% + f\%$   
 $5\% = 8\% + (-3)\%$

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7. In a two-country-two-good model, the outputs per unit of resources of both countries are as follows.

	Rice (units)	Toys (units)
Country E	10	20
Country F	5	15

0.8R

0.33R

- (a) Assume the terms of trade are that 1 unit of rice can be exchanged for 2.2 units of toys. Calculate the gains from trade of **EACH** country when trading 1 unit of rice. Show your workings. (4 marks)
- (b) With reference to your answer in part (a), defend the following statement. 'There is still a basis for trade even if a country has no absolute advantage in producing any goods.' (2 marks)

(a) comparative advantage of Country E on unit of rice =

$$\frac{20}{10} = 2T$$

comparative advantage of Country F on unit of rice =

$$\frac{15}{5} = 3T$$

$$\text{Gain from Country E} = 2.2T - 2T = 0.2T$$

$$\text{Gain from Country F} = 2.2T - 3T = -0.8T$$

(b) Country F has no absolute advantage on either producing rice or toys. However in comparative with Country E in producing toys, it has comparative advantage and there is still a basis for trade.

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8. The following table shows the balance sheet of a banking system.

Assets (\$ million)		Liabilities (\$ million)	
Reserves	1 000	Deposits	4 000
Loans	3 000		

The public initially holds \$1 000 million cash and the banks are fully loaned up.

- (a) Calculate the required reserve ratio. (1 mark)
- (b) Suppose the public only wants to hold \$400 million cash and deposits the remaining cash into the banks. Calculate the maximum change in money supply. Show your workings. (3 marks)

(a) Required reserve ratio =  $\frac{\$1000}{\$4000} \times 100\% = 25\%$

(b)

R	1600	D	6400
L	4800		

original money supply =  $C + D = \$1000 + \$4000 = \$5000 \text{ million}$

maximum money supply =  $\$400 + \$6400 = \$6800 \text{ million}$

Maximum change in money supply =  
 $\$6800 - \$5000$   
 $= +\$1800 \text{ million}$

END OF SECTION A

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**Section B (60 marks)**

9. The Mainland government introduced the Targeted Poverty Alleviation Campaign (精準扶貧政策) in 2014. After analysing the situations of people living in poverty, the government officials came up with tailor-made measures. The following are two examples of the campaign.

Example 1	A village in Yunnan province has beautiful natural landscape. The government of Yunnan province promoted the village to attract more travellers. Apart from farming, the villagers also set up <u>hostels</u> to serve travellers in order to <u>earn more income</u> .
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- (a) Refer to Example 1.

- (i) In which types of production did the villagers engage after the introduction of the campaign? Explain. (4 marks)
- (ii) Explain how labour mobility of the villagers would be affected. (3 marks)

Example 2	The government provided <u>funding</u> and <u>invited</u> private firms to develop hydroelectric power plants in <u>six</u> provinces (such as Hubei and Jiangxi). Such <u>development</u> would help improve <u>transportation</u> , irrigation and flood prevention in <u>the rural villages</u> in these provinces.
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- (b) Refer to Example 2. With the aid of a diagram, explain how aggregate output in these six provinces would be affected in the long run. (8 marks)

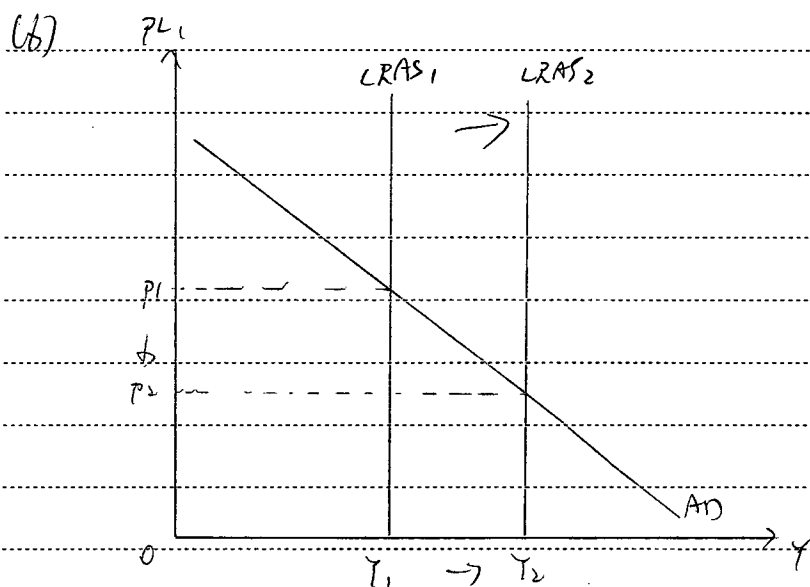
(a)(i) Entrepreneurship: Villagers setting up hostels to earn more income. They need to bear business risks and practice in decision-making.  
Labour: Villagers also needed to contribute physical effort in production, (farming).

(ii) Labour mobility of the villagers will be higher. The villagers can engage in different production process. Not only farming, but also server in hostels.

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Develop in hydroelectric power plants help improve transportation and long run aggregate supply (LRAS) increases from  $LRAS_1$  to  $LRAS_2$ . The aggregate output increases from  $Y_1$  to  $Y_2$  in the long run.

By funding firms, production cost decreases and short run aggregate supply increases.

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10. The Olympic Games attract billions of international television viewers to watch the competitions among thousands of top athletes.

(a) Some restaurants in shopping malls find their businesses increase sharply when the malls broadcast Olympic events. Explain how the broadcast of Olympic events may result in a divergence between private and social benefits. (3 marks)

(b) Suppose the divergence in part (a) does exist. How can market mechanism help reduce this divergence? (2 marks)

Athletes compete in the Olympic Games with their support teams consisting of sport psychologists, physical therapists, nutritionists, etc.

(c) Which economic principle is illustrated in the above practice? State **TWO** reasons why such a practice can increase labour productivity. (3 marks)

Some professional athletes receive a monthly salary and share a proportion of the prize money whenever they win in competitions.

(d) Instead of paying the athletes a monthly rate only, explain why some employers of professional athletes use the above wage payment arrangement. (2 marks)

Whenever an athlete wins a gold medal in a certain sport, there will be the following phenomena: more people will start learning the sport. As a result, there will soon be long queues registering for courses in the sport.

(e) With the aid of a demand-supply diagram, explain the above phenomena. (5 marks)

Professional athletes usually start their full-time training before graduating from secondary school and have to give up their studies.

(f) Will the opportunity cost of being a professional athlete be affected if the average income of professional athletes increases? Explain. (2 marks)

(a) There is positive externality. Some restaurants in malls find their business increase sharply due to broadcast of Olympic events. These restaurants benefited but did not compensate. The marginal social benefit is larger than marginal social cost. There is a divergence gap, deadweight loss and under-production.

(b) These shopping mall can collect relative fees for compensation for the restaurants benefited by the broadcast of Olympic events.

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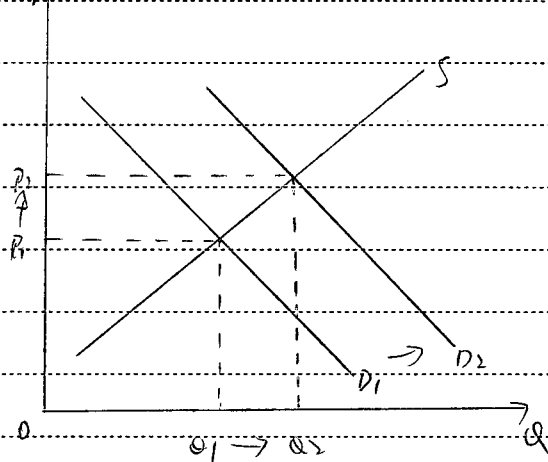
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ce) Division of labour.

First, assign suitable person to do the right job.  
Second, practice makes perfect.

(d) It is because <sup>by</sup> using the above wage payment, the incentive for athletes performing better will increase for achieving higher for better share of proportion of prize money.

ce)  $P(\$)$



More people learning the sport, makes the demand curve shift rightwards. Increases from  $D_1$  to  $D_2$ . The price will increase from  $P_1$  to  $P_2$ . Output will increase from  $Q_1$  to  $Q_2$ .

(f) No. Only the value of chosen option, being a professional athlete would decrease but not highest-valued option forgone, studying.

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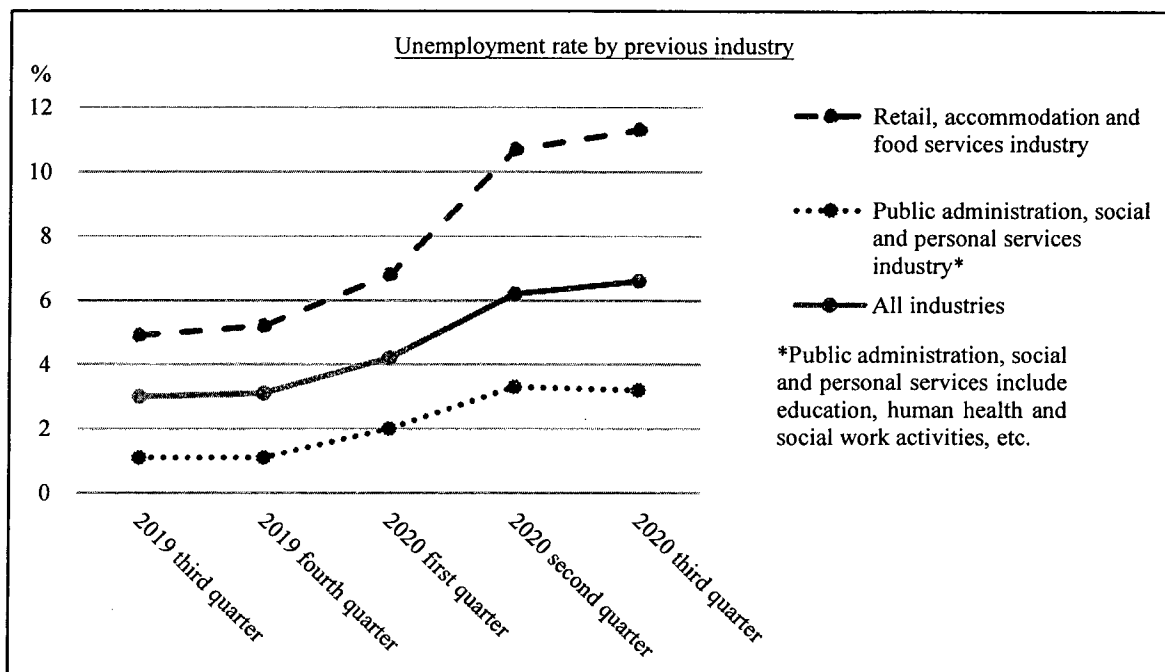
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11. The Government launched the Consumption Voucher Scheme in 2021 to relieve the impact of COVID-19 on the Hong Kong economy.





Source A: Statistical data about unemployment rate in Hong Kong



Source B: An extract of information about the Consumption Voucher Scheme

All Hong Kong permanent residents and new arrivals aged 18 or above, who comply with the 'residing in Hong Kong' requirement, could register to receive electronic consumption vouchers with a total value of \$5 000 by instalments.

Source C: Information about the four designated stored value facilities to receive the \$5 000 consumption vouchers by instalments




	AlipayHK  AlipayHK	Octopus  八達通 Octopus	Tap & Go  Tap & Go	WeChat Pay HK  WeChat Pay
Public transportation with the above payment facilities installed	MTR, bus, mini bus and ferry	MTR, bus, mini bus and ferry	Bus and mini bus	None
Promotions to consumption voucher users	5 e-coupons	First 2 million registered customers enjoy \$18 of stored value	\$50 awarded when using virtual Tap & Go Unionpay card for the first transaction with an amount equal to or larger than \$50	e-coupons

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## Source D: Some reminders for the Consumption Voucher Scheme

- Consumption vouchers cannot be used in transactions such as payments to the government (e.g. tax), public utilities (e.g. electricity charges), purchase of financial products (e.g. insurance), and direct purchase from merchants located outside Hong Kong.
- There are deadlines for using consumption vouchers.

## Source E: Some views on the Consumption Voucher Scheme in Hong Kong

<p>A housewife</p> 	<p>I have spent more than \$5 000 as there are e-coupons from the stored value facility provider. A lot of promotions in large <u>retail chains</u> and <u>malls</u> have also tempted me to consume!</p>
<p>A former chef in a restaurant</p> 	<p>I have been <u>laid off</u> and have stayed home for months. No one knows when the travellers would be back. I hope that the Consumption Voucher Scheme will bring more local people to <u>spend on food and beverage</u> and the whole industry can survive the <u>pandemic</u>. Otherwise, many workers <u>will be forced</u> to leave the industry.</p>
<p>A doctor working in a public hospital</p> 	<p>Resources should be allocated to the <u>medical sector</u>, instead of <u>giving everyone</u> an equal amount under the Consumption Voucher Scheme. The public hospitals lacked <u>space, manpower and equipment</u> even before the pandemic. Start building new hospitals <u>earlier</u> so that more lives could be saved.</p>

- (a) Refer to Source A.
- In which phase of business cycle the Hong Kong economy most likely was? Apart from the change in unemployment rate, list **ONE** other economic phenomenon of this phase. (2 marks)
  - Why did the unemployment rate of retail, accommodation and food services industry increase faster than that of public administration, social and personal services industry during the pandemic? (2 marks)
- (b) Refer to Source B. Would the \$5 000 distributed under the Consumption Voucher Scheme be included in the calculation of government consumption expenditure? Explain your answer. (2 marks)
- (c) Based on the information given in Source C, explain with **TWO** reasons why the market of stored value facilities in Hong Kong is **NOT** perfectly competitive. (4 marks)
- (d) Refer to Source D. Some citizens claimed, 'I would rather receive \$5 000 cash instead of consumption vouchers.' In terms of functions of money, explain such a claim with **TWO** reasons. (4 marks)



For part (e), candidates are required to present their answers in essay form. Criteria for marking will include use of sources and economic theories, relevant content, logical presentation and clarity of expression.

- (e) Suppose the Government plans to spend another sum of money to cope with the pandemic. The following are two suggestions.

Scheme C	Distribute the sum of money using the same mechanism as the existing Consumption Voucher Scheme.
Scheme H	Spend the sum of money on building new hospitals and hiring additional medical staff.

With reference to the above sources and your own knowledge in Economics, discuss which scheme the Government will prefer in order to achieve **EACH** of the following policy objectives respectively.

Objective 1: to relieve unemployment in an industry severely affected by the pandemic

Objective 2: to increase average labour productivity

Objective 3: to increase aggregate output (in the short run and/or in the long run)

(14 marks)

[Use a separate paragraph for comparing the effects of the two schemes under each policy objective.]

(a)(i) Recession. Decrease in inflation growth rate.

(a)(ii) It is because many retail, accommodation and food services industry were forced to close in the pandemic which <sup>immediately</sup> laid off employees. While public administration, social and personal services industry still need to operate for maintaining essential services during the pandemic, employees have less opportunities to be unemployed.

(b) No. Providing electronic consumption vouchers is not a consumption behaviour by the government but a government expenditure.

(c) The first reason is companies of stored value facilities provide heterogeneous services. They provide different promotions to attract users. The second reason is they have imperfect market information. They do not know the preference of users in choosing different companies.

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(d) Refer to Source D, consumption voucher is not a general accepted medium of exchange. It cannot be used for payments to government or purchasing financial products as money does.

Secondly, consumption voucher does not perform standard of deferred payment. There are deadlines for consumption voucher. It cannot be stored as for future consumption or payment as money does.

(e) In terms of relieving unemployment in an industry severely affected by the pandemic. According to Source A, the industry suffered greatly due to pandemic is retail, accommodation and food services industry. If using Scheme C, using same method as consumption voucher to distribute the sum of money, people consumption can be boosted. Consumption expenditure increases and aggregate demand increases. Aggregate output increases and thus unemployment can decrease. Also, same method as consumption voucher meansy that, according to Source D, consumption area is restricted whereas normally, retail, accommodation and food services industry can benefit more.

However, using Scheme H, use the sum of money to hiring medical staff and building new hospitals cannot help with the main industry that unemployment occurs most severely. This can help the unemployed people to have

more job opportunities though, building new hospitals require construction workers and hiring more medical staff can help boost the employment rate in hospital industry.

Comparing two schemes, Government will prefer scheme C in order to relieve the industry affected most severely by the pandemic.

In terms of to increase average labour productivity, In scheme C, according to source C, stored value facilities companies use electronic purse. Whereas using same distributing money method, the government and also the employees in shops and companies need less time to distribute <sup>the sum of</sup> money. Using the help of technology, labour productivity can thus be increased.

However, in scheme H, spend the sum of money to build new hospital and hiring medical staff, may not necessarily increase labour productivity. Hiring more staff can relieve the work of medical staff but cannot guarantee the hired staff are of high productivity. The average productivity of hiring more staff may even decrease. Also, in new hospitals, new medical staff may be unfamiliar with the working environment. The average labour productivity will also decrease. Comparing two schemes, the government will prefer scheme C to increase average labour productivity.

In terms of to increase aggregate output. For Scheme C, according to Source B, Hong Kong residents aged 18 or above are eligible to receive \$200 electronic consumption voucher. In Source F, even a housewife have more incentive to consume more. This will make Hong Kong people's incentive to consume higher. The consumption expenditure increases and aggregate demand increases. Therefore an increase in aggregate output.

In Scheme H, spend the sum in building new hospitals. The production cost of building a new hospital will decrease due to subsidies from the government. The short run aggregate supply will increase. This leads to an increase in aggregate output.

Moreover, in the long run, building new hospitals can increase the long run aggregate supply.

The aggregate output increases eventually.

Comparing the two schemes, C and H. The government will prefer scheme H for both increase in aggregate output in short run and long run.

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**END OF PAPER**

Sources of materials used in this paper will be acknowledged in the *HKDSE Question Papers* booklet published by the Hong Kong Examinations and Assessment Authority at a later stage.

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Supplementary Answer Sheet

Question No. \_\_\_\_\_

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# Level 3

## Exemplar 2 Paper 2

### Section A (44 marks)

1. (a) Mary was the major shareholder of a private limited company which operated a restaurant chain. She planned to change the form of business ownership to a listed company. List **ONE** advantage and **ONE** disadvantage of the change. (2 marks)
- (b) After opening some new restaurants, Mary found that the average cost of production of her company had increased. Explain the change in average cost with **ONE** reason. (2 marks)

a) For advantage, she may enjoy a wider source of capital.  
For disadvantage, she need to disclose her company's financial account to public.

b) The management may become too complicated and hence the management cost increase.

2. There are two kinds of food deliverers: 'riders' delivering food by self-provided motorbikes and 'walkers' delivering food on foot. Why do 'riders' usually have a higher income per order than 'walkers'? Suggest **ONE** demand-side factor and **ONE** supply-side factor to explain your answer. (4 marks)

Firstly, for demand-side factor,

Secondly, for supply-side factor, since 'riders' can deliver food by self-provided motorbikes, so the time-cost<sup>of</sup> the 'riders' will be lower than the 'walkers'.

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3. Refer to the following data about Country A.

Year	2019	2020
Per capita disposable income	\$15 000	\$20 000
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- (a) State **TWO** reasons to explain why the increase in per capita disposable income may lead to an over-estimation of the improvement in living standard of Country A. (2 marks)
- (b) Based on household disposable income, did income inequality of Country A improve or worsen in 2020? Suggest **ONE** policy which may have caused such a change. (2 marks)

a) Firstly, it did not show the pollution level of Country A which affect the living standard.

Secondly, it did not show the income inequality from the increase in per capita disposable income.

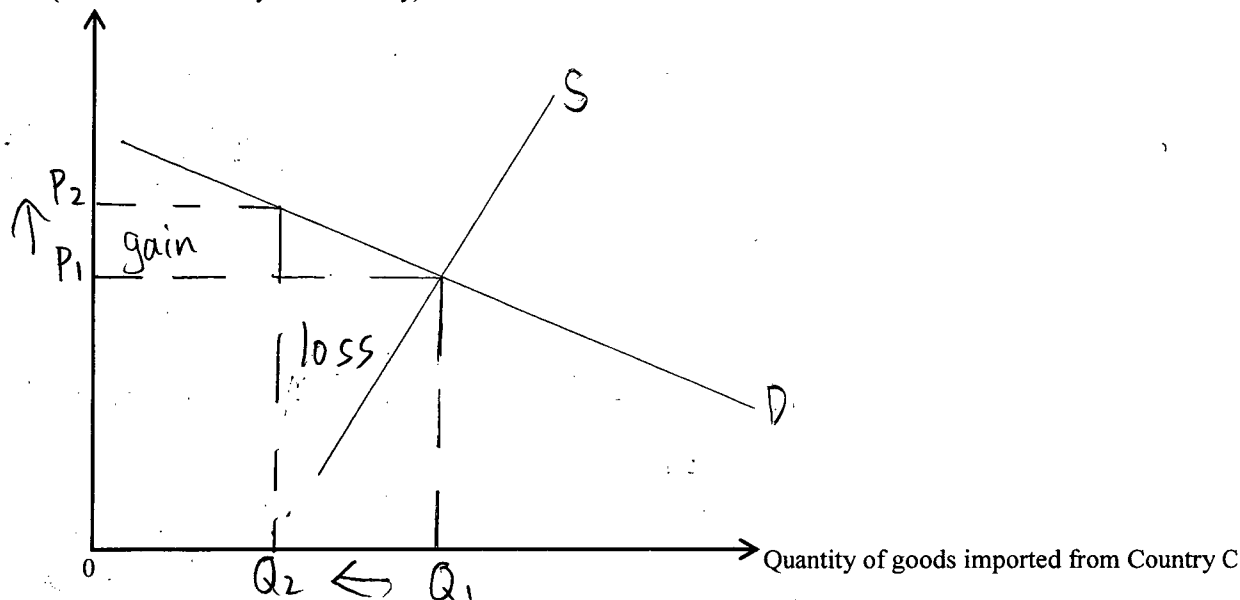
b) Income inequality of Country A improved. Imposing property tax may have caused the change.

4. Country B and Country C are two large open economies. Facing a huge visible trade deficit, Country B imposes a per-unit tariff on goods imported from Country C. Suppose Country B's demand for goods imported from Country C is elastic.

- With the aid of Figure 1, explain how the tariff would affect the total expenditure of Country B on goods imported from Country C. (6 marks)
- "Devaluation of a country's currency against its trading partners' may have the same effect on imports as tariff." Use Country B as an example to justify this statement. (2 marks)
- Apart from the effect on the country's visible trade balance, explain ONE other effect of devaluation on its balance of payments. (2 marks)

**Figure 1: Goods imported from Country C by Country B**

Price (in terms of Country B's currency)



a) When the demand for goods imported from Country C of Country B is elastic, the percentage increase in price will be smaller than the percentage decrease in quantity transacted. Thus, the gain will be smaller than loss. The expenditure of Country B on goods imported from Country C will decrease.

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b)

c) Government <sup>total</sup> expenditure increase.

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5. Country D introduced a short-term capital gains tax (STCGT) on property market.

Capital gains (\$)	STCGT rate (%)
10 000 or below	8
10 001 to 50 000	16
50 001 to 100 000	24
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STCGT is a tax on capital gains from the sale of a property held for less than 1 year.

A spokesman of the tax department said that a new computer system had been developed for STCGT. Although the system cost more than 1 billion dollars, it allowed tax payers to check and pay the amount of STCGT online easily.

- (a) Evaluate the new tax in terms of **TWO** principles of taxation put forward by Adam Smith. (4 marks)
- (b) 'The introduction of STCGT would not relieve the problem of rising property prices.' Explain whether this is a positive statement or a normative statement. (2 marks)

a) Firstly, convenience. The tax collection method should be convenient both the tax payers and the government. The new computer system that developed for STCGT may be convenient for both the tax payers and government.

Secondly, certainty. The tax payers should be well-informed about the calculation method of the tax payment. STCGT has clearly stated that how to calculate the tax payments, such as capital gains \$10 000 or below has to pay the tax in 8%.

b) This is a positive statement as this has a clear stand.

Answers written in the margins will not be marked.

6. (a) 'Deflation will occur if the amount of goods and services produced is growing faster than money supply.' Explain this statement in terms of the quantity theory of money. (4 marks)
- (b) 'If deflation is expected, the real interest rate will be higher than the nominal interest rate.' Why? (2 marks)

a) Quantity theory of money (QTM) =  $MV = PY$ ,  $M$  = money supply,  $V$  = velocity of circulation of money,  $P$  = general price level and  $Y$  = real output.  
 In short run,  $M\bar{V} = PY$ ,  $V$  is assumed to be constant. When the real output is keep increasing, which the percentage increase in  $Y$  is greater than percentage increase in  $M$ .  $P$  will proportionally decrease as  $M\bar{V} = PY$ . Therefore, when  $P$  decrease, there is a deflation.

b) This is because people will expect the interest rate will be smaller due to the deflation.  
 ^ expectation of

7. In a two-country-two-good model, the outputs per unit of resources of both countries are as follows.

	Rice (units)		Toys (units)
Country E	10	OR	20
Country F	5	OR	15

- (a) Assume the terms of trade are that 1 unit of rice can be exchanged for 2.2 units of toys. Calculate the gains from trade of **EACH** country when trading 1 unit of rice. Show your workings. (4 marks)
- (b) With reference to your answer in part (a), defend the following statement. 'There is still a basis for trade even if a country has no absolute advantage in producing any goods.' (2 marks)

a) The opportunity cost of Country E producing 1 unit of rice (R) =  $\frac{20}{10} = 2$  units of toy (T)  
 The opportunity cost of Country F producing 1R =  $\frac{15}{5} = 3T$   
 $\therefore$  Term of trade = 1:2.2

$$\therefore \text{Gains from Country E} = 2.2T - 2T = 0.2T$$

$$\text{Gains from Country F} = 3T - 2.2T = 0.8T$$

And Country E is the exporting country as it has a lower opportunity cost of producing 1 unit of rice.

b)

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8. The following table shows the balance sheet of a banking system.

Assets (\$ million)		Liabilities (\$ million)	
Reserves	1 000	Deposits	4 000
Loans	3 000		

The public initially holds \$1 000 million cash and the banks are fully loaned up.

- (a) Calculate the required reserve ratio. *cp + d* (1 mark)
- (b) Suppose the public only wants to hold \$400 million cash and deposits the remaining cash into the banks. Calculate the maximum change in money supply. Show your workings. (3 marks)

a) The required reserve ratio =  $\frac{\$1000 \text{ million (m)}}{\$4000 \text{ m}} \times 100\% = 25\%$

b) The original money supply =  $\$1000 \text{ m} + \$4000 \text{ m} = \$5000 \text{ m}$   
 The new money supply =  $\$400 \text{ m} + \$[1000 \text{ m} + (\$1000 \text{ m} - \$400 \text{ m})] \times \frac{1}{0.25}$   
 $= \$6800 \text{ m}$

The maximum change in money supply =  $\$6800 \text{ m} - \$5000 \text{ m}$   
 $= \$1800 \text{ m}$

END OF SECTION A

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**Section B (60 marks)**

9. The Mainland government introduced the Targeted Poverty Alleviation Campaign (精準扶貧政策) in 2014. After analysing the situations of people living in poverty, the government officials came up with tailor-made measures. The following are two examples of the campaign.

Example 1	A village in Yunnan province has beautiful natural landscape. The government of Yunnan province promoted the village to attract more travellers. Apart from farming, the villagers also set up hostels to serve travellers in order to earn more income.
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- (a) Refer to Example 1.
- (i) In which types of production did the villagers engage after the introduction of the campaign? Explain. (4 marks)
- (ii) Explain how labour mobility of the villagers would be affected. (3 marks)

Example 2	The government provided funding and invited private firms to develop hydroelectric power plants in six provinces (such as Hubei and Jiangxi). Such development would help improve transportation, irrigation and flood prevention in the rural villages in these provinces.
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- (b) Refer to Example 2. With the aid of a diagram, explain how aggregate output in these six provinces would be affected in the long run. (8 marks)

ai) Tertiary production. As tourism provides service.

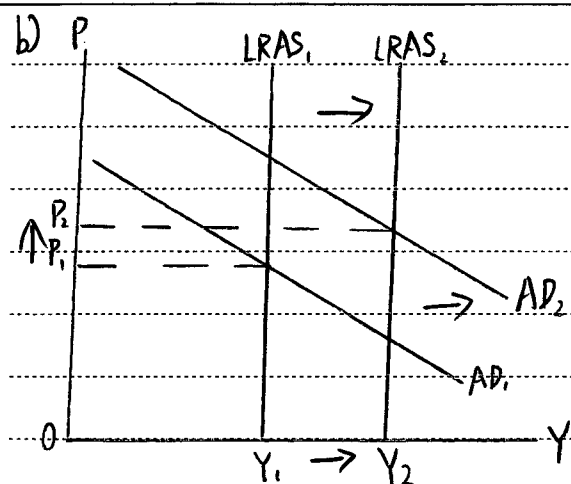
aii) Occupational mobility will increase. As development of tourism will provide many low-skill job positions that even the low-educated people can do. Therefore, the occupational mobility of the villagers may raise as they can switch from being a farmer into tourism service providers.

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The aggregate output will increase. Since these six provinces help developing hydroelectric power plants which are the infrastructure that may rise the productivity in the future. Since there are more infrastructures will be built in the future, the long run aggregate supply will increase. Also, since there are better development of transportation in the future, more business may be made and increase the private consumption demand and so the aggregate demand will increase. Thus, the price level increase and aggregate output increase.

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10. The Olympic Games attract billions of international television viewers to watch the competitions among thousands of top athletes.

- (a) Some restaurants in shopping malls find their businesses increase sharply when the malls broadcast Olympic events. Explain how the broadcast of Olympic events may result in a divergence between private and social benefits. (3 marks)
- (b) Suppose the divergence in part (a) does exist. How can market mechanism help reduce this divergence? (2 marks)

Athletes compete in the Olympic Games with their support teams consisting of sport psychologists, physical therapists, nutritionists, etc.

- (c) Which economic principle is illustrated in the above practice? State **TWO** reasons why such a practice can increase labour productivity. (3 marks)

Some professional athletes receive a monthly salary and share a proportion of the prize money whenever they win in competitions.

- (d) Instead of paying the athletes a monthly rate only, explain why some employers of professional athletes use the above wage payment arrangement. (2 marks)

Whenever an athlete wins a gold medal in a certain sport, there will be the following phenomena: more people will start learning the sport. As a result, there will soon be long queues registering for courses in the sport.

- (e) With the aid of a demand-supply diagram, explain the above phenomena. (5 marks)

Professional athletes usually start their full-time training before graduating from secondary school and have to give up their studies.

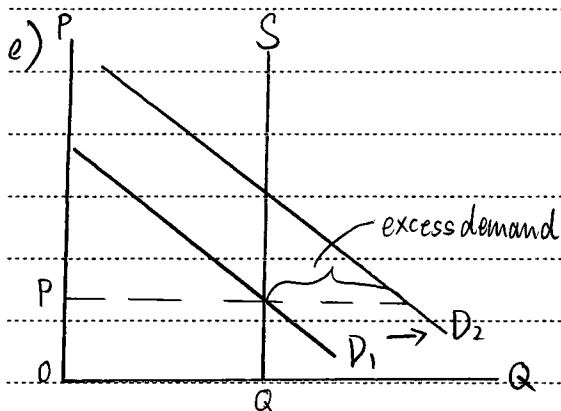
- (f) Will the opportunity cost of being a professional athlete be affected if the average income of professional athletes increases? Explain. (2 marks)

a) Since the income of the restaurant may increase because of the malls broadcast Olympic events, the marginal social benefit will be greater than the marginal private benefit as the restaurants did not compensate the malls. Therefore, there is a divergence between private and social benefits and causes a deadweight loss.

b) It can increase the land rent of the stores in the shopping malls, hence to decrease the gap between private and social benefit, thus to reduce this divergence.

c) Division of labour. Firstly, choose the most suitable person to the job. Secondly, lower the time of switching the jobs.

d) Since the working incentive of the athletes will be higher as they can have more chances to get a higher income.



Suppose the quantity demanded is at the equilibrium level before the winning of a gold medal. Since the number of courses is fixed, which is an inelastic supply, when the demand for the courses increases and the price remains unchanged. There is an excess demand for the courses.

f) No. Since opportunity cost is the highest valued option forgone. So the opportunity cost will only be affected when the cost of the second option made by the professional athletes changes.

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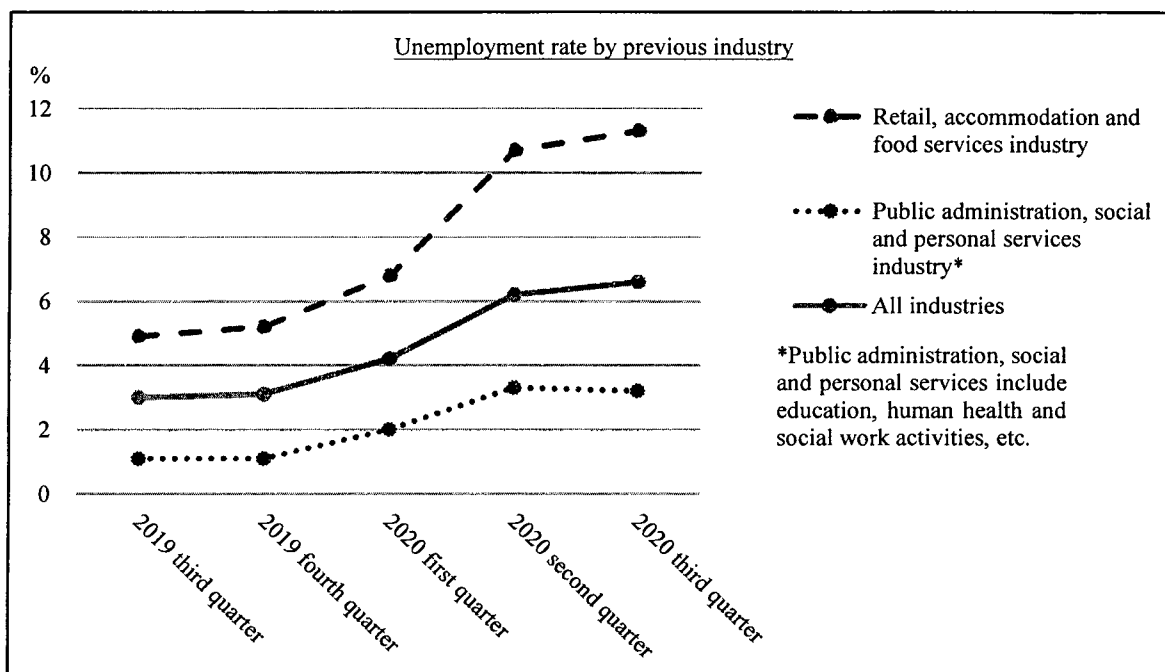
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11. The Government launched the Consumption Voucher Scheme in 2021 to relieve the impact of COVID-19 on the Hong Kong economy.





Source A: Statistical data about unemployment rate in Hong Kong



Source B: An extract of information about the Consumption Voucher Scheme

All Hong Kong permanent residents and new arrivals aged 18 or above, who comply with the 'residing in Hong Kong' requirement, could register to receive electronic consumption vouchers with a total value of \$5 000 by instalments.

Source C: Information about the four designated stored value facilities to receive the \$5 000 consumption vouchers by instalments




	AlipayHK	Octopus	Tap & Go	WeChat Pay HK
	 AlipayHK	 八達通 Octopus		 WeChat Pay <sup>®</sup>
Public transportation with the above payment facilities installed	MTR, bus, mini bus and ferry	MTR, bus, mini bus and ferry	Bus and mini bus	None
Promotions to consumption voucher users	5 e-coupons	First 2 million registered customers enjoy \$18 of stored value	\$50 awarded when using virtual Tap & Go Unionpay card for the first transaction with an amount equal to or larger than \$50	e-coupons

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Source D: Some reminders for the Consumption Voucher Scheme

- Consumption vouchers cannot be used in transactions such as payments to the government (e.g. tax), public utilities (e.g. electricity charges), purchase of financial products (e.g. insurance), and direct purchase from merchants located outside Hong Kong.
- There are deadlines for using consumption vouchers.

Source E: Some views on the Consumption Voucher Scheme in Hong Kong

<p>A housewife</p> 	<p>I have spent more than \$5 000 as there are e-coupons from the stored value facility provider. A lot of promotions in large retail chains and malls have also tempted me to consume!</p>
<p>A former chef in a restaurant</p> 	<p>I have been laid off and have stayed home for months. No one knows when the travellers would be back. I hope that the Consumption Voucher Scheme will bring more local people to spend on food and beverage and the whole industry can survive the pandemic. Otherwise, many workers will be forced to leave the industry.</p>
<p>A doctor working in a public hospital</p> 	<p>Resources should be allocated to the medical sector, instead of giving everyone an equal amount under the Consumption Voucher Scheme. The public hospitals lacked space, manpower and equipment even before the pandemic. Start building new hospitals earlier so that more lives could be saved.</p>

- (a) Refer to Source A.
- In which phase of business cycle the Hong Kong economy most likely was? Apart from the change in unemployment rate, list **ONE** other economic phenomenon of this phase. (2 marks)
  - Why did the unemployment rate of retail, accommodation and food services industry increase faster than that of public administration, social and personal services industry during the pandemic? (2 marks)
- (b) Refer to Source B. Would the \$5 000 distributed under the Consumption Voucher Scheme be included in the calculation of government consumption expenditure? Explain your answer. (2 marks)
- (c) Based on the information given in Source C, explain with **TWO** reasons why the market of stored value facilities in Hong Kong is **NOT** perfectly competitive. (4 marks)
- (d) Refer to Source D. Some citizens claimed, 'I would rather receive \$5 000 cash instead of consumption vouchers.' In terms of functions of money, explain such a claim with **TWO** reasons. (4 marks)

For part (e), candidates are required to present their answers in essay form. Criteria for marking will include use of sources and economic theories, relevant content, logical presentation and clarity of expression.

- (e) Suppose the Government plans to spend another sum of money to cope with the pandemic. The following are two suggestions.

Scheme C	Distribute the sum of money using the same mechanism as the existing Consumption Voucher Scheme.
Scheme H	Spend the sum of money on building new hospitals and hiring additional medical staff. <i>LRAS infrastructure</i>

With reference to the above sources and your own knowledge in Economics, discuss which scheme the Government will prefer in order to achieve **EACH** of the following policy objectives respectively.

Objective 1: to relieve unemployment in an industry severely affected by the pandemic

Objective 2: to increase average labour productivity

Objective 3: to increase aggregate output (in the short run and/or in the long run)

(14 marks)

[Use a separate paragraph for comparing the effects of the two schemes under each policy objective.]

*ai) Recovery. The GDP per capita will rise.*

*aii) Since during the Covid-19 pandemic, most people chose to have their meal at home or cook by themselves. Also, less tourists come to Hong Kong due to the quarantine policy. Therefore, the demand for the restaurants and accommodation decreased. Hence, the income of those industry decrease and so the employer will choose to employ fewer people. While the public administration, social and personal services industry have no substitutes hence the demand for them is more inelastic and so employers will still employ the employees to maintain the job.*

*b) Yes. As this is a transfer payment given by the government to Hong Kong residents.*

*c) Firstly, their provision of service is heterogeneous. For example, we can use Alipay HK on MTR while Tap & Go can only use on bus and minibus. Secondly, they have imperfect information about the quality of the service. For example, there are different promotions to consumption voucher users.*

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d) Firstly, medium of exchange. Money serves as the medium to facilitate the buying and selling of the goods and services. However, as the consumption vouchers are not generally acceptable, such as consumption vouchers cannot be used in transactions such as payments to the government. This has weakened its function of medium of exchange while cash is more generally accepted than it.

Secondly, store of value. People can store the purchasing power for the future spending as money. However, consumption vouchers have a deadline for using them. They will lose their value after the deadline. It weakens the function of store of value of money while cash can be stored for the future spending without a deadline.

e) For Objective 1, government may prefer Scheme C.

Firstly, when there is the provision of Consumption Vouchers, it is a transfer payment. The disposable income of people will increase. They may then use the consumption vouchers to purchase different goods and services. Hence, the private consumption expenditure will increase. Aggregate demand increases, aggregate output increases. Thus, the unemployment will decrease. Such as, the unemployment of the food and beverage industry will be improved in the short run.

Secondly, as consumption vouchers is a transfer payment. The government expenditure will increase. Aggregate demand (AD) will increase. Real output increases and unemployment decreases in the short run.

For Scheme H in Objective 1, since there are building new infrastructure, the investment expenditure and government expenditure will increase. Thus, AD increases and real output increases during the building period of the new buildings. So there provide more job positions to the public and so the unemployment will be improved in the short run.

However, in the view of government, Scheme H is a long term developing project which may increase the government expenditure continuously during the construction period. This may affect the fiscal balance of

the government. So government may not prefer this when comparing with Scheme C.

For objective 2, government may prefer Scheme H.

Firstly, for Scheme C, the provision of consumption vouchers may increase their disposable income. Hence, it helps equalising the opportunities of low-income group. As they can buy electronic devices or having extra courses with using the consumption vouchers. Then they can attend the online lessons of school and have a higher education in the future. Therefore, the average labour productivity of them will increase in long term.

For Scheme H, the building of hospital may help equalising the opportunity of low income group. Since there are more public hospital, it may help solving the long waiting time of the public hospital now. And hence, more lower income group are able to receive medical service with a low medical cost. Therefore, they may have a healthier body and the average labour productivity will increase in future.

Also, since building more hospitals are increasing the infrastructure in the society. Therefore, long run aggregate supply will increase. And hence more production can be made and thus the average labour productivity will increase.

Therefore, government may prefer Scheme H as it has more benefit in long term.

For Objective 3, government may prefer Scheme H

Firstly, for Scheme C, with the provision of consumption vouchers, the private consumption expenditure will increase. The transaction demand for money will increase. Thus, the money supply will increase. Thus, the aggregate demand will increase. Aggregate output increase in short run.

For Scheme H, as building infrastructure will increase the long run aggregate supply, the aggregate output will increase in long run.

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Therefore, government may prefer Scheme H as the hospital and development of medical service can have a sustainable benefit from recent to future production.

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**END OF PAPER**

Sources of materials used in this paper will be acknowledged in the *HKDSE Question Papers* booklet published by the Hong Kong Examinations and Assessment Authority at a later stage.

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Supplementary Answer Sheet

Question No. \_\_\_\_\_

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