Public Assessment

HKDSE Econ 2018 live paper

Oct/Nov 2018

Live papers

- Paper 1:
- On compulsory part of the curriculum
- Answer all questions
- 45 multiple choice questions
- Account for 30% of the subject marks
- 60 minutes

Live papers

- Paper 2 section A:
- On compulsory part of the curriculum
- Short questions
- All questions are compulsory
- 9 short questions
- 50 marks
- Account for 30% of the subject marks
  - From 2019 total mark for section A: 44 marks (26 % of the subject marks)

Live papers

- Paper 2 section B:
- On compulsory part of the curriculum
- Structured/essay-type questions
- All questions are compulsory
- 4 structured questions
- 54 marks
- Account for 31% of the subject marks
  - From 2019 total mark for section B: 60 marks (35% of the subject marks)

Live papers

- Paper 2 section C:
- On elective part of the curriculum
- Structured/essay-type questions
- Attempt questions on ONE elective only
- 2 structured questions
- 16 marks each
- Account for 9% of the subject marks
- In 2015-2018 Exam: Total time is 2 hours 15 mins
  - From 2019, Total time: 2 hours 30 mins

Paper 1

- Number sat: 13,876

- Overall mean score of 2018:

28.0 out of 44 questions

= 63.7%

- Overall mean score of 2017

= 63.9% (28.7)

Paper 1 Q15

The average waiting time for public housing is 4.7 years according to the data from the Housing Authority. Which of the following would lead to an increase in the waiting time for public housing in the long term?

A. a financial aid offered to low-income families renting private residential flats   (6%)
B. a rise in the income limit of applying for public housing   (47%)
C. a relaxation of rules regulating the change of land use   (36%)
D. a provision of shared-housing units by a billionaire for the applicants of Comprehensive Social Security Assistance Scheme   (11%)

Paper 1 Q40

A Hong Kong resident works for a Mainland company located in Shenzhen and he earns a monthly wage. He receives dividend from Hang Seng Bank and rental income from a leased apartment in Mongkok as well. He took a flight to Seoul departing from the Hong Kong International Airport last month.

Which type(s) of direct tax does he need to pay in Hong Kong?

(1)   property tax

(2)   profits tax
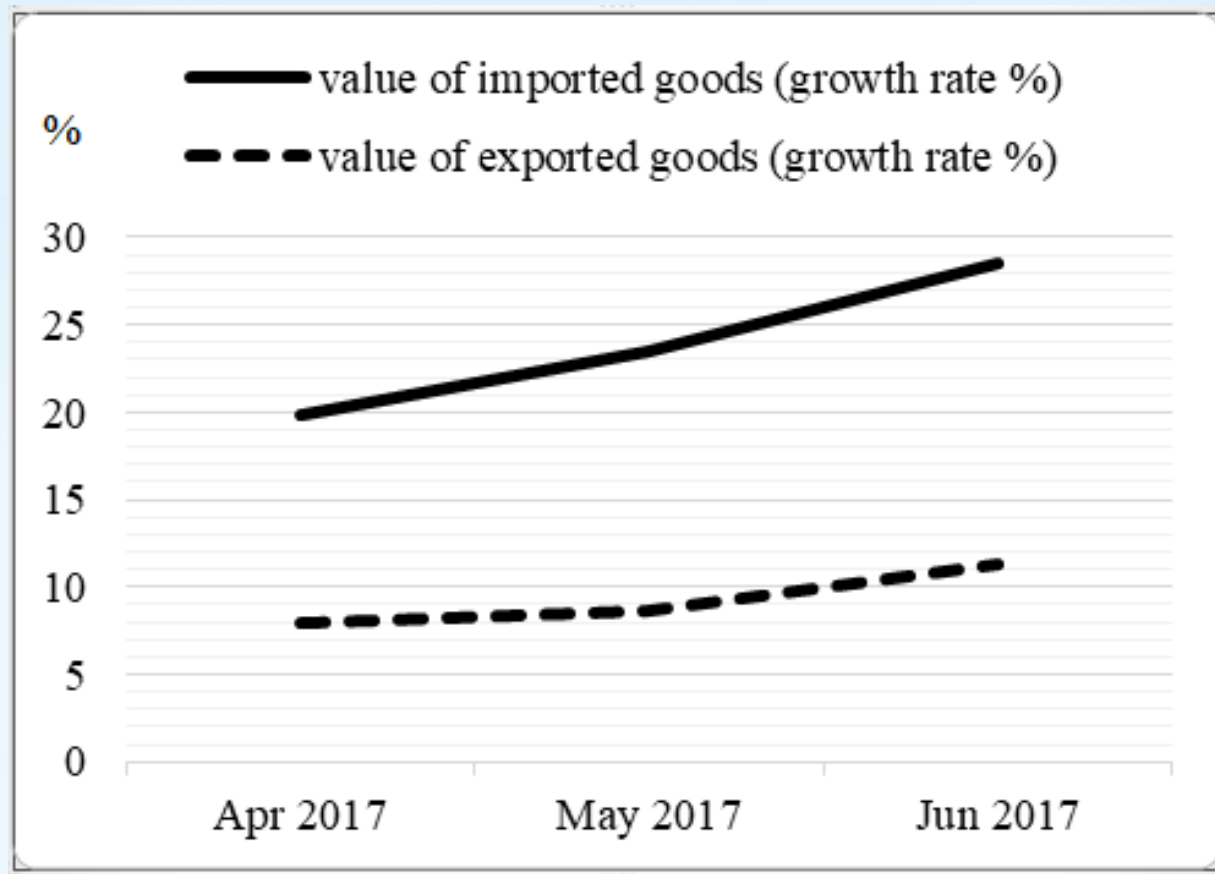
(3)   salaries tax

(4)   air passenger departure tax

A.   (1) only   (24%)
B.   (1) and (4) only   (58%)
C.   (1), (2) and (3) only   (9%)
D.   (2), (3) and (4) only   (9%)

Paper 1 Q42 (deleted)

The diagram below shows some trade data of Country A in the second quarter last year.

Paper 1 Q42 (deleted)

Country A reported a trade surplus during that period. Based on the given information, we can conclude that during the second quarter last year,

A. the trade balance was in deficit.
B. the volume of imported goods increased faster than that of exported goods.
C. the visible trade surplus decreased. ← may not be correct*
D. the current account deficit increased.

*consider: initial value of exports is much greater than that of imports

Deleted as it did not effectively assess candidates' knowledge and understanding of trade balance.

Paper 1 Q44

The Hong Kong Tourism Board organised the E-sports and Music Festival in summer 2017. Foreign E-sports players and K-pop superstars participated in the festival and they attracted locals and tourists from other parts of the world to attend the event. Organising the festival will lead to

(1)   an increase in private consumption expenditure in Hong Kong.

(2)   an increase in export of services in Hong Kong.

(3)   a decrease in balance of payment deficit in Hong Kong.

     A.   (1) and (2) only   (46%)
     B.   (1) and (3) only   (8%)
     C.   (2) and (3) only   (8%)
     D.   (1), (2) and (3)   (38%)

Paper 1 Comments

○ Time: 45 MCQs in 60 mins

➔ Sufficient time

Candidates are weaker in

- Data interpretation⬅

- Application of formula for calculation

- Integration of topics

- Macroeconomics

- Social/economic issues

Paper 2

- Number sat : 13,848
  Overall mean score in 2018: 56.9%

- Overall mean score in 2017: 55.9%

- Overall mean score in 2016: 55.3%

Paper 2 Marking

- Onscreen Marking System (OSM)
- Scanned images
- Markers mark in Assessment Centres
- Section A1, A2, B1, B2, C
- Each marker marking 16-27 marks
- → 300 to 600 scripts
- Increase reliability

Paper 2

- Welcome the Assistant Examiners to comment on candidates' performance by Section:
- Section A1: (Q1, 2, 4, 5, 8)
- Section A2: (Q3, 6, 7, 9)
- Section B1: (Q10, 13)
- Section B2: (Q11, 12)
- Section C: (Q14, 15)

Paper 2 Section A1 (Q1, 2, 4, 5, 8)

Q1

Although air ticket fares and hotel rates are usually higher during holiday periods, many people still travel abroad. Explain, in terms of opportunity cost, why it is not necessarily more expensive for travellers to travel abroad during holiday periods than non-holiday periods. (3 marks)

Q2

Last year, Peter operated a sole proprietorship. Recently he invited Paul and Mary to form a partnership to expand the business to other markets.

(a) Suggest TWO reasons why Peter switched his firm's form of business ownership for expansion.   (2 marks)

(b)Mary has invested in the firm but would not take part in its management. To what type of factor of production does Mary belong? Explain your answer.   (2 marks)

Paper 2 Section A1 (Q1, 2, 4, 5, 8)

Q4
Apart from the difference in education level, explain TWO factors that may lead to income inequality. (4 marks)

Q5
During peak flu seasons, there is not enough medical staff in public hospitals in Hong Kong.

a) An economist stated, 'Even if the government sharply increases the wage rates of the medical staff, it is still difficult to relieve the problem.' Justify his statement using the concept of elasticity of supply / demand. (3 marks)

b) In order to relieve the pressure of the medical staff, the government plans to recruit retired medical staff to re-join the public hospitals. Explain how the measure would affect the unemployment rate in Hong Kong. (4 marks)

Q8

Suppose the labour requirement for the production of toys and clothing in China and Japan is as follows:

	1 unit of toys	1 unit of clothing
China	10 man-hours	2 man-hours
Japan	8 man-hours	4 man-hours

a) Calculate the opportunity costs of producing one unit of toys for China and Japan respectively.(2 marks)

b) State the principle of comparative advantage. According to this principle, explain which country would export toys.   (3 marks)

c) Suppose the transportation cost per unit of toys traded is 0.1 units of clothing and has to be shared equally by both countries. Find the range of terms of trade over which exchange between both countries is mutually beneficial.   (2 marks)

Paper 2 Section A1 Report

Q.	Highlight of the comments
1	• Failed to mention higher monetary costs • Failed to compare the monetary costs and the time costs for the two situations
2	• Wrongly stated making business decisions as reason
4	• Only gave some terms without elaboration: e.g. sex/racial discrimination • Failed to state the directions of the effect: e.g. taller people, higher income on average

Paper 2 Section A1 Report

Q.	Highlight of the comments
5	• Mixed up Es with Ed • Wrongly discussed the change in TR • Failed to express in terms of %
8	• Inaccurate unit • Missed some keywords: lower opportunity cost • Only got half of the inequality correct • Wrong direction (reversed)

Paper 2 Section A2 (Q3, 6, 7, 9)

Q3
Shenzhen has become China's 'Silicon Valley'. The headquarters of many high technology firms such as Tencent (騰訊), Huawei (華為) and BYD (比亞迪) are located there. Explain TWO external economies of scale high technology firms may enjoy in Shenzhen. (4 marks)

Q6
The government proposes the following changes in the profits tax system.

Profit	Existing system	New two-tier system
On the first $2 000 000	16.5%	8.25%
Remainder		16.5%

a) Would the above changes in tax system necessarily result in a drop in profits tax revenue? Explain. (4 marks)

b) Evaluate the above changes in the tax system in terms of ONE principle of taxation put forward by Adam Smith. (2 marks)

Q7

(a) The following is the balance sheet of a banking system.

Assets ($ million)		Liabilities ($ million)	
Reserves	500	Deposits	2 000
Loans	1 500		

Initially the banks held $100 million excess reserves and the public held $100 million cash. Suppose the central bank buys $40 million worth of government bonds from the public.

(i) Calculate the new monetary base. Show your workings.(2 marks)

(ii) State TWO assumptions under which the actual change in money supply would equal the maximum possible change in money supply.   (2 marks)

(iii) Calculate the maximum possible change in money supply. Show your workings.   (4 marks)

Paper 2 Section A2 (Q3, 6, 7, 9)

Q7
(b) Based on the quantity theory of money, predict the effect of an open market purchase of government bonds by the central bank on the price level. State the assumption(s) needed to reach your conclusion.

Q9
The Express Rail Link (XRL) project (Hong Kong Section) is expected to be completed in 2018. It will shorten the estimated journey time between Hong Kong and various Mainland cities. Below are some opinions on the XRL project.

Government officials
With better infrastructure, the overall economic development of Hong Kong will be enhanced.
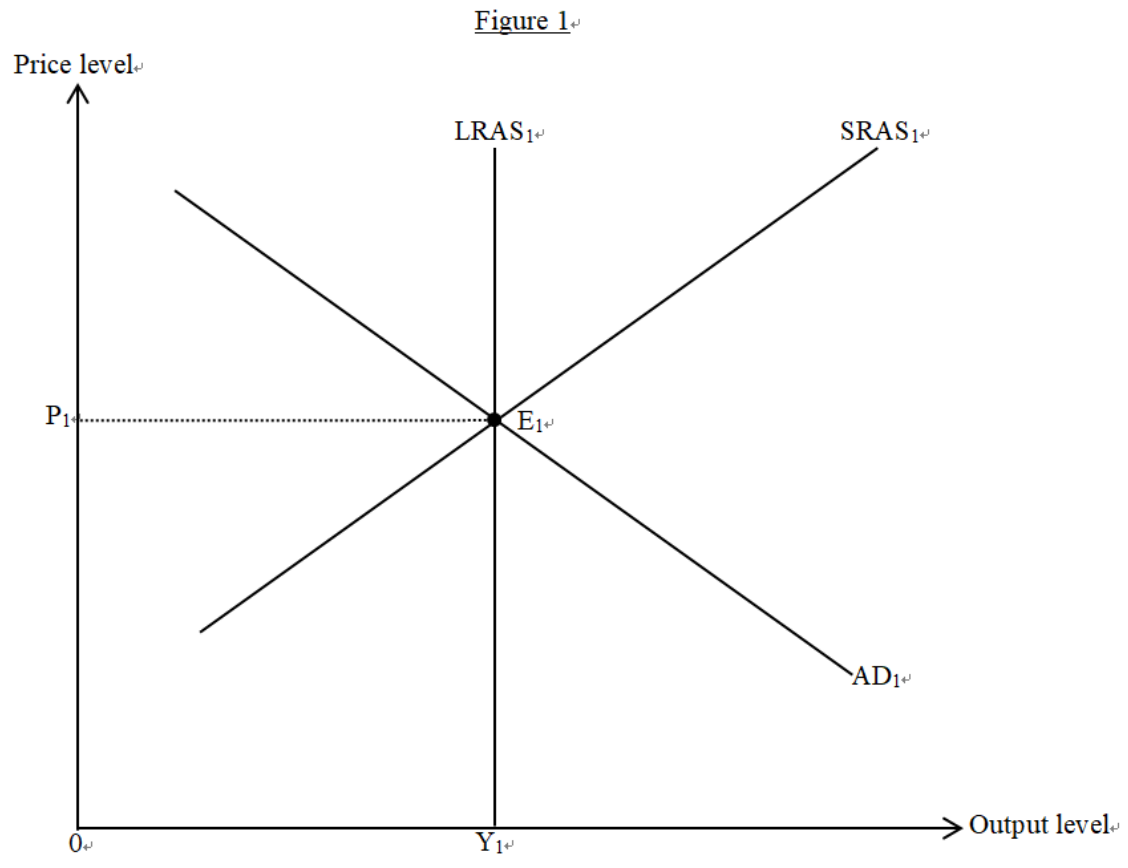
Small medium enterprise owners
We expect that the XRL could bring more Mainland travellers to Hong Kong.

Paper 2 Section A2 (Q3, 6, 7, 9)

Q9

Suppose the Hong Kong economy operates at E1. With reference to the above opinions, show why the price level of Hong Kong may rise in the long run after the completion of XRL project in Figure 1. (3 marks)

Figure 1

Paper 2 Section A2 (Report)

3	- Failed to specify the type of cost being lowered - Failed to relate to AC - Confused external EOS with internal EOS
6a	- Wrongly thought that working incentive would be affected - Failed to specify the condition for the tax revenue to increase
6b	- Only named the principle without explaining why the new tax was consistent with the principle - Mistook equity as a requirement for tax payers with bigger profits to be charged at higher tax rates - Mistook economy as a reduction in the firm's profits tax payments

Paper 2 Section A2 (Report)

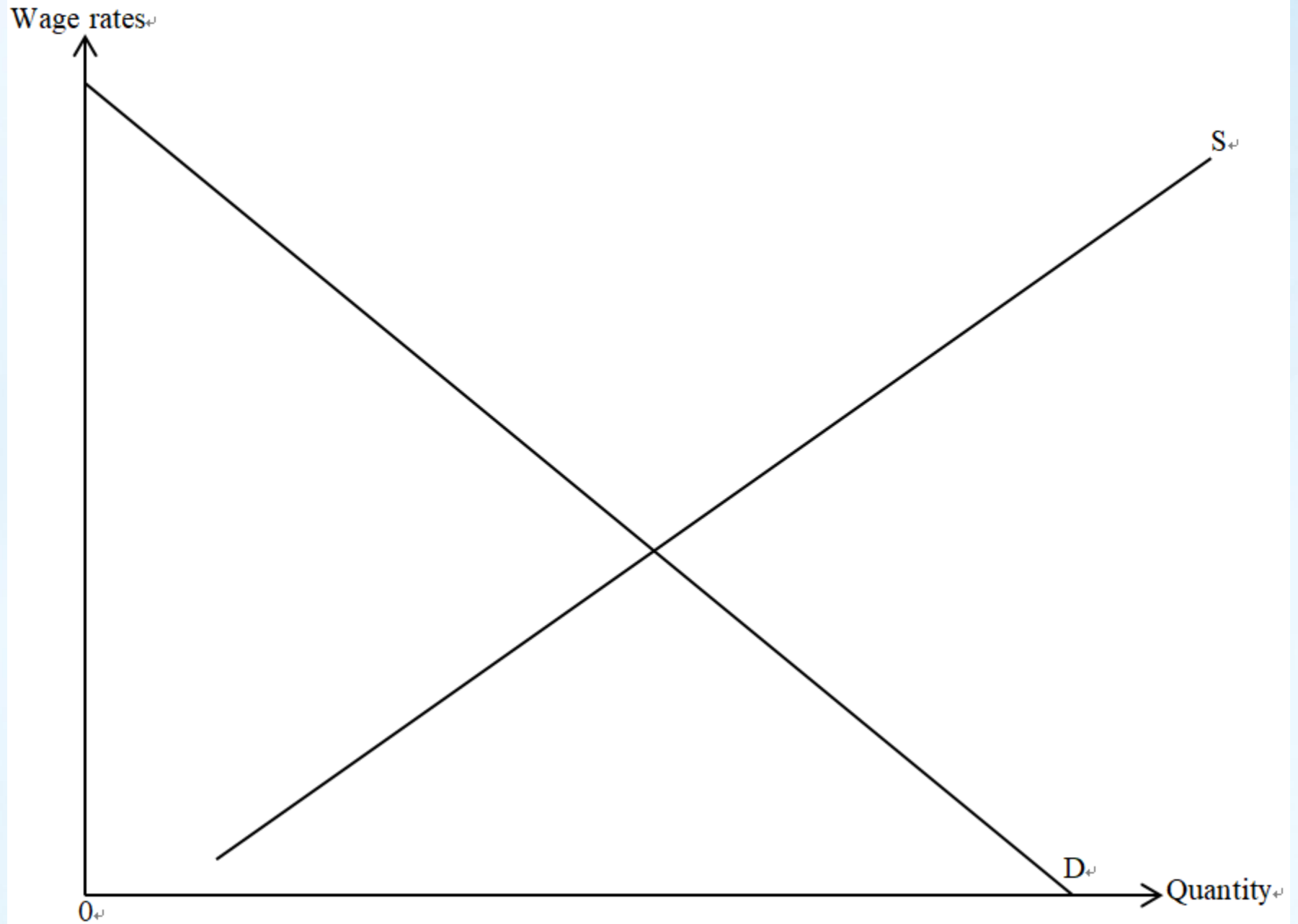|	
7ai	• Mistook the purchase of government bond resulting a reduction of Cp
7aiii	• Failed to realise that 40 million of OMO should provide additional reserve for credit creation • Mis-read the question: calculated the maximum possible amount of **(new) money supply**, without finding the maximum possible **change** in money supply
7b	• Failed to indicate the prediction clearly
9	• Failed to indicate the new equilibrium point correctly (even if the new curves are correct)

Paper 2 Section B1 (Q10,13)

Q10
Foreign domestic helpers are paid with a minimum wage at HK$4 410 per month for a two-year contractual period in Hong Kong.

a) Explain why foreign domestic helpers are paid by a monthly salary instead of a piece rate. (2 marks)

b) Who, the employers or the foreign domestic helpers, will suffer a loss if there is an unexpected inflation in the contractual period? Explain. (2 marks)

c) Suppose the minimum wage in the market of foreign domestic helpers in Hong Kong is effective. With the aid of Figure 2, explain how it may result in economic inefficiency. (4 marks)

Figure 2: Foreign Domestic Helpers in Hong Kong

Paper 2 Section B1 (Q10,13)

It is reported that the Mainland market is about to open its doors to maids from the Philippines, offering them a salary several times higher than the minimum wage for foreign domestic helpers in Hong Kong.

(d)   Some employers in Hong Kong claimed, 'Even if we offer higher wages to foreign domestic helpers, there will still be insufficient foreign domestic helpers in Hong Kong after the opening of the Mainland market to maids from the Philippines.' With the aid of Figure 2, explain why the above claim may be correct. (6 marks)

(e)   Other than insufficient foreign domestic helpers, suggest ONE phenomenon that may be observed in the market of foreign domestic helpers in Hong Kong after the opening of the Mainland market to maids from the Philippines.   (1 mark)

Paper 2 Section B1 (Q10,13)

Q13
The source below shows Hong Kong's population projection.
(a) With reference to the above source, briefly discuss the possible effects of the change in composition of population on
      (i) potential output and
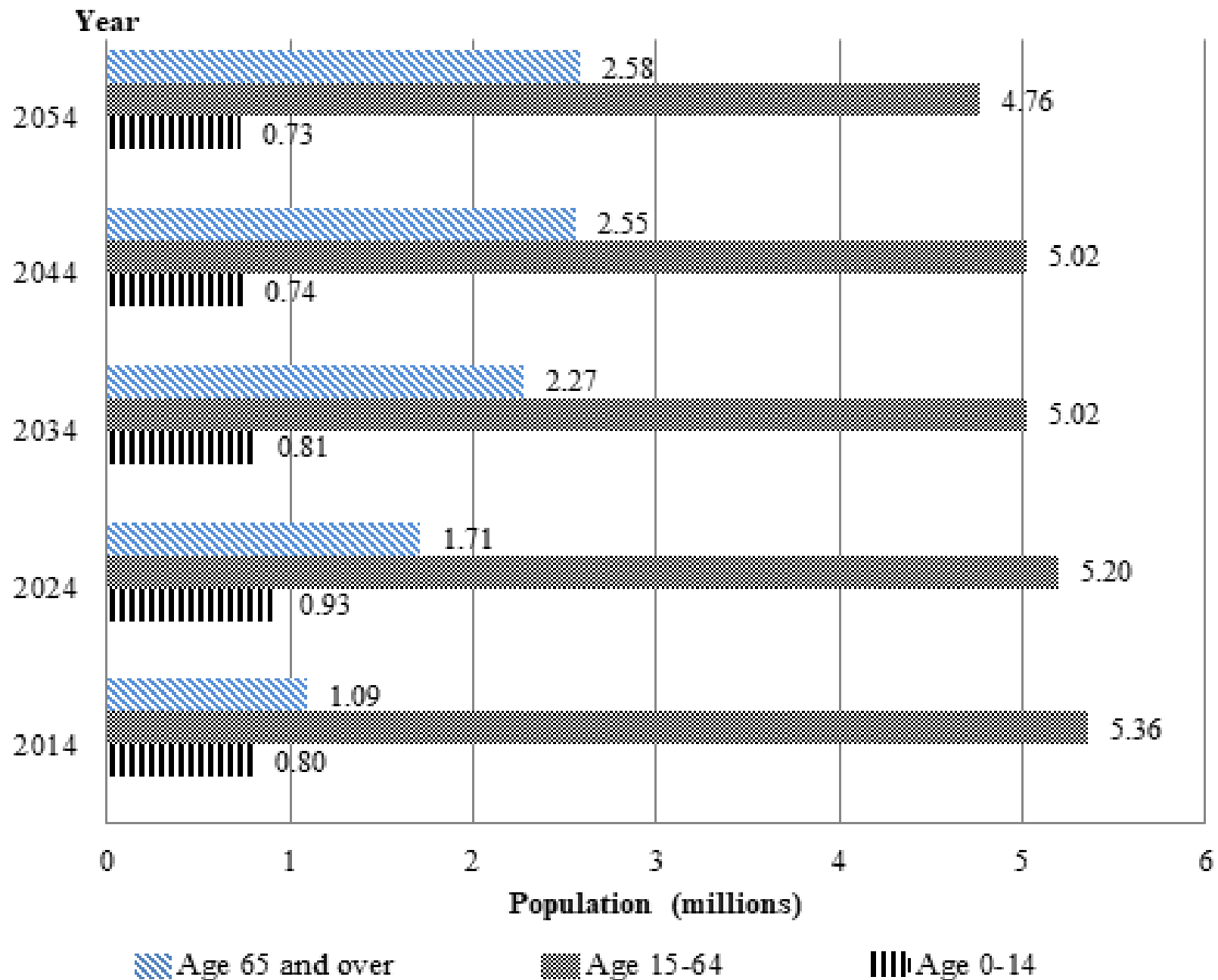   (ii) fiscal balance
in the future.   (5 marks)

(b) In view of the population projection in Hong Kong, politicians suggest the following measures:
      (i) providing subsidy for firms to improve production technology
      (ii) importing more workers
Analyse how each of the above two measures affects average labour productivity.   (5 marks)

(c) Susan is a local S6 graduate and is considering enrolling a programme in either primary education or nursing in Hong Kong. If future income is her major concern, which programme would you recommend to her? Explain your choice with reference to the above source. (4 marks)

Composition of Hong Kong's population in 2014 - 2054

Year

2054
- Age 65 and over: 2.58
- Age 15-64: 4.76
- Age 0-14: 0.73

2044
- Age 65 and over: 2.55
- Age 15-64: 5.02
- Age 0-14: 0.74

2034
- Age 65 and over: 2.27
- Age 15-64: 5.02
- Age 0-14: 0.81

2024
- Age 65 and over: 1.71
- Age 15-64: 5.20
- Age 0-14: 0.93

2014
- Age 65 and over: 1.09
- Age 15-64: 5.36
- Age 0-14: 0.80

Population (millions)

0   1   2   3   4   5   6

Age 65 and over   Age 15-64   Age 0-14

Paper 2 Section B1 (Report)

10c	• Incomplete diagram: missing labels • Inaccurate diagram: wrongly highlighted DL • Failed to state the inefficiency condition: MB> MC
10d	• Mistook helpers in HK and China as joint supply • Mistook that demand of helpers in HK will rise • Overlooked that the wage increases • Wrongly drew a relatively mild reduction in supply, resulting in a surplus (excess supply) rather than a shortage (excess demand) of helpers

Paper 2 Section B1 (Report)

13a	• Inaccurately used the term: fiscal imbalance
13b	• Failed to draw a conclusion based on a productivity comparison between the newly-imported workers and the existing workers • Mistook that labour importation would help increase average productivity by increasing output (via more imported workers)
13c	• Failed to explain their answers by using such terms as derived demand, wages and factor of production

Paper 2 Section B2 (Q11,12)

Q11

To develop nuclear weapons and increase the military power, Country Z has raised the proportion of government spending on national defence from 10% to 20%. All males aged from 20 - 25 are also required to join the military force for 2 years.

In response to the increasing military threat from Country Z, the United Nations has passed a bill to embargo most of the goods exporting from Country Z.

Analyse the effects of the above situation on Country Z's:

- general living standard,
- aggregate output in the short run, and
- balance of payment.

(10 marks)

Paper 2 Section B2 (Q11,12)

Q11
Tourism is one of the 'pillar industries' in Hong Kong.

Source 1: search result from a hotel booking website

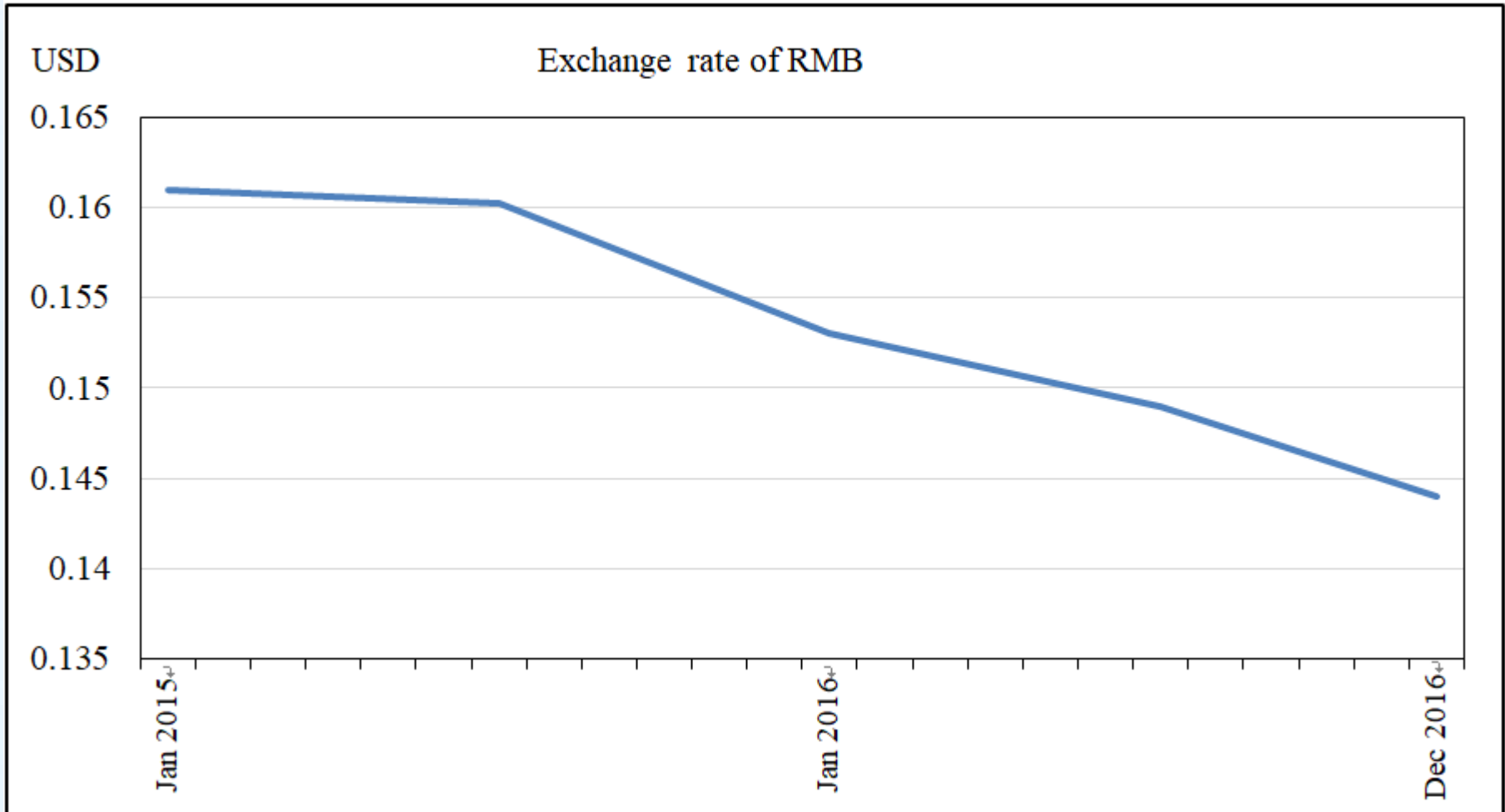|			
Hotel A Tsim Sha Tsui East, Kowloon	☆ ☆ ☆ ☆ ☆ 30 square metres 2 Twin Beds	Free cancellation	**Book now!** HK$2100 OR RMB¥1750
Hotel B Tsim Sha Tsui East, Kowloon	☆ ☆ ☆ ☆ ☆ 32 square metres 2 Twin Beds Free WIFI	Non-refundable	**Book now!** HK$2040 OR RMB¥1700

Paper 2 Section B2 (Q11,12)

Source 2: statistical data about tourism in Hong Kong in 2016		
	2016	Compared with 2015 (%)
Mainland visitors	42.8 million	-6.7%
Total visitors	56.65 million	-4.5%
Total tourism expenditure associated to inbound tourism	HK$296.2 billion	-10.1%

Paper 2 Section B2 (Q11,12)

Source 3: exchange rate of the Renminbi (RMB) to the US dollar (USD) between 2015 and 2016

Exchange rate of RMB

Paper 2 Section B2 (Q11,12)

Q12

a) With reference to Source 1, give TWO reasons to explain why the market structure of Hong Kong's hotel industry is NOT perfectly competitive.   (4 marks)

b) Which TWO functions of money does the Renminbi perform in Source 1? Explain.   (4 marks)

c) With reference to Source 2, to which component of Hong Kong's GDP does the 'total tourism expenditure associated to inbound tourism' belong?   (1 mark)

d) A reporter stated, 'The change in the exchange rate of the Renminbi to the US dollar was a major factor contributing to the change of the total tourism expenditure associated to inbound tourism.' Based on Sources 2 and 3, justify his statement.   (6 marks)

Paper 2 Section B2 (Report)

11	
	• Wrongly focused on why Country Z's living standard had been over-estimated instead of how its living standard would change
	• Failed to realise that the (likely) reduction in the production of consumer goods could be a reason for the drop in living standard
	• Mistook the increase in the proportion of government spending on national defence for an increase in government expenditure
	• Mistook a worsening in the balance of payments (BOP) for BOP deficits
	• Failed to indicate whether the embargo would reduce visible or invisible exports
	• Failed to accurately use such BOP-related terms as capital inflow/outflow, and inflow/outflow of factor incomes

Paper 2 Section B2 (Report)

12b	• Failed to use the information provided to illustrate their answers • Misread the question and chose to discuss the functions of prices (rather than money) in their answers
12c	• Mistook the inbound-tourist expenditure for private consumption expenditure
12d	• Provided arguments to show that the reporter was wrong instead of justifying his statement • Misinterpreted Source 3 as a depreciation of the USD • Failed to state clearly whether the RMB depreciated against the USD or HKD • Failed to relate the depreciation of RMB against HKD to the rise in prices of goods and services in Hong Kong (in terms of RMB) to the Mainland tourists

Paper 2 Section C (Q14-15)

Q14

The petrol market in Hong Kong is dominated by five oil companies, namely Esso, Shell, Caltex, Sinopec and PetroChina.
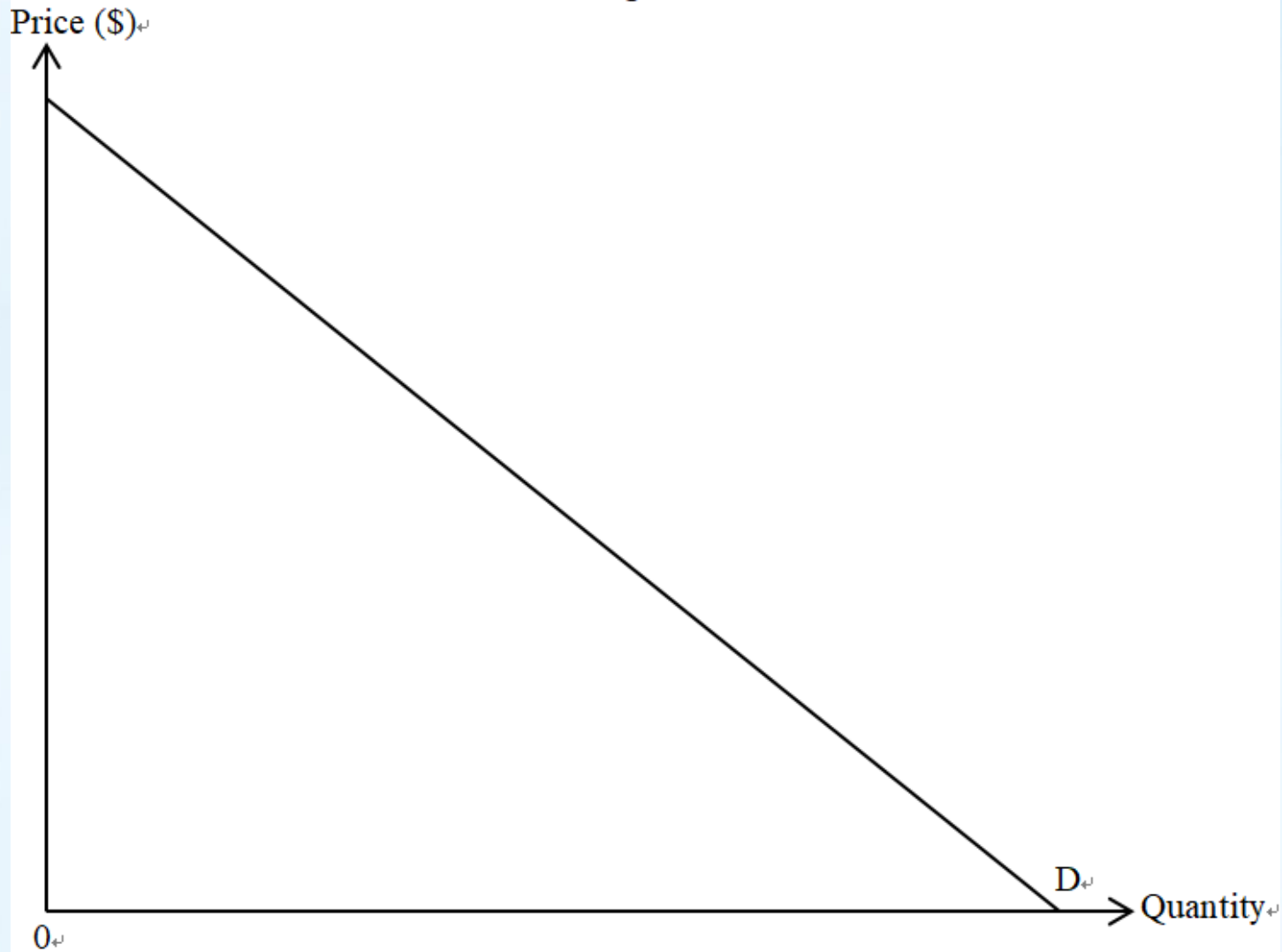
Source: adapted from a report by Hong Kong Competition Commission

Same prices are often set across all petrol filling stations even though the stations are owned by different oil companies. Also only the most expensive type of petrol, '98 RON', is sold in the petrol market while other cheaper types of petrol with lower RON are unavailable in Hong Kong.

a) Name ONE anti-competitive behaviour that may be found in the above source. State TWO ways such behaviour may harm consumers.(3 marks)

b) Suggest ONE alternative reason to explain the behaviour of the oil companies in the source instead of accusing them of practising anti-competitive behaviour. (2 marks)

Paper 2 Section C (Q14-15)

Figure 3

Paper 2 Section C (Q14-15)

Figure 3 shows the demand curve faced by a franchised bus company in Hong Kong. For simplicity, suppose the cost of fuel is the only cost of production and the company adopts uniform pricing.
(c) Indicate the profit maximising output level as QM and price as PM in Figure 3.   (3 marks)

Suppose all the oil companies increase the price of fuel sharply.
(d) Indicate the new price and quantity transacted as P2 and Q2 respectively in Figure 3. Indicate the deadweight loss in Figure 3 after the rise in fuel price.   (3 marks)

(e) Case 1: The bus company charges the elderly aged 65 or above $2 per trip.
Case 2: The bus company offers return discount concessions for all passengers.
Does each of the above two cases constitute price discrimination? Explain.   (5 marks)
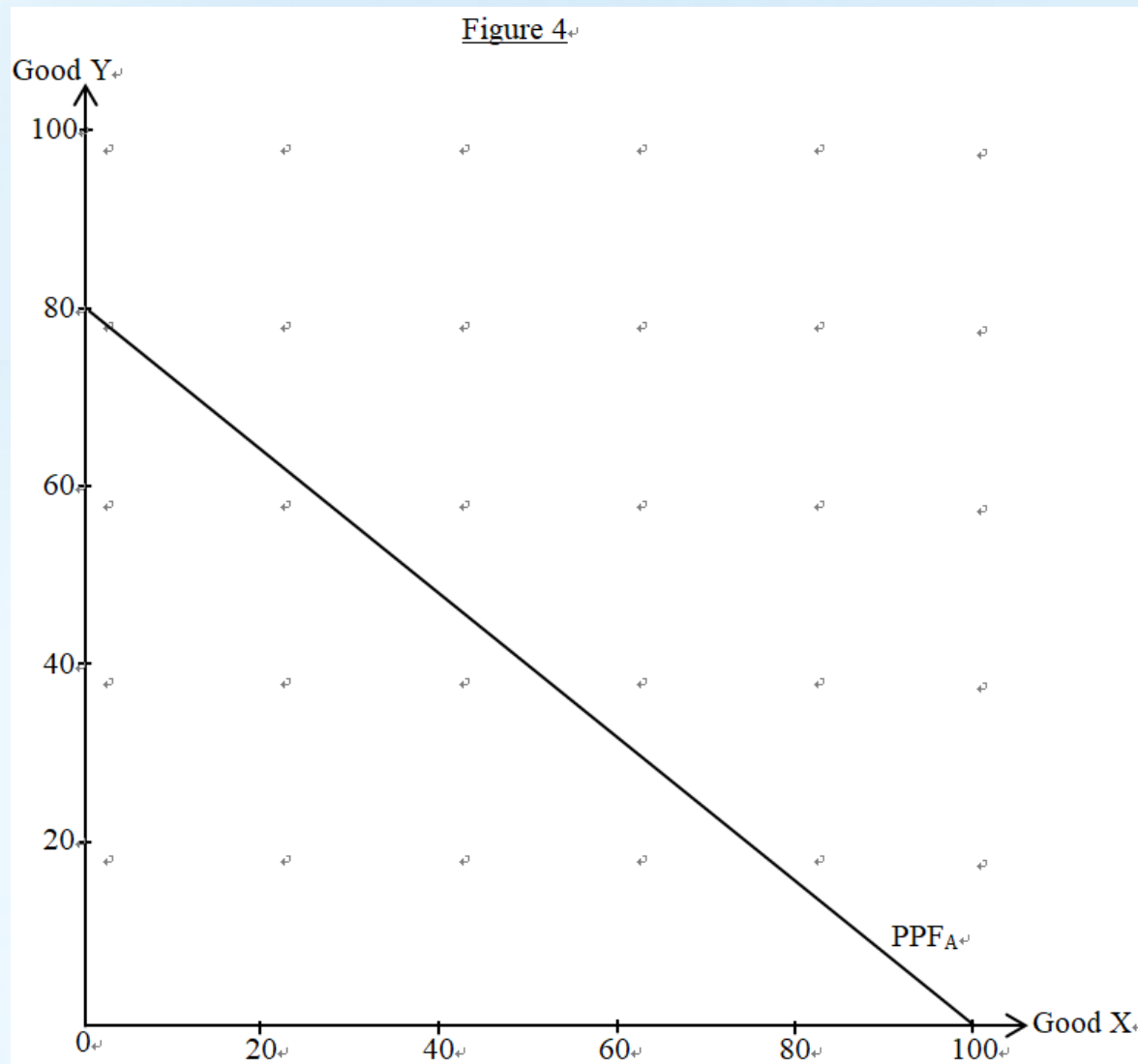
Paper 2 Section C (Q14-15)

Q15

Figure 4 shows the production possibility frontier (PPFA) of Country A.

Both Country A and its trading partner, Country B, produce Good X and Good Y. Country A has 50 units of resources whereas Country B has 30 units of resources. Country B requires 1 unit of resources to produce 1 unit of Good X and 0.5 units of resources to produce 1 unit of Good Y.

a)   Draw the production possibility frontier of Country B (PPFB) in Figure 4.   (1 mark)

b)   Explain which country has an absolute advantage in producing Good X.   (3 marks)

Paper 2 Section C (Q14-15)

Figure 4

Paper 2 Section C (Q14-15)

(c) The two countries trade with each other and the terms of trade is 1X = 1Y. Also, Country B consumes equal amount of Good X and Good Y after trade. In Figure 4, indicate

(i) the production point (PB) of Country B after specialisation,   (1 mark)
(ii) the consumption possibility frontier (CPFB) and consumption point (CB) of Country B after trade and   (2 marks)
(iii) the consumption possibility frontier (CPFA), the volume of import and the volume of export of Country A.   (3 marks)

(d) Explain whether the following policies would result in an increase in a country's Human Development Index (HDI).

(i) The government closes down environmentally harmful power plants and factories.   (3 marks)
(ii) The government grants citizenship to all illegal immigrants so that they can stay and work in the country legally.   (3 marks)

Paper 2 Section C (Report)

14(b)	54%	• Failed to understand the meaning of the key words 'alternative reason' • Only provided vague arguments instead of applying clear economic concepts
14(c)		• Misinterpreted the phrase 'the cost of fuel is the only cost of production' as meaning zero marginal cost (MC) • Wrongly labelled the MC curve as the supply curve
14(d)		• Failed to explain their answers in terms of the lower cost involved when subscribing to two kinds of services

Paper 2 Section C (Report)

15(a)	46%	• Wrongly labelled the two intercepts
15(b)		• Only wrote the definition of absolute advantage without providing an explanation in terms of the outputs of Good X produced by the two countries under the same amount of resources
15(c)(i)(ii)(iii)		• Failed to identify the consumption point of Country A • Indicated in the diagram the import and export volumes of Country B rather than those of country A • Indicated in the diagram the export volume with reference to PA (correctly) but the import volume with reference to PB (incorrectly) • Mis-represented the import/export volume as a single consumption basket (i.e. a single point)

Paper 2 Section C (Report)

15(d)(i)(ii)		• Failed to realise that there might be offsetting effects, resulting in the possibility of HDI changing ambiguously
		• Failed to realise that differences in the productivity/health/education levels between the illegal immigrants and the original residents might result in a change in the country's HDI
		• Mistakenly thought that GDP (aggregate output), rather than per capita GNI, should be used in the calculation of HDI
		• Failed to discuss changes in the three parameters in the HDI measure

Paper 2

General reminder:

- Don't use colour to indicate the areas in the diagram

- Don't successively use symbols in the answer

- Express the answer in a comprehensible way: rough work written not in the designated spaces will NOT be marked

Paper 2 Overall comments

Some candidates lack a thorough understanding of basic economic concepts and principles, and thus have difficulty in applying them to solve hypothetical or real-life problems. Candidates should strengthen their analytical skills instead of simply regurgitating concepts and theories.

Some candidates do not read all the questions carefully.   Candidates should devote special attention to the assumptions and conditions laid down in the questions so as to avoid giving irrelevant answers.

Some candidates provided convoluted answers. Candidates should equip themselves with better language abilities as well as graphical skills, and present their answers in a clear and precise way.

Some candidates were unaware of current economic issues. Candidates should pay more attention to economic news.

Some candidates showed a weakness when extracting information from tables and graphs as well as when drawing well-labelled diagrams. Candidates should pay special attention to the headings, labels, and axes as they are essential to our understanding of the data presented therein.

Grading - paper marks and subject marks

- Raw mark of Paper 1 (max mark): 44
- Raw mark of Paper 2 (max mark): 124
- Adjusted mark: Marks awarded by markers are adjusted, if necessary, to rectify lenient, strict or erratic marking.
- Weighted paper mark: Marks of different papers are converted to the same comparable scale, taking into account the spread of marks in different papers and the published paper weightings, before they are combined to form the subject mark.

Grading - Grading procedures

1. Sample scripts selection

2. Standardisation

3. Post-marking exercise:
The grading panel will discuss and suggest a provisional grading recommendation (including preliminary cut score range) on each paper through expert judgment base on:

Grading – Post-marking exercise

- The level descriptors
- The standards of 2012 DSE (library scripts)
- Marked-live scripts, selected according to the total marks
- Feedback from markers on the level of difficulty of papers
- Inter-paper correlations, the mean and standard deviation of the current year's papers
- Paper mark cumulative distributions
- Performance samples from 2015 and 2016 DSE (library scripts)

Grading – Panel of judges grading meeting

- Preliminary cut score range
- Samples scripts around the cut score range
- Group ability index:
  - constructed per level
  - An index for each level based on the number of candidates in this group (this subject) achieving that particular level in the four core subjects
  - depends on the correlation of the subject and EACH of the 4 core subjects

Grading – Panel of judges grading meeting

Panel of judges considers:

- Preliminary cut score range
- Samples scripts around the cut score range
- Group ability index (GAI) as reference

➔ Recommendation for the cut score for the subject

- The panel of judges plays a very important and independent role in setting a cut score for each level based on the actual performance of candidates

Grading – Internal meeting and Public Examinations Board meeting

- Internal meeting: A senior management team led by Secretary General of the Authority will meet to review the recommendations of individual subject panels.

- PEB meeting: The recommendations of the internal meeting will be reviewed at the PEB meeting and the final cut scores of all HKDSE subjects must be endorsed at this meeting.

Grading – Determination of level 5** and 5*

- Statistically determined
- The highest 10% (approximately) of level 5 candidates will be awarded 5**
- The next highest-achieving 30% (approximately) of level 5 candidates will be awarded 5*

Grading: Standard Maintenance

- Standard of the level 1,2,3,4,5 should be maintained across years
- the cutting scores NOT constant:
the cutting scores depends on level of difficulty of the papers and the actual performance of the candidates
- It is possible that a level 2 candidate perform better in one particular question than a level 5 candidate:
the level represents the overall performance

DRQ: Online Resources

Sample questions (with updated assessment criteria):

Eng: 　　　　　　　Chi:

PowerPoint of
the seminar on DRQ:

DRQ: Related Past Questions

- 2012: Nil
- 2013: Q8, Q11b
- 2014: Q7ab
- 2015: Q8
- 2016: Q11d, Q12c, Q13b
- 2017: Q10b, Q13b
- 2018: Q11, Q13b