

TABLE OF CONTENTS

Level 4

Exemplar 1 Paper 2

Exemplar 2 Paper 2

Level 4

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) Advantage: Can gain capital from selling shares.

Disadvantage: The restaurant's decision may be affected by new shareholders.

(b) When opening some new restaurants, the ^{marginal} cost of operating those restaurants increase, so the average cost increase.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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)

Demand-side factor:

Most of the people order delivering food don't want to wait for a long time. So they are willing to pay a higher price to 'rider' than 'walkers', resulted in a higher income of 'rider' than 'walker' per order.

Answers written in the margins will not be marked.

Supply-side factor:

'rider' delivering more order than 'walker' in a same period of time, as riding motorbikes usually faster than 'walkers', to increase its total output. Firms would give 'rider' a higher income per order, to encourage food deliverers bring their own motorbikes, as 'rider' produce more output than 'walkers' in a same period of time.

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) Because the per capita disposable income can't estimate the inflation rate and the pollution problem in Country A.

(b) The income inequality of Country A improve. As the Gini coefficient based on household disposable income - decrease to 0.44 in 2020. Transfer payment to low income group may have caused such a change.

Answers written in the margins will not be marked.

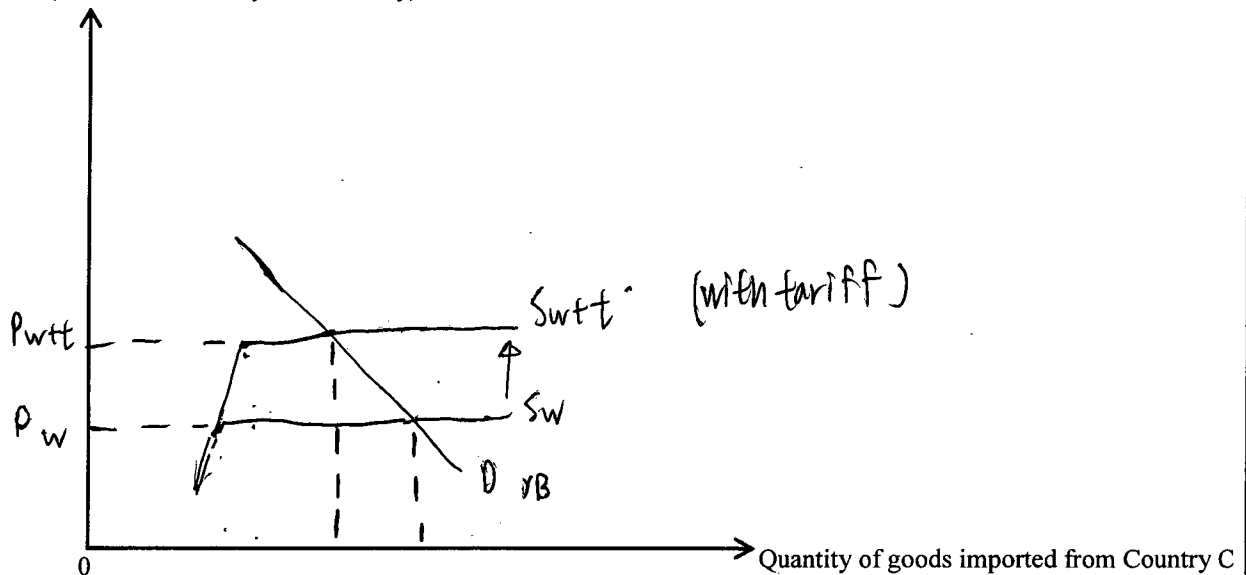


4. Country B and Country C are two large open economies. Facing a huge visible trade deficit, Country B imposes a per-unit tariff on goods imported from Country C. Suppose Country B's demand for goods imported from Country C is elastic.

- 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)



(c) When Country B imposes a tariff on goods imported from Country C, the price of imported goods increase and the quantity of imported decrease. As the demand is elastic, the percentage decrease in quantity is higher than the percentage increase in price, so the total expenditure of Country B on goods imported from Country C

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

decrease.

(b) When devaluation of Country B's currency against Country C's, the goods imported from Country C is more expensive to Country B, so the price of imported goods increase and quantity imported decrease, and total expenditure decrease due to elastic demand.

the balance of payments will improve, as the value of exports will increase and the value of imports will decrease. The current account will improve.

(c) The invisible trade balance would improve. As devaluation makes foreign's services are more expensive to domestic residents and domestic services become cheaper to foreign consumers, so the invisible trade balance improved.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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)

5(a) The new tax do not follow the equity principles of taxation by Adam Smith, as the tax is not proportional tax, the tax rate with the capital gains.

The new tax follow the convenience principle of taxation by Adam Smith. As the new computer system is convenient for taxpayers to pay tax, to reduce their cost for pay tax.

cb) This is a positive statement, because it may be justify by the market information.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

W-

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)

(c) By quantity theory of money, $MV = PY$

M is the Nominal money supply

V is the velocity of circulation money

P is the general price level

Y is the output level

V is assumed to be constant, when amount of goods and services produced is growing faster than money supply, the P would be decrease to maintain the increase in $Y >$ Increase in M , So the general price level is decrease imply deflation.

(b) The real interest rate = Nominal interest rate - inflation rate

When deflation is expected,

the real interest rate = Nominal interest rate + deflation rate

∴ So the real interest rate $>$ the nominal interest rate

As the deflation rate is positive when deflation occurs.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

2 4
1 3

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) Unit Cost of Country E produced a unit of Rice = $\frac{20}{10} = 2T$
 Unit Cost of Country F produced a unit of Rice = $\frac{15}{5} = 3T$
 $3T > 2T$

So Country E would export the rice while Country F import.

Gain of Country E from trade = TOT - unit cost of a rice
 $= 2.2T - 2T = 0.2T$

Gain of Country F from trading 1 unit of rice
 $= \text{Unit cost of a rice of Country F} - \text{TOT}$
 $= 3T - 2.2T = 0.8T$

(b) While $10 > 5$ and $20 > 15$, it showed that Country E have absolute advantage in both rice and toys. However, there is still a gain from trade for both country in part (a), so the statement given is correct.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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 = $\frac{1000}{4000} = 0.25$

(b) New reserves = $\$[1000 + (4000 - 400)]$ million
 $= \$1600$ million

Maximum Deposits = $\$ \left(\frac{1600}{0.25} \right)$ million
 $= \$6400$ million

Maximum change in money supply
 $= \text{Maximum money supply after deposits cash} - \text{original money supply}$
 $= \$ (400 + 6400) \text{ million} - \$ (1000 + 4000) \text{ million}$
 $= \$ (6800 - 5000) \text{ million}$
 $= \$1800 \text{ million}$

END OF SECTION A

Answers written in the margins will not be marked.

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.
-----------	--

- (a) Refer to Example 1. Tertiary
- (i) In which types of production did the villagers engage after the introduction of the campaign? Explain. occupational mobility (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.
-----------	---

- (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) Primary production and tertiary production. Because the hostels set up to serve traveller as a services. And farming is producing raw materials, so villagers engage both primary production and tertiary production after the introduction of the campaign.

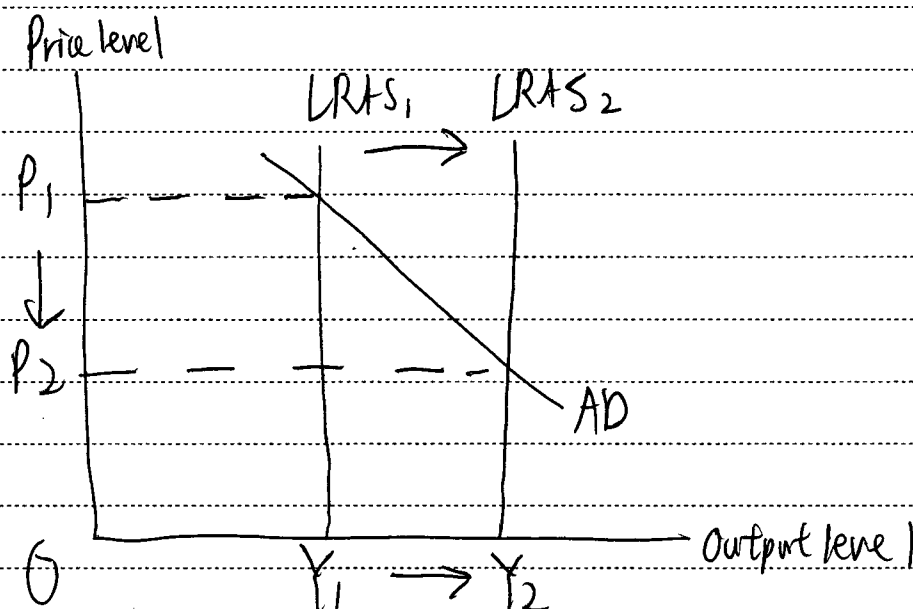
(ii) The occupational mobility would increase. As now the villager could choose whether continue farming or working in hostels, the working choice available is widen.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

C60



When funding is given, private firms is invited to develop hydroelectric power plants; the long run aggregate supply of these six provinces would increase, the price level decrease from P_1 to P_2 , while the aggregate output increase from Y_1 to Y_2 .

Answers written in the margins will not be marked.

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) When some restaurant in shopping malls find their businesses increase sharply when the malls broadcast Olympic events. And the restaurants haven't pay the compensation to the organizer held Olympic events. There would be a divergence between private and social benefits.

(b) The restaurant could paid compensation to the organization held the Olympic events.

(c) Division of labour. Because could assign the right person to do the right thing, and saves time; shifting between different work.

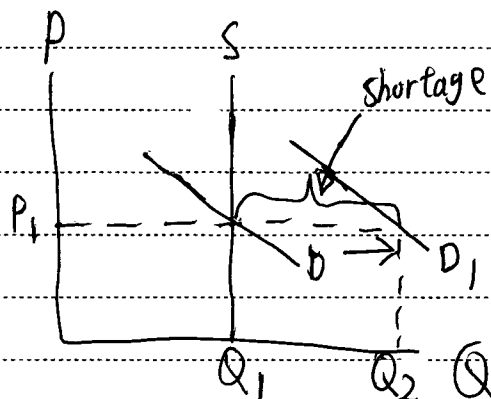
Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

(d) Because the employers of professional athletes want to encourage athletes to win gold medal with prize money.

(e)



When whenever an athlete wins gold medal in a certain sport, it attracts more people to start learning that sport. It increases the demand of the course in the sport. Given the fixed price and number for those courses, there is a shortage on those courses in that sport and the long queues registering for courses in the sport occurs.

(f) No, because the opportunity cost is the highest value option forgone, in this case the opportunity cost is the studies of professional athlete, so the average income increase has no effects on the value of the studies forgone by professional athlete.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

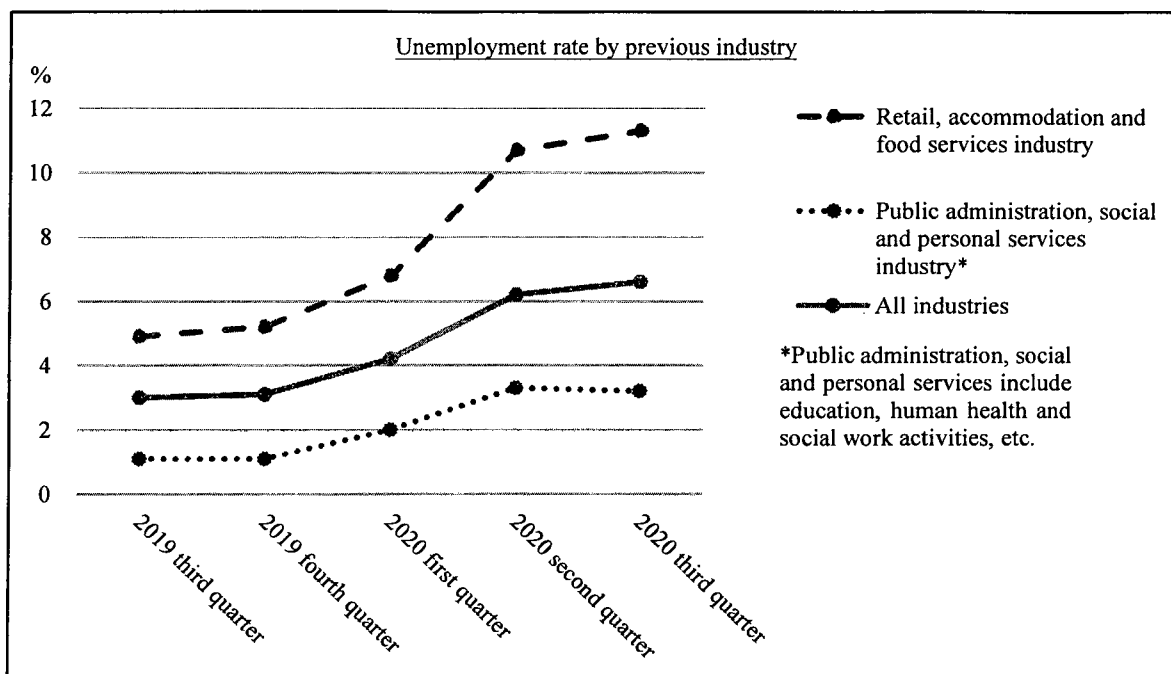
Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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 	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




Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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)

Median
Store in value

heterogeneous

homoge

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 <u>sum of money</u> using the <u>same mechanism</u> as the existing Consumption Voucher Scheme.
Scheme H	Spend the <u>sum of money</u> 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) Recession. The inflation rate was decreasing.

(1) Because the demand of retail, accommodation and food services industry is lower than the demand of public administration, social and personal services industry during pandemic.

(b) Wouldn't. Because, the Consumption Voucher Scheme would be used on consumption by permanent residents and new arrivals aged 18 or above, so the Consumption Voucher Scheme not included in government consumption expenditure.

(c) They provide heterogeneous services, the public transportation with the above payment facilities installed is different while perfectly competitive is homogeneous.

There are non-price competition. As they provide different promotions to consumption while there is no non-price competition in perfectly competitive market.

(d) Because the consumption vouchers is not a medium of exchange. It could only used in Hong Kong but not in the world.

The consumption vouchers can't store in value, as there are deadlines for using them.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

(e) On the Objective 1:

Scheme C have no effect on relieve unemployment rate while Scheme H could relieve unemployment rate in an industry severely affected by pandemic, i.e. by building the hospital. Unemployment rate = $\frac{\text{unemployed population}}{\text{Labour force}} \times 100\%$, Scheme H reduce unemployed population while have no effect on labour force, so Scheme H could relieve unemployment rate in an industry severely affected by the pandemic, i.e. the construction industry. So the government will prefer Scheme H on the objective 1.

On the Objective 2:

Scheme C have no effect on increase average labour productivity as labour productivity and distributed money are unrelated. While Scheme H could increase the average labour productivity, labour productivity = $\frac{\text{Total output}}{\text{Number of labour}}$, all the industry is affected so the total output and number of labour is low, The Scheme H could increase labour productivity by hire construction workers and hiring additional medical staff to increase the total output. So the government would prefer Scheme H on Objective 2.

On the Objective 3:

In short run, both Scheme increase aggregate output. In short run, Scheme C can increase private consumption expenditure by distributed money, it increase the aggregate demand, and leads to increase in aggregate output. Scheme H could increase government consumption expenditure by building a hospital and hiring more medical staff. Then the aggregate demand increase and aggregate output increase. However, only Scheme H could increase aggregate output. As Scheme C only increase aggregate output, which only increase aggregate demand, and won't increase aggregate output in long run. But for

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Scheme H, it increase the long run aggregate supply as building a new hospital would increase construction in Hong Kong. So the aggregate output in long run would increase due to Scheme H.

<

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Handwriting practice area with horizontal dashed lines.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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.

Answers written in the margins will not be marked.

Supplementary Answer Sheet

Question No. _____

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Level 4

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, Mary can have wider sources of capital, such as issue bonds.

For disadvantage, Mary's company may have higher risk to be taken over.

(b) Purchasing diseconomies. Mary's bulk purchases are over-sized to purchase and increase the production 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)

For demand-side = Cost are charge per order but not difference riders or walkers has different price. So customers expect faster services. As a result, they will chose rider

For supply-side = Riders are using motorbikes and their time can be lower cost will be lower. Walkers are using more time in walking. So the time cost of riders is lower, resulting in a lower production cost, and more supply. [cause the rider's time is faster than walkers]

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

3. Refer to the following data about Country A.

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

- (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)

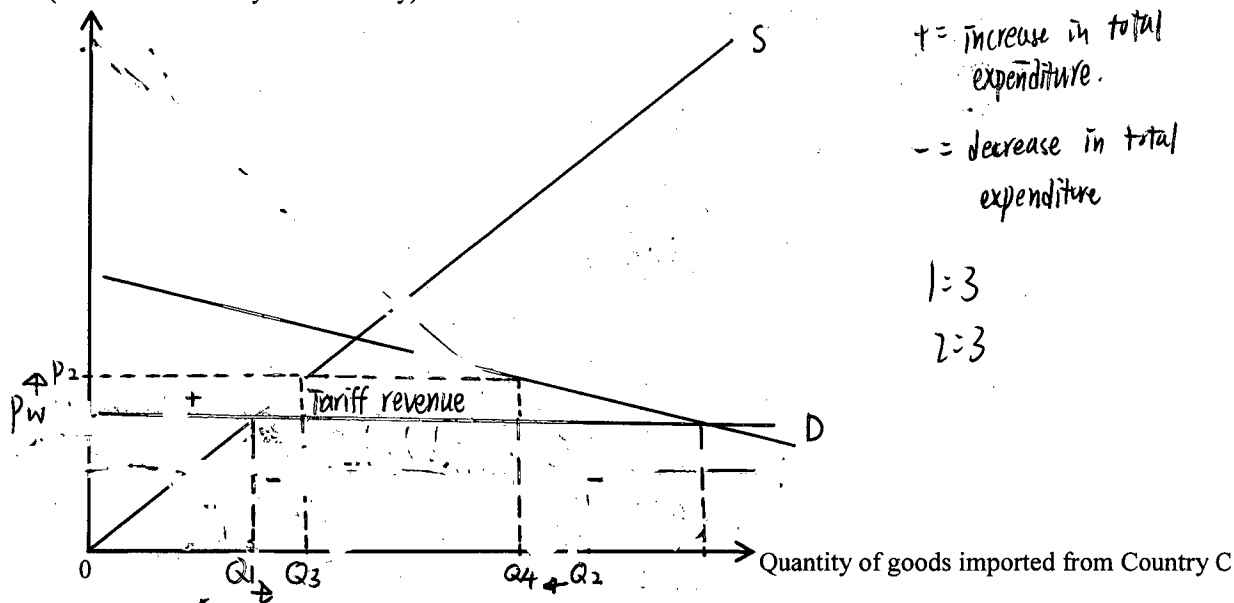
(a) First, the low income group may have lower income and higher income group generates higher income. The living standard of low income group are over-estimated. Second, the price level ^{increase} percentage may higher than the disposable income increase percentage. Their real income may decrease and cannot buy as many goods as in before.

(b) Improved. Impose progressive 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) ^{Dep} "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

Price (in terms of Country B's currency)



(a) When they imposed tariff, the import volume decrease. price increase and import decrease.

When demand is elastic, percentage increase in price is smaller than the percentage change in quantity, the total expenditure decrease.

(b) When the country B's currency depreciate, Country C's goods in terms country C's currency unchanged, but in terms of country's B currency increase, they will choose to decrease import from Country C as the price increase. The total expenditure decrease. And when

the demand is elastic. Percentage increase in price is smaller than the percentage decrease in quantity. The total expenditure decrease.

Country B good!

(c) When there is depreciation, the price of Country B's goods in terms of Country C's currency is lower, more visitors will come to Country B, it will increase invisible trade, resulting in trade surplus.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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) In equity, the tax should be according to taxpayer's ability. As it is progressive tax, it violates equity. (Tax rate increase when taxable income increase.)

In convenience, the tax should be convenience to taxpayers. During the above cases, it allowed tax payers to check and pay the amount online easily. So it illustrates.

(b) Normative. Because it is not refundable by fact and contain value judgement.
Statement

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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. $M = P \cdot Y$ (4 marks)
- (b) 'If deflation is expected, the real interest rate will be higher than the nominal interest rate.' Why? (2 marks)

(a) First, $MV = PY$, M equal to money supply, V is velocity of circulation of money, P is price level, Y is real output. As V is remain constant in short run, The real output's increase in percentage is higher than the money supply's increase percentage. The price, need to be decreasing and match the concept of when money supply increase, the nominal ^{level} output increase the same percentage.

(b) $N = I + R$, N is nominal interest rate, i is inflation rate, R is real interest rate, when the deflation is expected, the inflation rate should be negative, resulting in real interest rate is higher than nominal interest rate.

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) 1 R = 2.2 Toys

$$\text{Country E's Rice opportunity cost} = \frac{20}{10} = 2 \text{ Toys}$$

$$\text{Country F's Rice opportunity cost} = \frac{15}{5} = 3 \text{ toys}$$

i.e. Country E's opportunity cost < Country F's opportunity cost,

Country E export, Country F imports.

$$\begin{aligned} \text{Country E gain from trade} &= 2.2 - 2 \\ &= 0.2 \text{ toys} \end{aligned}$$

$$\begin{aligned} \text{Country F gain from trade} &= 3 - 2.2 \\ &= 0.8 \text{ toys.} \end{aligned}$$

and it only calculates the opportunity cost.

- (b) As there is comparative advantage, it must exist in one good in each country. Country F has none of absolute advantage but it still has comparative advantages on toys. And it will increase the total world output.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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)

$$(a) \frac{1000}{4000} = 0.25$$

$$(b) \text{ Required reserve ratio} = 0.25$$

$$\text{Reserves} = 1000 + (1000 - 400) = 1600$$

$$\text{Deposit} = \frac{1600}{0.2} = 8000$$

$$\text{Old money supply} = 1000 + 4000$$

$$= \$5000 \text{ million}$$

$$\text{New money supply} = 400 + 8000$$

$$= \$8400 \text{ million}$$

$$\$8400 - \$5000$$

$$= \$3400 \text{ million}$$

∴ Increase \$3400 million.

END OF SECTION A

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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.
-----------	--

- (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)

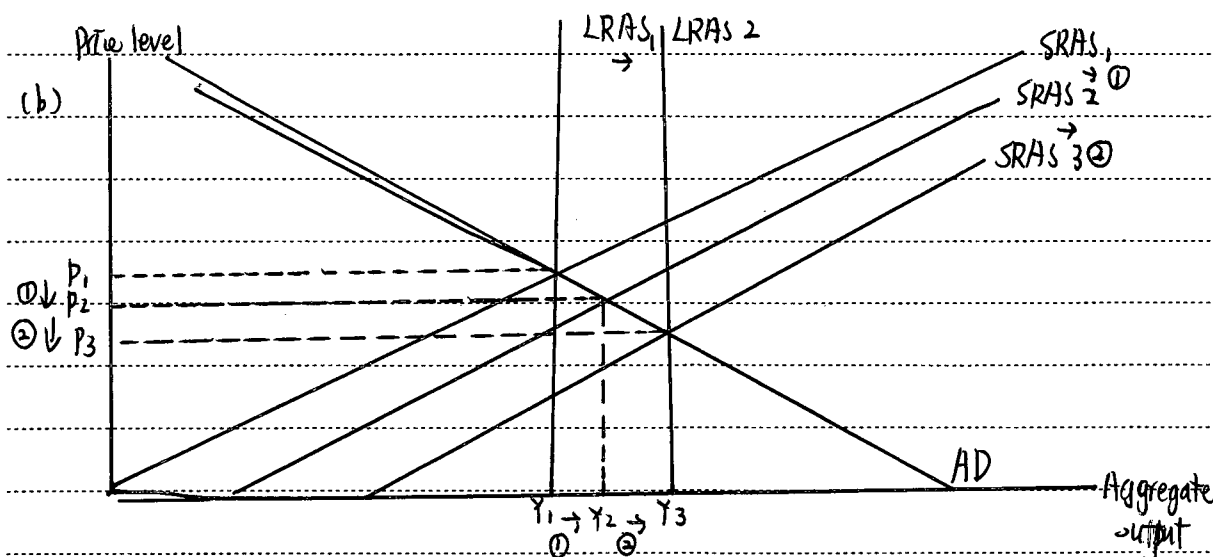
Example 2	The government provided funding and invited private firms to develop hydroelectric power plants in six provinces (such as Hubei and Jiangxi). Such development would help improve transportation, irrigation and flood prevention in the rural villages in these provinces.
-----------	---

- (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) Tertiary Production. They provides hostels services to travellers.

Primary production. They extract natural resources (farming) after introducing the campaign.

(ii) Labour mobility increase. As they have other jobs, such as = waiters, their cost of being farmers to another job decrease.



Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

As they improve the transportation, it can improve productivity. Long Run aggregate supply and short run aggregate supply increase. Price level will increase and aggregate output increase. Deflationary gap exists.

In the long run equilibrium, there will be excess demand, since the price cannot fully adjust, the real production cost decrease, the firm will choose to produce more. The short run aggregate supply increase. Price level increase and ^{use more factor} aggregate output increase.
long run

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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) When the mall are broadcasting Olympic Games freely, the visitors can watch the Olympic Games and more people go to ^{mall}. The social benefit will be larger than marginal private benefit, resulting in divergence. (and the ^{margin} restaurant will gain without compensation.)

(b) The restaurant should pay fees to the shopping malls to reduce the divergence.

(c) Division of labour.

First, they can save of walking time. Such as: checking bodies in special room or training in gym room. They can specialise in their stage and focus, increase the productivity.

Second, they can practise makes perfect. They can specialise in which they are

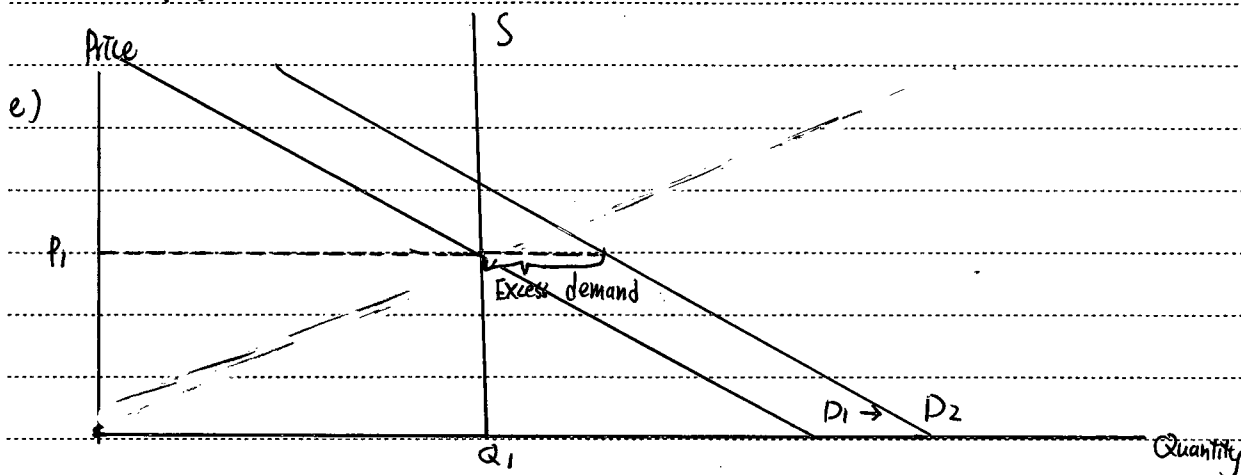
Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

good at. After practises, they can do their job in fuster and effective way. Resulting in increasing productivity.

d) Because it can increase ^{employees} working incentive. Athletes will like to get commission and play harder to win the competition.



As they got gold medal, more people want to learning sports, demand increase, as the services of sport courses ^{and price} are fixed, the quantity remain unchanged. They have to involve non-price competition, such as = queueing. So it (There is excess demand exist) causes a long queue.

(f) Remain unchanged. The highest-valued option forgone which is giving up their studies remain unchange. So it does not change.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

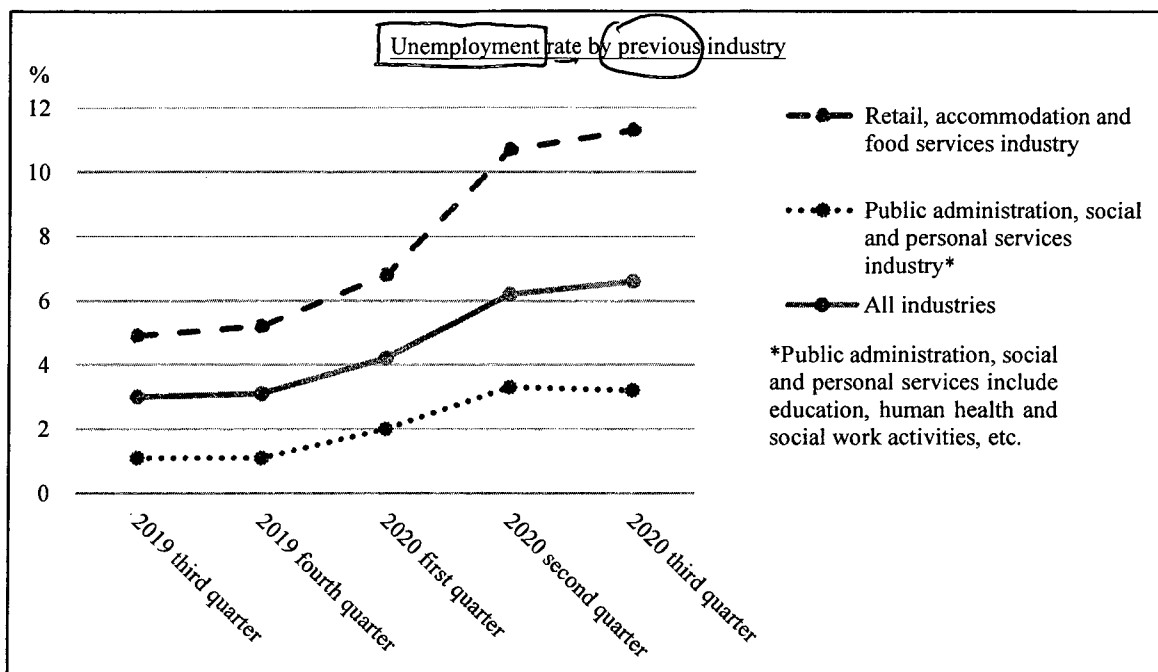
A large rectangular area with horizontal dashed lines for writing answers.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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




Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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. ①, ④
Scheme H	Spend the sum of money on building new hospitals and hiring additional medical staff. ②

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:

The growth rate of GDP is decreasing

(ii) Retail, accommodation and food services are tertiary production. They relies on visitors. However, the administration, social and personal services are focus on local people. When pandemic, the lose of visitors bring to higher employment of former, cause their profit are lower.

(b) No. As it does not involve production. the government consumption expenditure will not increased.

(c) First, they are selling heterogenous services. They have different place to use the stored value facilities. Such as= Alipay HK used in many places. But wechat pay hk none of them can use

Second, they are involved price competition. They will provide different discount, such as= Alipay HK provide 5 e-coupons and Octopus have \$18 stored of valued, they have price and discount for customer.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

(d) First, it is more generally accepted. Cash can be used in different places such as insurance, but coupons only use in local with a lot of limitation (no insurance, pay tax, charges). So that cash is more generally accepted and be the medium of exchange.

Second, cash can be more showing the function of standard of payment. As coupons have a deadline and the coupons will cancell. Good can be future payment in terms of cash but coupons can't. So it is better in cash.

(e) There will be different effect and different prefer in each objective.

In terms of relieve of unemployment, policies C will get a better relieve of unemployment. Policies C giving coupons to Hong Kong people. It encourage Hong Kong people consume as it has a maturity date. As more people are going out and consume. Shops will need more employees to support the customers. There will be people to be employed. In Source A, Retail, accommodation and ^{increasing} food services industry has a higher percentage of unemployment. So when the scheme are keeping, the employment (And limitations to consume locally) will increase and relieve the unemployment. However, Policies D, it aims at medical services. They build infrastructure and it can increase employment of construction industry and employ more medical staffs. The unemployment rate are much lower than food services. In Source A, an unemployment rate of food services is higher than average. So that it can relieve more unemployment in Scheme C.

In terms of average labour productivity, Scheme C can increase the productivity. As the labour productivity is $\text{Total output} \div \text{total working of man-hour}$. Scheme C can increase more rapidly. As they released coupons, more people to consume, some shops are close during pandemic they will reopen the shops to attract customers, there will be more employers to hired employees. They will be increase in people of ^{or open longer} employed and time to open. Then it can increase the labour productivity and as more people consume more output will needed. However, Scheme D is less effect on labour productivity. As they give money to build hospital. There is still need a lot of time to produce. The productivity of increasing cannot show it immediately. So that the increase the labour productivity is lower.

In term of short run aggregate output, scheme C is more suitable. As they released the coupons, more consumers consume in local. In Source D, they cannot direct purchase from outside of Hong Kong. Consumers have to consume in local. They will increase the private consumption expenditure, aggregate demand

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Increase, the short run aggregate output increase. However in Scheme D, they are building infrastructure, it can increase government expenditure. It may not build within one year and it may have some construction are not produced in Hong Kong and import. The aggregated demand will increase but smaller than Scheme D, the aggregate output will smaller than Scheme C.

In terms of long run aggregate output, Scheme D will be more suitable. As it build infrastructure of Hong Kong, the productivity will increase. In long run, the potential output increase. Long run aggregate supply increase, long run aggregate output increase. However, in scheme C, there is only immediate effect on aggregate demand and short-run aggregate supply. The coupon also have maturity date. They cannot use the coupons to consume after deadline. So there will be not effect in scheme C.

In conclusion, there will be different effect in different objectives of each policies.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

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.

Answers written in the margins will not be marked.

Supplementary Answer Sheet

Question No. _____

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.

Answers written in the margins will not be marked.