# Marking Schemes

Paper 1

Question No.	Key	v	Question No.	Ke	y
1.	С	(85%)	26.	D	(56%)
2.	В	(73%)	27.	D	(67%)
3.	Α	(67%)	28.	C	(49%)
4.	C	(60%)	29.	D	(39%)
5.	D	(67%)	30.	A	(74%)
6.	В	(56%)	31.	В	(65%)
7.	A	(61%)	32.	C	(60%)
8.	C	(81%)	33.	В	(60%)
9.	D	(82%)	34.	В	(50%)
10.	A	(46%)	35.	Α	(41%)
11.	С	(60%)	36.	В	(88%)
12.	C	(58%)	37.	A	(50%)
13.	D	(62%)	38.	A	(54%)
14.	В	(51%)	39.	D	(48%)
15.	D	(55%)	40.	A	(31%)
16.	В	(48%)	41.	С	(26%)
17.	A	(71%)	42.	D	(29%)
18.	C	(26%)	43.	C	(67%)
19.	C	(58%)	44.	В	(58%)
20.	A	(57%)	45.	Α	(53%)
21.	В	(69%)			
22.	D	(61%)			
23.	В	(49%)			
24.	A	(53%)			
25.	D	(53%)			

Note: Figures in brackets indicate the percentages of candidates choosing the correct answers.

## Paper 2

These documents were prepared for markers' reference. They should not be regarded as sets of model answers. Candidates and teachers who were not involved in the marking process are advised to interpret their contents with care.

The answers provided in the marking scheme are for reference only. They are not the only possible answers. Alternative answers are acceptable so long as they are well reasoned.

The examination emphasises the testing of the understanding of economic theories and the application of the knowledge of economic analysis to practical problems. Candidates are advised to study this document in conjunction with the examiner's comments on candidates' performance in this booklet.

For essay-type questions, candidates are expected to demonstrate an understanding of the question, an ability to deploy relevant knowledge of the subject in response to the questions, and to present their answers logically and coherently.

In questions asking for a specified number of reasons or examples etc. and a candidate gives more than the required number, the extra answers should not be marked. For instance, in a question asking candidates to provide two examples, and if a candidate gives three answers, only the first two should be marked.

## The following symbols are used:

- / A single slash indicates an acceptable alternative within an answer.
- The number in front of the symbol indicates the marks for each point.

max Maximum mark for the question/sub-question

## Section A

1. (a) Disadvantages:

Less job/income stability

Self-provision of capital goods<sup>1</sup>

Tendency to drive fast and ignore road safety

Any other relevant point
 [Mark the FIRST TWO points only.]

@1 max: 2

Marks

(2)

(b) Capital goods, when the riders use them to help further production, i.e. delivery service. OR

Consumption goods, when the riders use them for self-consumption, e.g. playing games.

(c) Law of diminishing returns. When a larger amount of variable factor are continuously added to a given amount of a fixed factor, the marginal product (of the variable factor) would eventually diminish, holding technology constant. In this case, the rider is the variable factor and the firm's operating system is the fixed factor.<sup>2</sup>

When the surcharge is applied equally to long-distance trips and short-distance trips, the price
of the former trips relative to the latter would fall. This would lead to a rise in the proportion
of passengers travelling long distance. As a result, the average travel distance of late-night
taxi passengers would increase.

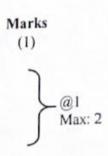
It implies that the rider needs to bear their depreciation costs.

<sup>&</sup>lt;sup>2</sup> The marginal product (MP) of a particular rider may be lowered due to such reasons as traffic jams, over-use of the online system, etc. In other words, there may be a downward shift in the MP curve rather than (or in addition to) a downward movement along the original MP curve.

Vertical backward integration.

## Motives:

- To ensure a steady supply of raw materials
- To diversify sources of income and spread risks
- To make use of its brand name in other products
- Any other relevant point
  [Mark the FIRST TWO points only.]



## 4. Reasons:

- Sellers provide heterogeneous goods, e.g. smartphones with different specifications
- There exists non-price competition, e.g. advertisements
- Market information is imperfect, e.g. information about the performance of the smartphones
- Any other relevant point
   [Mark the FIRST TWO points only.]



5.	(a)	(i) No, because the salary received by Mr Chan was derived from production by a non-resident producing unit (the UK football club) outside Hong Kong.	Marks (2)
		(ii) Yes. As Mr Chan is a Hong Kong resident, the salary he received would be counted as factor income from abroad.	(3)
	(b)	USD, because the exchange rate of USD to HKD, thus the purchasing power of USD in Hong Kong, is more stable under the linked exchange rate. In other words, USD involves lower exchange-rate risk for Mr Chan.  OR  GBP, because GBP is the legal tender in the UK, so he can use GBP directly to buy goods and services during his stay in the UK.	(2)
6.	(a)	Required reserve ratio = (600–300)/1500 = 20%. <sup>3</sup>	(1)
	(b)	New required reserve ratio = 20–5 = 15 (%)	(3)

In real-world practice of monetary policy, adjustment in the required reserve ratio (RRR) is understood as a change in percentage point or basis point (i.e. a level change in RRR) rather than a percentage change in RRR. The following answers are also accepted in case the candidate (mis)understood the 5% reduction in RRR as a percentage change rather than change in percentage point. <sup>5</sup>

New deposit =  $1500 + (600-0.15 \times 1500)/0.15 = 4000$  (\$million)

New money supply =  $4000 + 100 = 4100 \text{ (Smillion)}^4$ 

New required reserve ratio = 20%×(1–5%) = 19% New deposit = \$3157.89 million New money supply = \$3257.89 million

4 Alternative answer with loan as the starting point also deserves full credits when the calculation is consistent with part (a).

<sup>3</sup> Alternative answer with loan as the starting point also deserves full credits.

Teachers are recommended to relay this convention to their students in the future. Actually, this convention also applies to interest rates. For instance, starting from an initial level of 5%, if the central bank cuts the interest rate by 1% (to be understood as 100 basis points), then the new interest-rate level should be 4%.

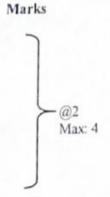
## 7. Reasons:

Not durable, as cigarettes can be easily damaged and cannot be stored for a long time.

 Not homogeneous, as cigarettes do not have uniform physical characteristics. Not portable, as people need to carry a large quantity of cigarettes for high-value

Not divisible, as cigarettes if divided into smaller units would have a fall in total value.

[Mark the FIRST TWO points only.]

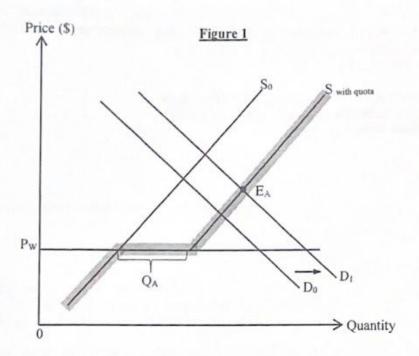


In Country A, the opportunity cost of producing 1W = 10/4 = 2.5 R8. In Country B, the opportunity cost of producing 1W = 6/3 = 2 RRange of terms of trade: 2R < 1W < 2.5R

In Country A, the opportunity cost of producing 1R = 4/10 = 0.4WIn Country B, the opportunity cost of producing 1R = 3/6 = 0.5WRange of terms of trade: 0.4W < 1R < 0.5W

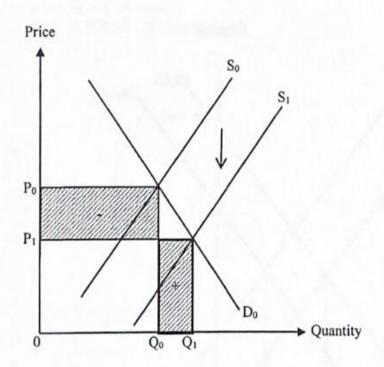
(3)

9.	(a)	Inferior good, as people with less income during recession choose to consume more junk food.	Mark (2)
	(b)	Illustrate in Figure 1:  - correct position of the quota (Q <sub>A</sub> )  - rightward shift of demand curve  - a new kinked supply curve (S with quota)  - correct position of the final equilibrium point (E <sub>A</sub> )	(1) (1) (1) (1)



## Section B

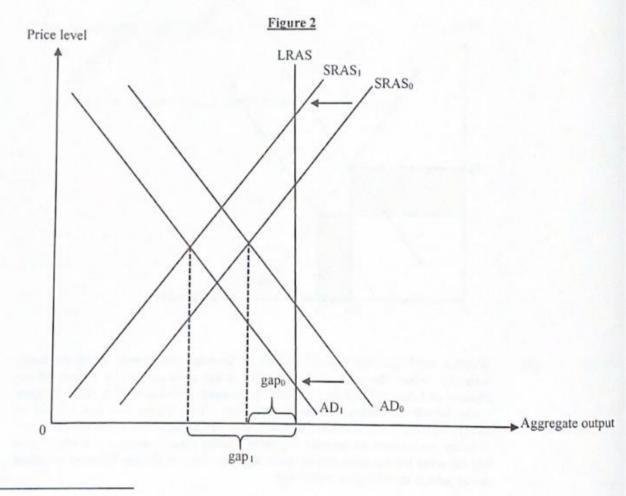
10. (a)	The amount of money spent on buying masks constitutes a higher percentage of income for the low-income group than for the high-income group.	Marks (2)
(b)	(i) No, it is not a free good because it is produced from scarce resources.	(2)
	<ul> <li>(ii) No, it is not a public good because it is rivalrous in consumption, i.e. it cannot be used concurrently by more-than-one persons.</li> </ul>	(2)
	No, it is not a public good because it is excludable, i.e. the owner of a mask can exclude other people from accessing or using his/her mask.	
(c)	Verbal elaborations: The provision of subsidy would result in an increase in the supply of masks. If demand	(4)
	is inelastic, the percentage decrease in price would be bigger than the percentage increase in quantity, so that total expenditure on masks would drop.	
	Illustrate in the diagram:	
	<ul> <li>downward shift of supply curve</li> </ul>	(1)
	<ul> <li>correct positions of the increase in total expenditure (+) and the decrease in total expenditure (-)</li> </ul>	(1)
	<ul> <li>Area of (+) &gt; Area of (-)</li> </ul>	(1)



Wearing mask protects oneself as well as lowering the chance of others being (d) (4) infected. Since the person wearing mask is not compensated by others (whose chances of being infected are reduced), there exists external benefit, with marginal social benefit exceeding marginal social cost. This implies that the number of people wearing mask is below the efficient level i.e. under-consumption of masks. Subsidy can increase the number of people wearing mask towards the efficient level (by lowering the marginal private cost), and thus narrow the gap between marginal social benefit and marginal social cost.

(1)

			Marks
11.	(a)	<u>Verbal elaborations</u> : Deflationary (output) gap refers to the difference between aggregate output $(Y)$ and the full-employment output $(Y_f)$ when $Y$ is below $Y_f$ .	(1)
		Illustrate in Figure 2:  — correct position of gapo	(1)
	(b)	Verbal elaborations: A temporary closure of factories would reduce aggregate supply in the short run. On the other hand, loss of jobs and pessimism would lower consumption (and possibly investment) expenditure and thus reduce aggregate demand. Together, shifts of the two curves would result in a drop in aggregate output (Y). Assuming, for simplicity, no change in long run aggregate supply and thus full-employment output (Yt), then the fall in Y implies a wider deflationary gap. 6	(4)
		Illustrate in Figure 2:  - leftward shift of SRAS curve  - leftward shift of AD curve  - correct position of gap <sub>1</sub>	(1) (1) (1)



<sup>&</sup>lt;sup>6</sup> Whether LRAS would be reduced or not is debatable. Candidates are not required to consider this possibility.

(c) The central bank could use open-market purchase (i.e. buy government bonds from the public) to increase money supply. Then, the interest rate would fall, thus inducing firms to invest more, implying an increase in aggregate demand. As a result, aggregate output (Y) would rise in the short run, but long-run output (Y<sub>f</sub>) would remain unchanged, so that the deflationary gap (= Y-Y<sub>f</sub>) would become narrower. Marks

(4)

12. (a) Costs of child-raising increase because

(2)

education and accommodation costs have increased over the past three decades. OR

the average wage income of female workers (i.e. the moms' opportunity cost of raising children) has increased.

(b) Reasons:

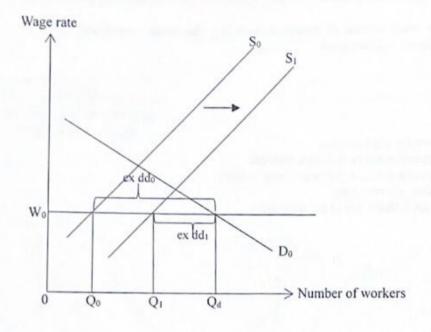
More people retire earlier.

More people become full-time students.

More people become full-time home-makers.

 Any other relevant point [Mark the FIRST TWO points only.] @1 Max: 2

		Marks
(c)	Verbal elaboration: Initially wage rate is below its equilibrium (market-clearing) level, so shortage or excess demand for labour arises. Importation of workers would increase labour supply, but not enough to eliminate the shortage. Though fewer than before, vacancies (excess demand) would still exist.	(3)
	Illustrate in the diagram:	
	- correct position of W <sub>0</sub>	(1)
	<ul> <li>correct position of initial excess demand (ex dd<sub>0</sub>)</li> </ul>	(1)
	<ul> <li>rightward shift of supply curve</li> </ul>	(1)
	- a smaller excess demand (ex dd <sub>1</sub> )	(1)



(d) Export of services would rise, as the imported workers' family members might come to visit them in Hong Kong and spend money on tourist items, transportation, etc.

OR

Current transfer would drop, as the imported workers might remit part of their income to their home country.

(e) Marks award for effective communication (EC: may 2 r

Marks	Performance
2	<ul> <li>Support arguments with the source/data and appropriate economic theories.</li> </ul>
	<ul> <li>Present relevant material.</li> <li>Present well-organised and coherent answers without repetition of ideas.</li> <li>Use language that expresses ideas clearly and fluently with appropriate use of words/terms/symbols.</li> </ul>
1	<ul> <li>Present arguments with some support of the source/data and economic theories.</li> <li>Present some irrelevant material.</li> <li>Present answers in a less organised way with some repetition.</li> <li>Use language that conveys a clear message with some inappropriate use of words/terms/symbols.</li> </ul>
0	<ul> <li>Present arguments with no support of the source/data and economic theories.</li> <li>Present material unrelated to the gist of the question.</li> <li>Present inconsistent arguments.</li> <li>Express limited ideas with inappropriate use of words/terms/symbols.</li> </ul>

The maximum mark for content is 12 marks

Answers may include the following:

## Aggregate output 7

#### Strategy I:

In the short term, given the cash granted by the government, some parents may choose to work less or even quit their jobs so as to take care of their babies. The result is a smaller labour force and a decrease in short run aggregate supply, which would have a negative impact on aggregate output. On the other hand, making use of the extra childcare service provided by the government, some other parents may re-enter the job market. The result is a bigger labour force and an increase in short run aggregate supply, which would have a positive impact on aggregate output. Overall, therefore, the effect on short run aggregate supply and thus aggregate output in the short term is uncertain.

In the long term, long run aggregate supply would rise as the grown-up kids leave school and join the labour force, so that aggregate output would increase as well.

The importation of workers would increase both short run aggregate supply and long run aggregate supply, so that aggregate output would rise in both the short and long runs.

## Evaluation:

In the short term, Strategy II is better than Strategy I in raising labour supply and aggregate output because imported workers can start working and contribute to production (by fulfilling the need in specific sectors) in Hong Kong instantly.

In the long term, however, Strategy I may be better than Strategy II because local workers are a more stable source of labour supply. High-skilled foreign workers might have a higher geographical mobility and only work in Hong Kong temporarily. Besides, there is no guarantee about the availability of foreign workers with skillsets that fit exactly the needs of specific sectors in Hong Kong. Tailor-made education/training programs for local workers would provide better skill-matching in this regard.

For simplicity, we have abstracted from possible effects of higher fertility (Strategy I) and importation of workers (Strategy II) on aggregate demand via an increase in population. Credits were given to those who correctly pointed out such effects.

## Government expenditure

Strategy I:

In short term, providing extra childcare would drive up the government consumption expenditure, while providing extra cash to parents would increase its transfer payment. In long term, the increase in population increase would rise the demand for education and public medical services, and thus government expenditure. On the other hand, grown-up children may take care of their parents, so that the government may consider reducing welfare payments to the elderly.

Strategy II:

The government may need to hire more officers to handle the applications of foreign workers and thus incur higher administrative costs. But such costs should be insignificant relative to other components of government expenditure.

Evaluation

Strategy II may be better than Strategy I as it may have no significant effect on government expenditure.

## Average labour productivity

Strategy I:

In the short term, newborn babies and children are not yet ready to join the labour force, so that they would not affect labour productivity.

In the long term, labour productivity depends crucially on the education and training of the new, younger generations relative to the older generations. For families with limited resources, an increase in the number of children means that each child can only get a smaller share of such resources, including parental care and education. Average labour productivity would fall as a result, unless the government is willing to invest more and more in education to improve the knowledge and skills of the new generation over time.

Strategy II:

It depends on the ratio of high-skilled workers to low-skilled workers. According to Source D, for imported workers, the numerator was much bigger than the denominator. Labour productivity would rise when the proportion of high-skilled imported workers exceeds the proportion of high-skilled local workers.

#### Evaluation:

Strategy II may be better than Strategy I in raising labour productivity as the government could simply choose to import more high-skilled workers.

### (f) Strategies:

- Increase the retirement age to allow more old-aged workers to continue working full-time.
- Provide transportation subsidy for the retired and the home-makers so that they can fill up job vacancies in different areas.
- Any other relevant point.
   [Mark the FIRST points only.]

≻ @2 Max: 2

This 'falling productivity' result is simply a reflection of the law of diminishing returns.