HONG KONG EXAMINATIONS AND ASSESSMENT AUTHORITY

HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION 2014

GEOGRAPHY PAPER 1

8.30 am – 11.00 am (2½ hours)

This paper must be answered in English

GENERAL INSTRUCTIONS

1. This paper consists of **THREE** sections:

   Section A – consists of 40 multiple-choice questions. Answer **ALL** questions in this section.

   Section B – consists of 4 data / skill-based structured questions. Choose **TWO** questions only in this section.

   Section C – consists of 3 short essay questions. Choose **ONE** question only in this section.

2. Draw sketch maps and diagrams to supply additional, relevant information when appropriate.

3. A map extract is provided and to be returned to the HKEAA at the end of the examination.

4. Answers to Section A should be marked on the Multiple-choice Answer Sheet. Answers to Sections B and C should be written in the Answer Book. In the Answer Book, start each question (not part of a question) on a new page. **The Answer Sheet for Section A and the Answer Book for Sections B and C must be handed in separately at the end of the examination.**

INSTRUCTIONS FOR SECTION A (MULTIPLE-CHOICE QUESTIONS)

1. Read carefully the instructions on the Answer Sheet. After the announcement of the start of the examination, you should first stick a barcode label and insert the information required in the spaces provided. No extra time will be given for sticking on the barcode label after the 'Time is up' announcement.

2. When told to open this book, you should check that all the questions are there. Look for the words **'END OF SECTION A'** after the last question.

3. All questions carry equal marks.

4. **ANSWER ALL QUESTIONS.** You are advised to use an HB pencil to mark all the answers on the Answer Sheet, so that wrong marks can be completely erased with a clean rubber. You must mark the answers clearly; otherwise you will lose marks if the answers cannot be captured.

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

6. No marks will be deducted for wrong answers.

Not to be taken away before the end of the examination session

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Section A: There are 40 questions in this section. Answer ALL questions in this section. All the answers must be marked on the Answer Sheet.

Refer to the map extract of Hong Kong (1:20 000) provided to answer Questions 1 to 8.

1. The drainage pattern shown in grid square 0481 is

   A. dendritic.
   B. radial.
   C. rectangular.
   D. trellis.

2. Which of the following facilities is **not** found in grid square 9185?

   A. clinic
   B. fire station
   C. police station
   D. post office

3. The area of Tin Shui Wai Park in grid square 9186 is approximately

   A. 0.04 km^2.
   B. 0.19 km^2.
   C. 0.34 km^2.
   D. 0.49 km^2.

4. Which of the following is the average gradient of the footpath from spot height 167 (065833) to the cultivated land at 069831?

   A. 1:1.9
   B. 1:2.7
   C. 1:3.6
   D. 1:4.4

5. Residents at Ha Pak Nai (032832) may suffer from the odour of landfill in grid square 0282 when wind is blowing from

   A. southeast.
   B. northeast.
   C. southwest.
   D. northwest.

6. Which of the following sites are intervisible with trigonometric station 375 (061837)?

   (1) spot height 167 (065833)
   (2) spot height 188 (056844)
   (3) spot height 303 (059835)

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

7. Which of the following is/ are the reason(s) for the sparse settlement in grid square 9182?

   (1) hilly relief
   (2) low accessibility
   (3) lack of water supply

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

8. Which of the following descriptions about Ha Tsuen in grid squares 0785 and 0885 are correct?

   (1) long history of settlement
   (2) nucleated pattern of settlement
   (3) large farming area

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

9. Which of the following statements about the structure of the earth are correct?

   (1) The asthenosphere is thicker than the earth's crust.
   (2) The lower mantle is in molten form.
   (3) The outer core is less dense than the inner core.

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

Provided by dse.life

10. Which of the following features is **not** formed by intrusive vulcanicity?

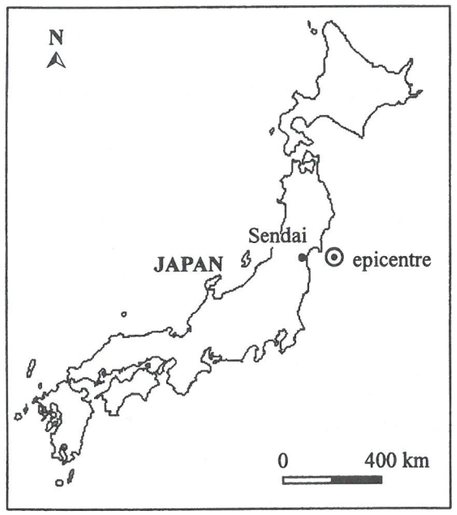
A. batholith
B. dyke
C. laccolith
D. lava plateau

11. Collision of the Eurasian Plate and the Philippine Plate has produced

(1) ocean trench.
(2) oceanic ridge.
(3) volcanic island arc.

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

12. Refer to the figure below.

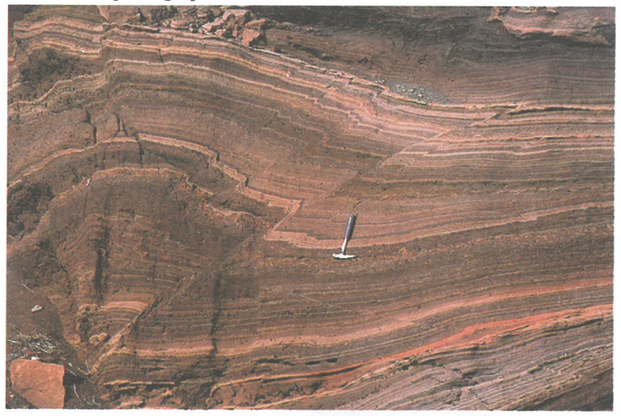


Which of the following explain the disastrous impact of the tsunami on Sendai, Japan in 2011?

(1) proximity to the epicentre of earthquake
(2) large displacement of the earth crust
(3) great increase in the height of sea waves due to sheltered bay

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

13. Refer to the photograph below.



Which of the following descriptions about the feature shown in the above photograph are correct?

(1) The feature is formed by compressional force.
(2) Rock displacement has occurred.
(3) Faulting has occurred.

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

14. Refer to the photograph below which shows a coastal management strategy.

Which of the following statements are correct?

(1) It helps reduce the damage caused by tsunamis.
(2) It helps reduce the impact caused by longshore drift.
(3) It is a "hard" strategy.

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

Provided by dse.life

15. Which of the following descriptions about destructive waves are correct?

(1) long wave length
(2) high wave frequency
(3) strong backwash and weak swash

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

16. Refer to the photograph below.

Which of the following descriptions about feature X are correct?

(1) an erosional landform
(2) formed by constructive waves
(3) found at headland

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

17. If there is an increase in vegetation cover,

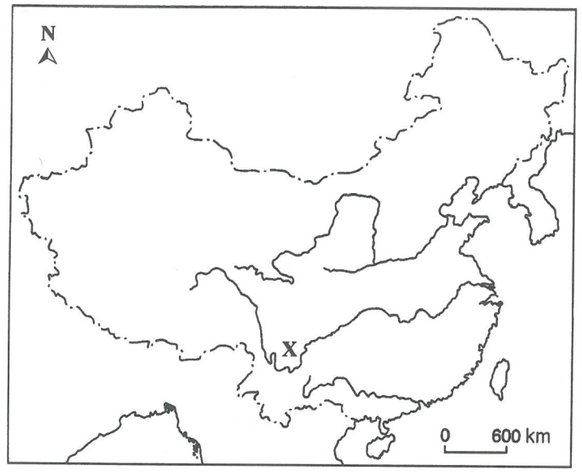
(1) interception will increase.
(2) surface runoff will decrease.
(3) water table will drop.

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

18. Which of the following is **not** a benefit brought by the construction of dams at the upper and middle course of Chang Jiang?

A. reduction of organic matter downstream
B. less flooding in the lower course
C. hydro-electric power supply
D. development of tourism

19. Refer to the figure below.



What are the difficulties when developing iron and steel industry in region X?

(1) insufficient raw materials
(2) inadequate skilled labour
(3) remote location from major markets

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

20. Which of the following is a characteristic of market-oriented industry?

A. bulky raw materials
B. perishable products
C. high land cost
D. high labour cost

Provided by dse.life

21. Which of the following are the benefits of industrial agglomeration?

(1) lowering production costs
(2) sharing supporting services
(3) enhancing industrial linkages

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

22. Which of the following was/ were the favourable factor(s) for the development of industries in Hong Kong in the 1960s?

(1) abundant cheap labour
(2) well-developed infrastructure
(3) adequate government financial support

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

23. Refer to the photographs below which show the changes before and after a development project.

Before	After

Which of the following strategies have been adopted for the development project shown in the above photographs?

(1) preservation
(2) redevelopment
(3) revitalisation

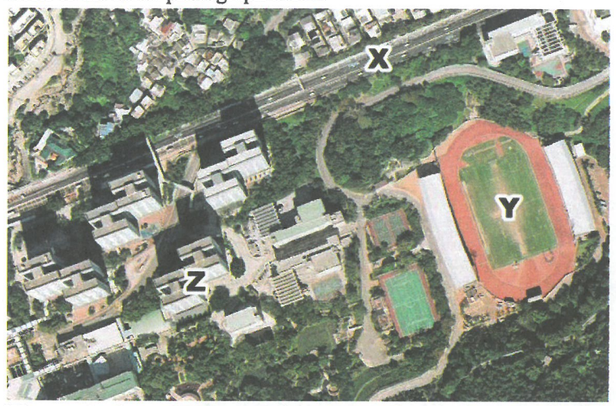
A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)

24. The sustainable ways to solve solid waste problem in Hong Kong include

(1) recycling wastes.
(2) adopting the polluter pays principle.
(3) expanding existing landfills.

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

25. Refer to the aerial photograph below.



What are land uses X, Y and Z shown respectively?

	X	Y	Z
A.	industrial	institutional	residential
B.	transport	recreational	residential
C.	industrial	institutional	recreational
D.	transport	residential	institutional

26. The table below shows the population figures in country X.

Year	1970	2010
Rural population	1 500 000	1 500 000
Total population	3 000 000	7 000 000

Which of the following has/ have occurred in country X between 1970 and 2010?

(1) counter-urbanisation
(2) urban growth
(3) urbanisation

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

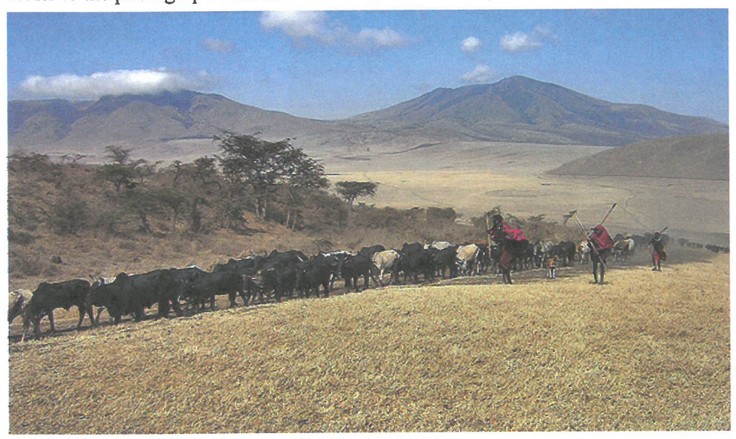
Provided by dse.life

27. Which of the following practices can citizens adopt to reduce the ecological footprint of Hong Kong?

(1) buy locally produced organic food
(2) buy energy-saving electrical appliances
(3) use the public transport system

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

28. Refer to the photograph below.



Which of the following are the characteristics of the farming activity shown in the above photograph?

(1) pastoral farming
(2) intensive farming
(3) subsistence farming

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

29. Which of the following factors might hinder farming activities in the Sahel?

(1) frequent civil wars
(2) poor government policies
(3) low technological level

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

30. Which of the following are the characteristics of organic farming?

(1) lower production cost
(2) no chemicals used
(3) less pollution

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

31. Which of the following farming methods may reduce soil erosion?

A. dry farming
B. monoculture
C. contour ploughing
D. greenhouse farming

32. Which of the following are correct descriptions of abiotic components in a rainforest ecosystem?

(1) high annual rainfall
(2) high mean annual temperature
(3) thick humus layer

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

33. Which of the following about the tropical rainforest are correctly matched?

	Environmental factor	Adaptation
(1)	limited sunlight under the canopy	tall emergent layer
(2)	heavy rainfall	drip-tip
(3)	infertile soil	deep roots

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

Provided by dse.life

34. Which of the following correctly shows the impact of deforestation in tropical rainforest region on microclimate?

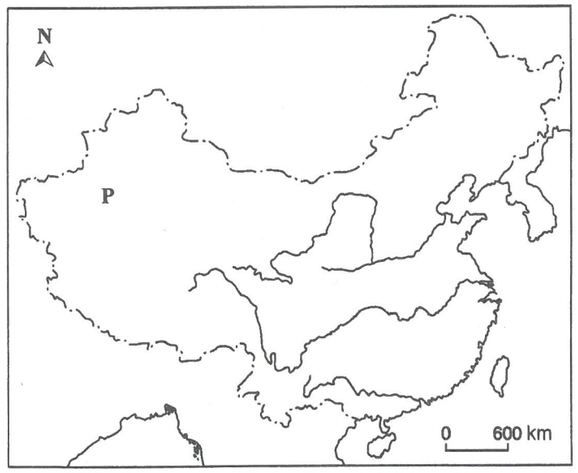
	Relative humidity	Wind speed	Diurnal range of temperature
A.	increase	increase	decrease
B.	decrease	increase	increase
C.	increase	decrease	increase
D.	decrease	decrease	decrease

35. Which of the following are the difficulties in controlling the rate of deforestation in less developed countries?

(1) poverty
(2) poor management strategies
(3) low education level

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

36. Refer to the figure below.



Which of the following are the effects of global warming on region P?

(1) lengthening the growing season
(2) acceleration of desertification
(3) a rise in sea-level

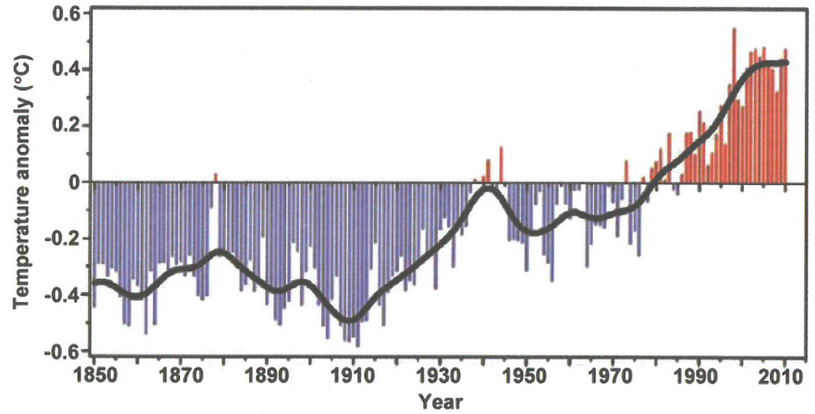
A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)

37. Which of the following greenhouse gases and their sources are correctly matched?

	Greenhouse gas	Source
(1)	methane	landfill
(2)	nitrous oxide	nylon producing factory
(3)	carbon dioxide	thermal power plant

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

38. Refer to the graph below which shows the global temperature anomalies from 1850 to 2010.



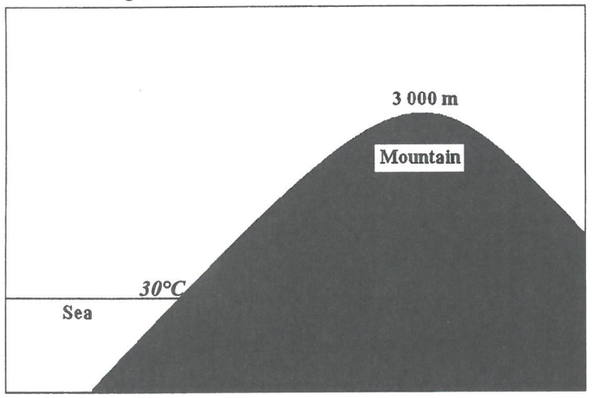
Which of the following statements are correct?

(1) Global warming has occurred since 1850.
(2) Global warming has worsened since 1980.
(3) The global temperature anomaly in 2010 is approximately +0.47°C.

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

Provided by dse.life

39. Refer to the figure below which shows the temperature at sea-level is 30°C.

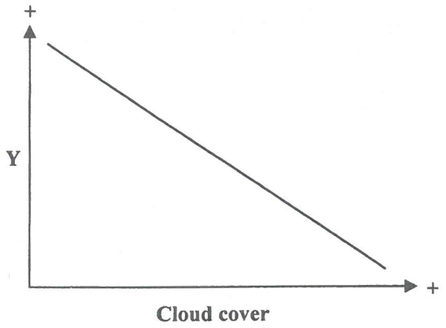


Which of the following statements is/ are correct?

(1) The temperature at 3 000 m is approximately 12°C.
(2) More heat is lost in long wave radiation at the summit.
(3) The summit is covered by ice.

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

40.



Which of the following are possible labels for the Y-axis in the above graph?

(1) Diurnal range of temperature
(2) Loss of long wave radiation
(3) Counter radiation

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

END OF SECTION A

Section B: Answer any TWO questions from this section. Each question carries 18 marks.

1. Photograph 1 shows landform A found at 032844 in the map extract (1:20 000) of Hong Kong.

Photograph 1

(a) Refer to Photograph 1 and the map extract (1:20 000) of Hong Kong.

(i) Identify landform A. (1 mark)

(ii) Describe and explain the favourable conditions for the formation of landform A. (4 marks)

(iii) Compare the characteristics of the river channels at B (038841) and C (045820) with map evidence. (5 marks)

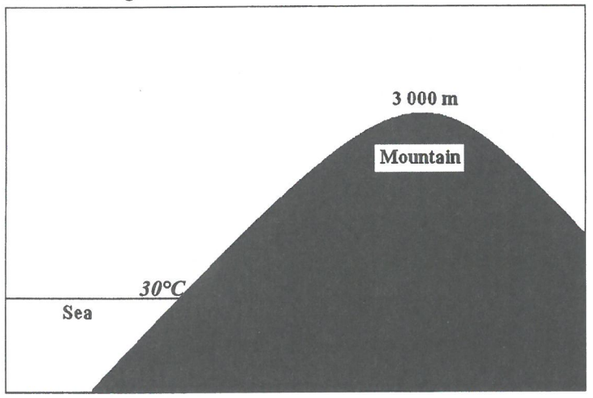
(b) Refer to the map extract (1:20 000) of Hong Kong.

(i) Quoting map evidence, explain the favourable factors for the cultivation at Ha Pak Nai (grid square 0383). (4 marks)

(ii) Evaluate the impact of the landfill in grid square 0282 on the neighbouring river and coastal environment. (4 marks)

Provided by dse.life

39. Refer to the figure below which shows the temperature at sea-level is 30°C.

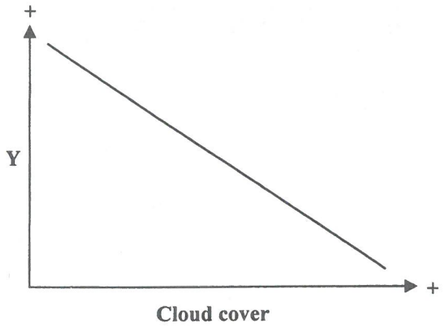


Which of the following statements is/ are correct?

(1) The temperature at 3 000 m is approximately 12°C.
(2) More heat is lost in long wave radiation at the summit.
(3) The summit is covered by ice.

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

40.



Which of the following are possible labels for the Y-axis in the above graph?

(1) Diurnal range of temperature
(2) Loss of long wave radiation
(3) Counter radiation

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

END OF SECTION A

Section B: Answer any TWO questions from this section. Each question carries 18 marks.

1. Photograph 1 shows landform A found at 032844 in the map extract (1:20 000) of Hong Kong.

Photograph 1

(a) Refer to Photograph 1 and the map extract (1:20 000) of Hong Kong.

(i) Identify landform A. (1 mark)

(ii) Describe and explain the favourable conditions for the formation of landform A. (4 marks)

(iii) Compare the characteristics of the river channels at B (038841) and C (045820) with map evidence. (5 marks)

(b) Refer to the map extract (1:20 000) of Hong Kong.

(i) Quoting map evidence, explain the favourable factors for the cultivation at Ha Pak Nai (grid square 0383). (4 marks)

(ii) Evaluate the impact of the landfill in grid square 0282 on the neighbouring river and coastal environment. (4 marks)

Provided by dse.life

2. Figure 2a shows the location of landform M and volcanoes in East Africa. Figure 2b shows some news headlines about the volcanic eruption of volcano N in 2002.

Figure 2a

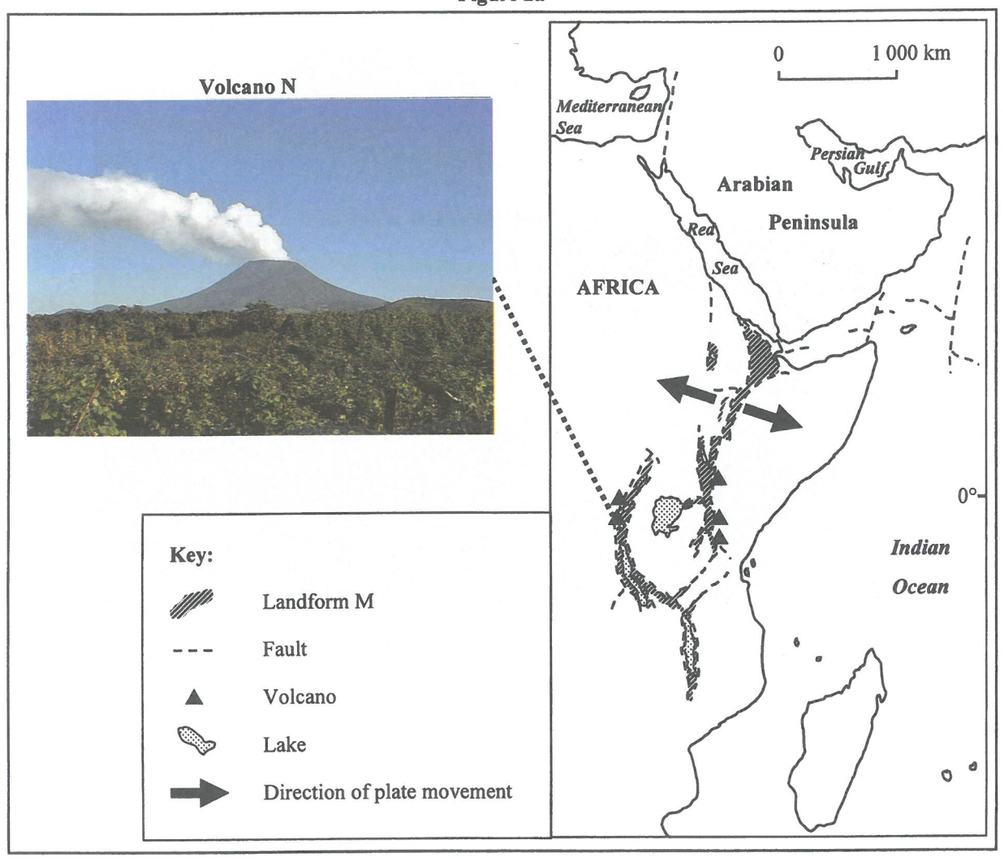
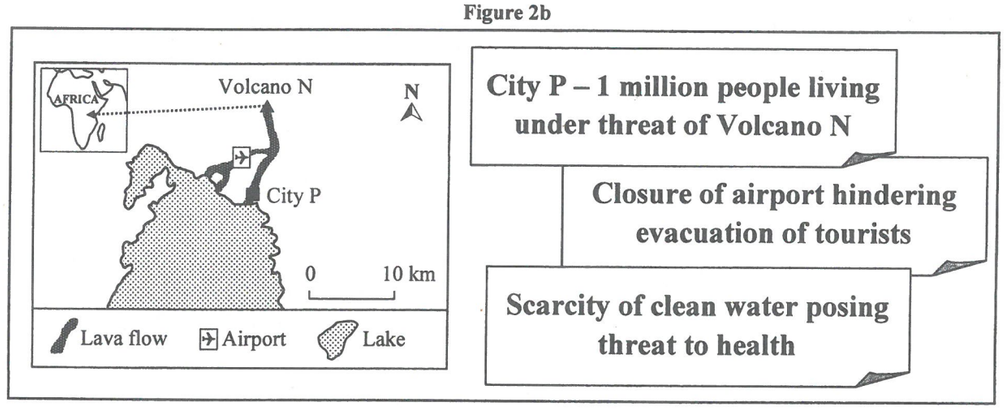


Figure 2b



(a) Refer to Figure 2a.

(i) Identify landform M. (1 mark)

(ii) Draw a series of annotated diagrams to explain the formation of landform M. (4 marks)

(iii) Explain why volcanoes are found in the area. (4 marks)

(b) Refer to Figures 2a and 2b.

(i) Describe the opportunities and risks volcano N bring to the citizens in city P. (5 marks)

(ii) *Some scientists suggested building lava diversion channels to reduce the risks brought by lava flow in city P.*

Evaluate the effectiveness of such a measure. (4 marks)

Provided by dse.life

3. Firm X is a mobile phone manufacturer. Figure 3a shows the locations of some manufacturing plants of firm X. Table 3b shows the information of plants A and B in 2010. Figure 3c shows some major economic indicators of Guangdong.

Figure 3a

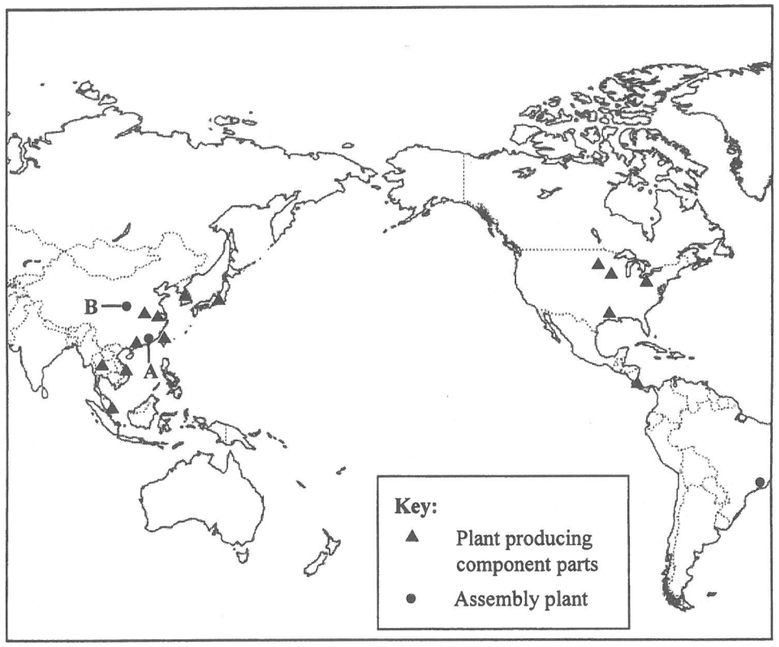
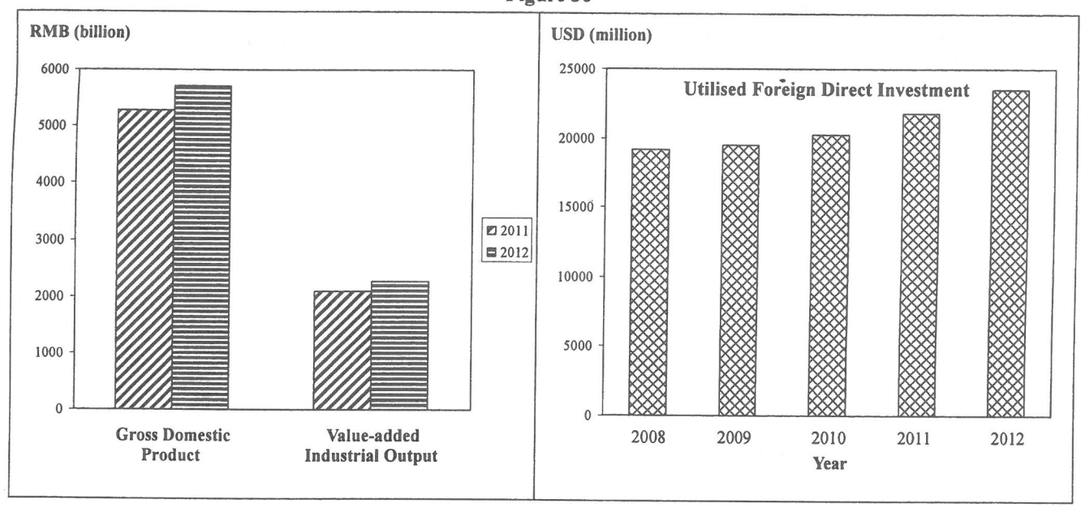


Table 3b

	Plant A	Plant B
Number of workers employed	210 000	230 000
Average monthly wages per worker (RMB)	2 444	611
Land price (RMB/m²)	100	60
Electricity tariff (RMB/degree)	1	0.56
Tax incentive for foreign invested enterprises	50% of business tax waived	100% of business tax waived

Figure 3c



(a) Refer to Figure 3a. With reference to the nature of the product, explain the production mode adopted by firm X. (4 marks)

(b) Refer to Figure 3a and Table 3b. Explain why the majority of the production lines have been shifted from plant A to plant B in recent years. (2 marks)

(c) *It is proposed that more assembly plants should be moved back to the US.*

(i) Refer to Figure 3c. Discuss the socio-economic impact of the above proposal on Guangdong. (5 marks)

(ii) Suggest the benefits of the proposal to the US. (4 marks)

(iii) Evaluate the feasibility of the proposal. (3 marks)

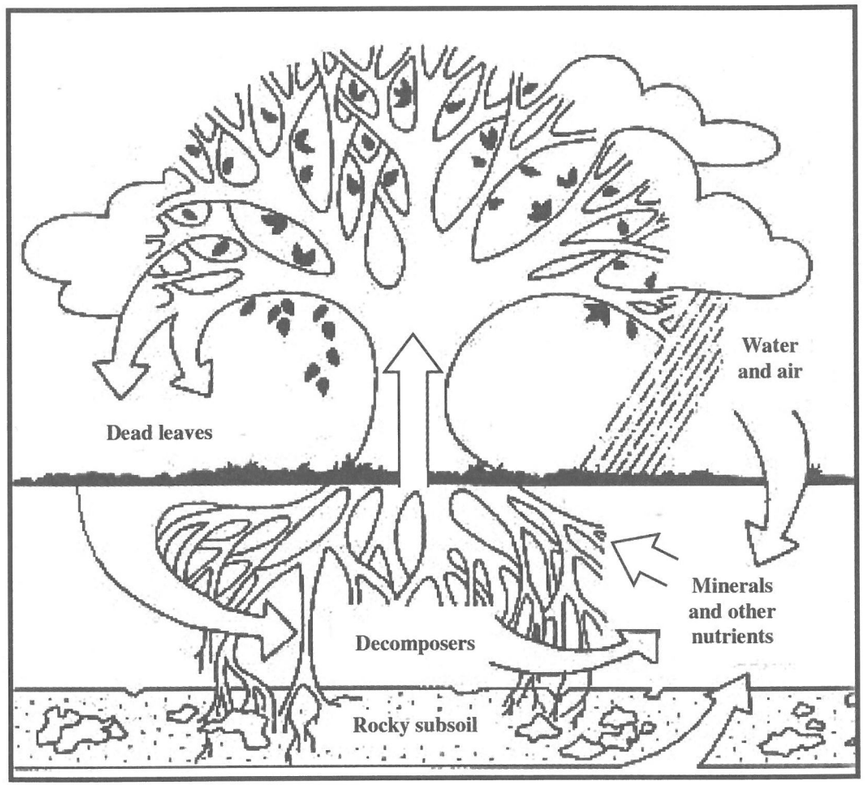
Provided by dse.life

4. Table 4a shows the human activities and forest area in Brazil from 1990 to 2010. Figure 4b shows a model of the nutrient cycle of the rainforest.

Table 4a

Year	Cattle herd size ('000 heads)	Soybean production (million tonnes)	Sugar cane production (million tonnes)	Charcoal production (million tonnes)	Forest area in Brazil ('000 ha)
1990	147 102	9.7	8.0	4.8	574 839
2010	212 800	24.2	39.0	5.0	519 522

Figure 4b



Key:

Nutrient flow

(a) Refer to Table 4a.

(i) Calculate the percentage change in forest area in Brazil from 1990 to 2010. (2 marks)

(ii) Explain how human activities led to the change in forest area in Brazil from 1990 to 2010. (3 marks)

(b) Refer to Figure 4b. Explain the impact of the human activities in Table 4a on:

(i) the nutrient cycle shown in Figure 4b. (5 marks)

(ii) the rainforest ecosystem in Brazil **irrespective of** the impact on the nutrient cycle. (5 marks)

(c) '*Rainforest adoption' aims at inviting the public to buy rainforest land for conservation.*

Evaluate whether 'rainforest adoption' can effectively conserve the rainforest ecosystem. (3 marks)

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Section C: Answer any ONE question from this section. Each question carries 12 marks.

5. Explain how suburbanisation causes land use conflicts in the New Territories. Evaluate whether new town development can keep a balance between environmental conservation and urban development. (12 marks)

6. Describe the climatic constraints of farming in Southern California. Evaluate the effectiveness of irrigation in solving the climatic constraints of farming in Southern California. (12 marks)

7. Explain how the overuse of fossil fuels leads to a rise in global temperature. Evaluate whether the use of renewable energy resources can effectively combat the adverse impact of global temperature change. (12 marks)

END OF PAPER

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

2014-DSE
GEOG
PAPER 2

HONG KONG EXAMINATIONS AND ASSESSMENT AUTHORITY
HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION 2014

GEOGRAPHY PAPER 2

11.45 am – 1.00 pm (1¼ hours)
This paper must be answered in English

GENERAL INSTRUCTIONS

1. This paper consists of **TWO** sections:

   Section D – consists of 4 data / skill-based structured questions. Choose **ONE** question **only** in this section, **which must be in a different elective from that chosen in Section E.**

   Candidates attempting:
   Question 1 in this section are **NOT** allowed to choose Question 5 in Section E.
   Question 2 in this section are **NOT** allowed to choose Question 6 in Section E.
   Question 3 in this section are **NOT** allowed to choose Question 7 in Section E.
   Question 4 in this section are **NOT** allowed to choose Question 8 in Section E.

   Section E – consists of 4 short essay questions. Choose **ONE** question **only** in this section, **which must be in a different elective from that chosen in Section D.**

   Candidates attempting:
   Question 5 in this section are **NOT** allowed to choose Question 1 in Section D.
   Question 6 in this section are **NOT** allowed to choose Question 2 in Section D.
   Question 7 in this section are **NOT** allowed to choose Question 3 in Section D.
   Question 8 in this section are **NOT** allowed to choose Question 4 in Section D.

2. Answer a total of **TWO** questions.

3. Write your answers in the Answer Book. Start each question (not part of a question) on a new page.

4. Draw sketch maps and diagrams to supply additional, relevant information when appropriate.

Not to be taken away before the end of the examination session

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