



福建中學

FUKIEN SECONDARY SCHOOL

S6 Mock Examination (2021-2022)

Geography Paper 1

(2 hours 30 minutes)

Date: 25th January 2022

Time: 8:30 a.m. - 11:00 a.m.

Name: _____

Class: _____ No.: _____

GENERAL INSTRUCTIONS

1. This paper consists of **THREE** sections:
Section A — consists of 20 multiple-choice questions. Answer **ALL** questions in this section.
Section B — consists of an **OPTIONAL** fieldwork-based question (Question 1) and 4 data/skill-based structured questions (Questions 2 to 5). Attempt any **TWO** questions in this section.
Section C — consists of 3 short essay questions (Questions 6 to 8). Attempt any **ONE** question in this section.
 2. Draw sketch maps and diagrams to supply additional, relevant information when appropriate.
 3. 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 to C must be handed in separately at the end of the examination.**
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INSTRUCTIONS FOR SECTION A (MULTIPLE-CHOICE QUESTIONS)

1. Read carefully the instructions on the Answer Sheet.
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.

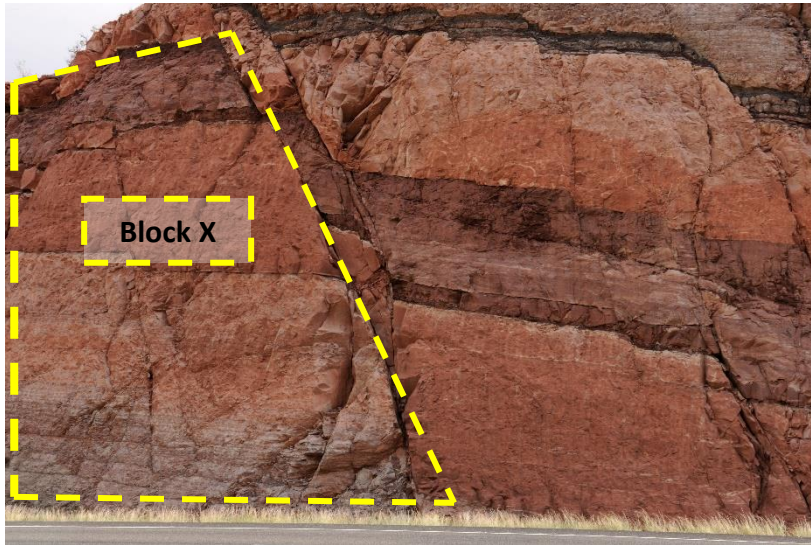
Section A: There are 20 questions in this section. Answer ALL questions in this section. All the answers must be marked on the Answer Sheet. (24%)

Refer to the map extract of Hong Kong (1:20 000) provided and answer Questions 1 to 6.

1. Which of the following facilities can be found in grid square 1977?
 - (1) Post office
 - (2) Fire station
 - (3) Sports ground
 - A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)
2. The actual length of the section of Tai Mong Tsai Road between the roundabout at 193783 and another roundabout at 203791 is approximately _____.
 - A. 1,140 m
 - B. 1,560 m
 - C. 3,850 m
 - D. 7,700 m
3. Which of the following shows the average gradient of the slope from spot height 249 at 202807 to the temple at 205791?
 - A. 1: 2.2
 - B. 1: 3.8
 - C. 1: 5.1
 - D. 1: 6.3
4. Which of the following places is 2.5 km away and at a whole circle bearing of 113° from the trigonometric station at 190796?
 - A. Jade Villa (190787)
 - B. Floral Villa (212786)
 - C. Wong Chuk Wan (203794)
 - D. Tsam Chuk Wan (229788)

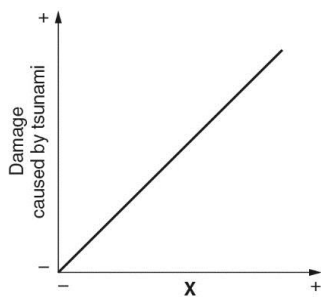
5. Which of the following places is/are visible from the trigonometric station at 220782?
- (1) Spot height 23 at 221763
 - (2) Spot height 19 at 215766
 - (3) Trigonometric station at 214793
- A. (2) only
 - B. (1) and (2) only
 - C. (1) and (3) only
 - D. (2) and (3) only
6. Which of the following help explain the low building density on Sharp Island (grid squares 2075, 2175, 2076 and 2176)?
- (1) Low accessibility
 - (2) Lack of public facilities
 - (3) Lack of electricity supply
- A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

7. The photo below shows a feature formed by an internal process. Which of the following descriptions about the feature is/are correct?



- (1) It is a normal fault.
 - (2) A block mountain is found.
 - (3) Block X is a footwall block.
- A. (1) only
 - B. (1) and (2) only
 - C. (1) and (3) only
 - D. (2) and (3) only

8. Refer to the figure below. Which of the following are the possible labels for X?



- (1) Effectiveness of warning system
 - (2) Population density of the coastal area
 - (3) Magnitude of submarine earthquake
- A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

9. The photo below shows a fluvial feature at a particular course of a river. Which of the following descriptions about the fluvial feature shown are correct?



- (1) It is formed by attrition and traction.
 - (2) It is normally found at the upper course.
 - (3) It is developed from rocks of different resistance.
- A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

10. The photos below show the same section of a river in Hong Kong before and after modifications. Which of the following descriptions about the river section after modifications are correct?



- (1) Lower river velocity
 - (2) Larger water-holding capacity
 - (3) Better ecological value of the river
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)

11. The photos below show two types of manufacturing industry. Which of the following comparisons between industries X and Y are correct?



		Industry X	Industry Y
(1)	Weight of raw materials	Light	Light
(2)	Level of technology	Low-tech	High-tech
(3)	Inputs of labour and capital	Labour-intensive	Capital-intensive

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

12. Which of the following are the reasons for the coastal shift of the iron and steel industry in China?
- (1) Adoption of the open policy
 - (2) Easy for importing raw materials
 - (3) Presence of agglomeration economies
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
13. Which of the following descriptions about counter-urbanisation is correct?
- (1) The size of large cities decreases.
 - (2) The number of small urban areas increases.
 - (3) Commuting between the suburbs and main urban areas increases.
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
14. The photo below is taken in the New Territories of Hong Kong. Which of the following are correct descriptions of the phenomenon shown in the photo?

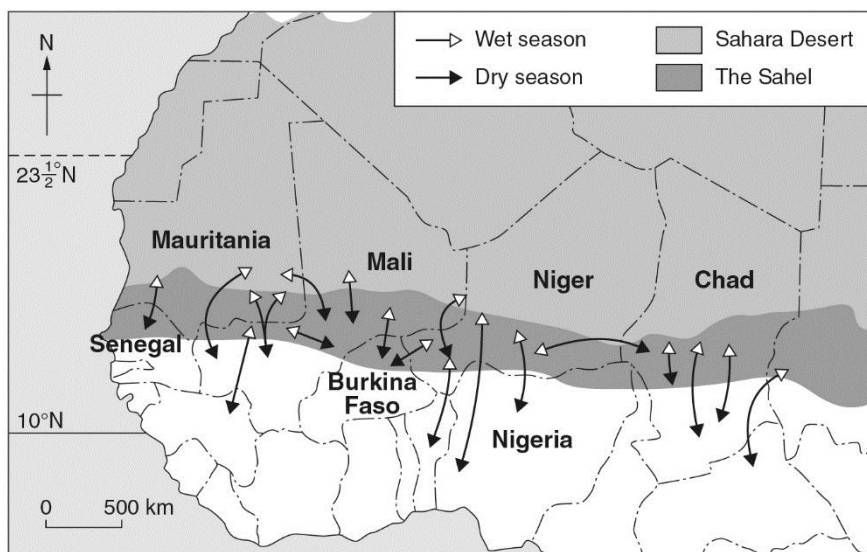


- (1) It is triggered by urban decay.
 - (2) There is a decrease in the number of local villagers.
 - (3) There is a decline in the community services available.
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)

15. Which of the following is/are the factor(s) that hinder(s) farming activity in the Sahel?

- (1) Large annual range of temperature
 - (2) High relief of above 500 m
 - (3) High variability of rainfall
- A. (1) only
 B. (3) only
 C. (1) and (2) only
 D. (2) and (3) only

16. The figure below shows some migration routes of a farming practice in the Sahel. Which of the following descriptions about this practice are correct?



- (1) The practice is called transhumance.
 - (2) Cross-border conflict may disrupt the migration routes.
 - (3) The migration usually causes overgrazing along the routes.
- A. (1) and (2) only
 B. (1) and (3) only
 C. (2) and (3) only
 D. (1), (2) and (3)

17. The photograph below shows a tropical rainforest. Which of the following descriptions about the trees in layer P are correct?



- (1) Mostly reaches 15 metres or above
 - (2) Has umbrella-shaped crowns
 - (3) Usually supported by buttress roots
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
18. The satellite image below shows the Amazon rainforest. Which of the following statements about the activity shown are correct?



- (1) Deforestation occurs along the main river.
 - (2) Deforestation occurs along highways and main roads.
 - (3) The land is deforested for plantation.
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)

19. How does climate change alter the rainfall pattern in Hong Kong?

- (1) Rainfall becomes more intense.
 - (2) Thunderstorms become more frequent.
 - (3) Rainfall becomes evenly distributed throughout the year.
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)

20. The photo below shows a measure to ease the problem of climate change in Hong Kong. Which of the following statements about the measure are correct?



- (1) It is a mitigation measure.
 - (2) It helps reduce energy consumption.
 - (3) It helps store carbon dioxide inside the building.
- A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)

END OF SECTION A

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Section B: Answer TWO questions from this section. Each question carries 18 marks. (39%)**1. This fieldwork-based question is OPTIONAL.**

A group of students carried out a geographical field study related to the size of sediment particles in a river in the New Territories. Figure 1a is a map showing the field study sites where students took sediment particle samples. Photo 1b shows the measuring equipment used. Table 1c shows the data collected at the field study sites.

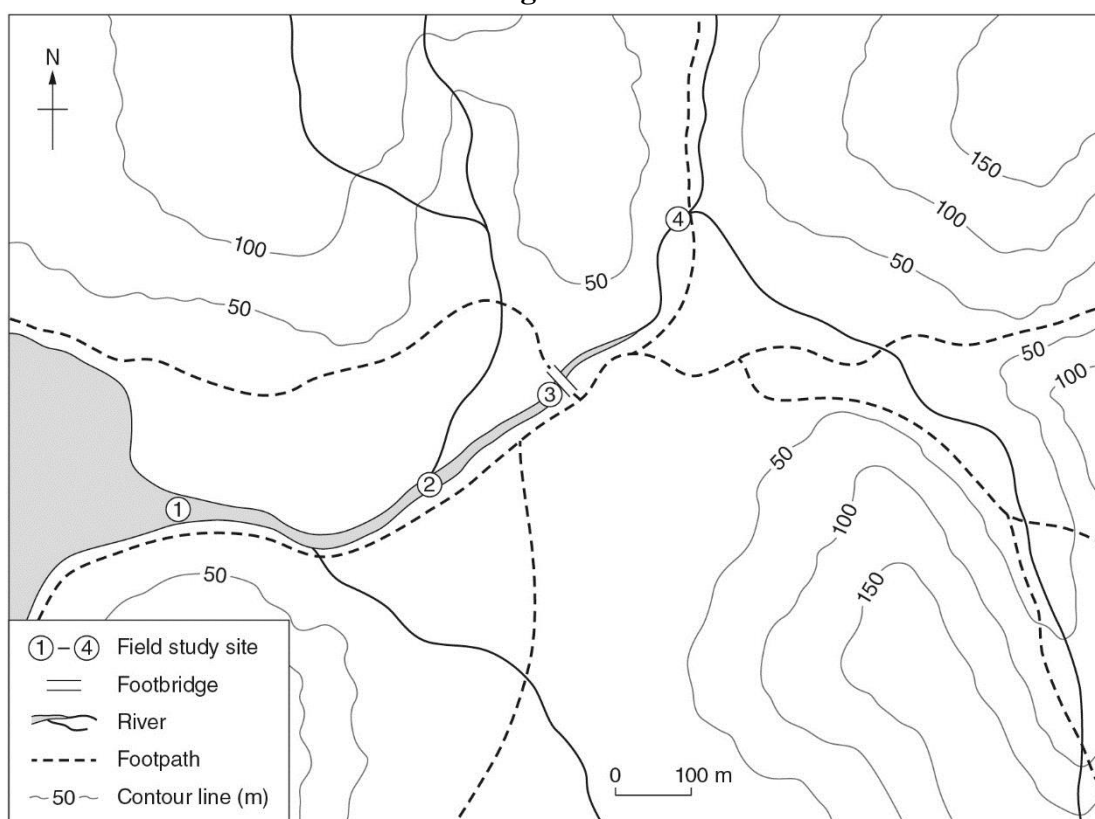
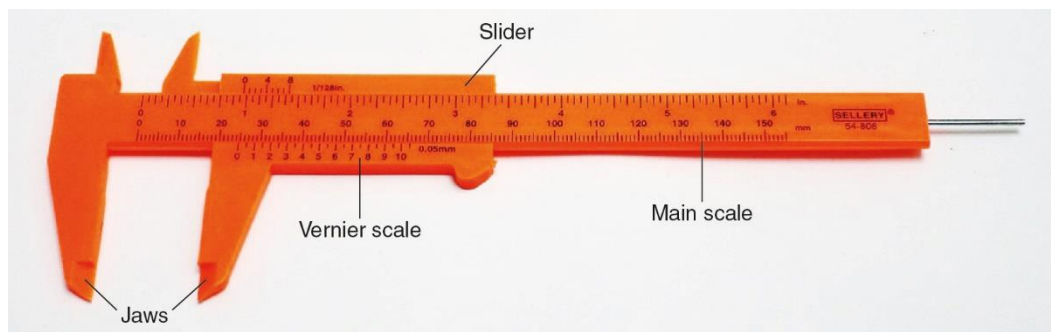
Figure 1a**Photo 1b**

Table 1c

Date: 20 December 2020					
Site	Distance from the river mouth (m)	Size of sediment particle (cm)			Mean size (cm)
		Sample 1	Sample 2	Sample 3	
①	60	4.40	5.95	6.25	5.53
②	430	4.35	6.20	6.10	5.55
③	620	5.65	4.80	6.25	5.57
④	930	6.05	5.70	4.75	5.50

(a) Refer to Figure 1a.

(i) Suggest a hypothesis for this field study. (1 mark)

(ii) Describe one merit and one limitation of the choice of field study sites. Quote map evidence to support your answer. (4 marks)

(b) Refer to Photo 1b and Table 1c. Describe how to make use of the measuring equipment shown to complete Table 1c. (4 marks)

(c) *The students chose sediment particle samples that are conveniently picked up by hand.*

Refer to Table 1c. Explain how this method may have affected the data collected. (3 marks)

(d) Suggest and explain ways to raise the reliability of data collection in the field study. (6 marks)

2. Figure 2a shows the locations of volcanoes X and Y which erupted in 2018. Figure 2b shows the plate movement near volcano Y and a photo of the eruption of volcano Y. Table 2c shows the information of the two volcanic eruptions.

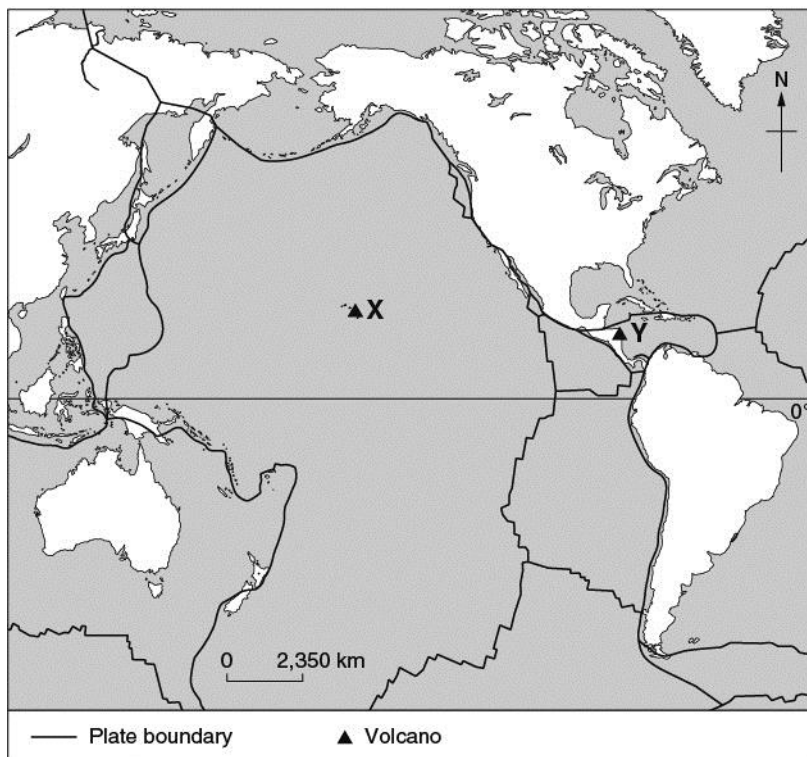
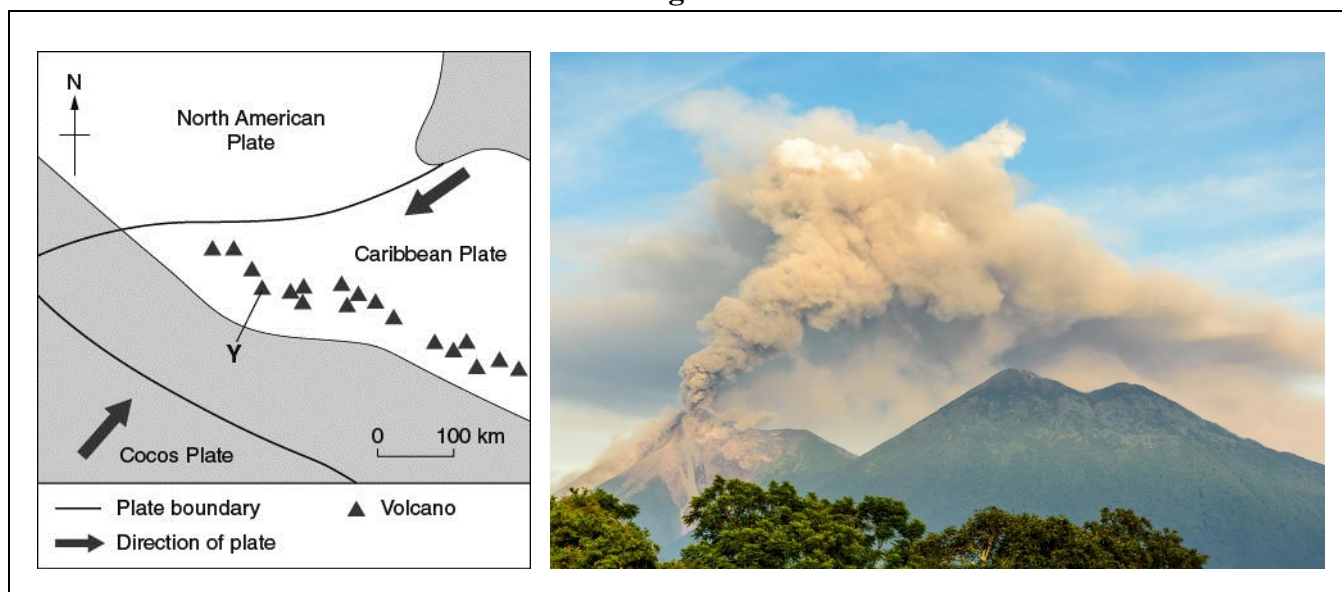
Figure 2a**Figure 2b**

Table 2c

	Volcano X	Volcano Y
Casualties	No deaths or major injuries	182 deaths and hundreds of injured
Erupted materials	Mainly lava	Mainly volcanic ashes, hot gases and rock fragments
Area covered by the erupted materials	10 km ²	1,100 km ²
Provision of early warning	Issued 2 days before eruption	No official warning issued
GDP per capita of the city where the volcano is located	US\$51,000	US\$4,000

(a) Refer to Figures 2a, 2b and Table 2c.

- (i) Contrast volcanoes X and Y in terms of their locations. (2 marks)
- (ii) Draw a series of annotated diagrams to explain the formation of volcano Y. (4 marks)
- (iii) Explain why volcano X will become extinct after 10 million years. (4 marks)

(b) Refer to Table 2c.

- (i) Quoting evidence from Table 2c, account for the differences in losses caused by the eruptions of volcanoes X and Y. (4 marks)
- (ii) Discuss whether the provision of drills is effective in minimizing losses caused by eruptions in the country where volcano Y is located. (4 marks)

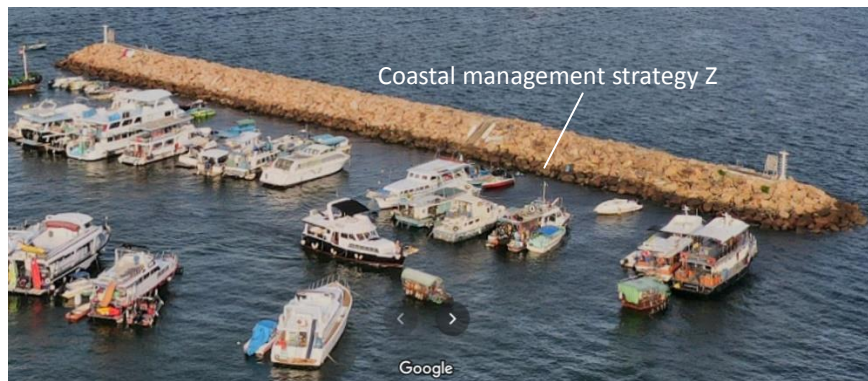
3. Refer to the map extract (1:20,000) of Sai Kung. Figure 3a is an outline map of Hong Kong, which indicates the area covered by the map extract with a broken line. Photo 3b is a satellite image showing features X (205769) and Y (215748) in area A in Figure 3a. Photo 3c shows coastal management strategy Z located at 194772. Photo 3d shows an alternative coastal management strategy.

Figure 3a



Photo 3b



Photo 3c**Photo 3d**

- (a) Refer to Figure 3a, Photo 3b and the map extract (1:20,000) of Sai Kung.
- (i) Name features X and Y. (2 marks)
 - (ii) Identify the major work of waves that cause the formation of these two features. (1 mark)
 - (iii) Using map evidence, explain the favourable conditions for the formation of feature X. (4 marks)
- (b) Refer to the map extract. How has the coastline in grid squares 1877 and 1977 been modified? Support your answer with map evidence. (4 marks)
- (c) Refer to the map extract, Photos 3c and 3d.
- (i) Identify coastal management strategy Z and explain how it works. (3 marks)
 - (ii) Discuss whether coastal management strategy Z or the strategy shown in Photo 3d is more appropriate for protecting the coast in grid squares 1877 and 1977. (4 marks)

4. Photo 4a shows the headquarters of manufacturing firm A in the USA. Figure 4b shows the map where the headquarters is located. Figure 4c shows the locations of the production plants of this manufacturing firm around the world.

Photo 4a

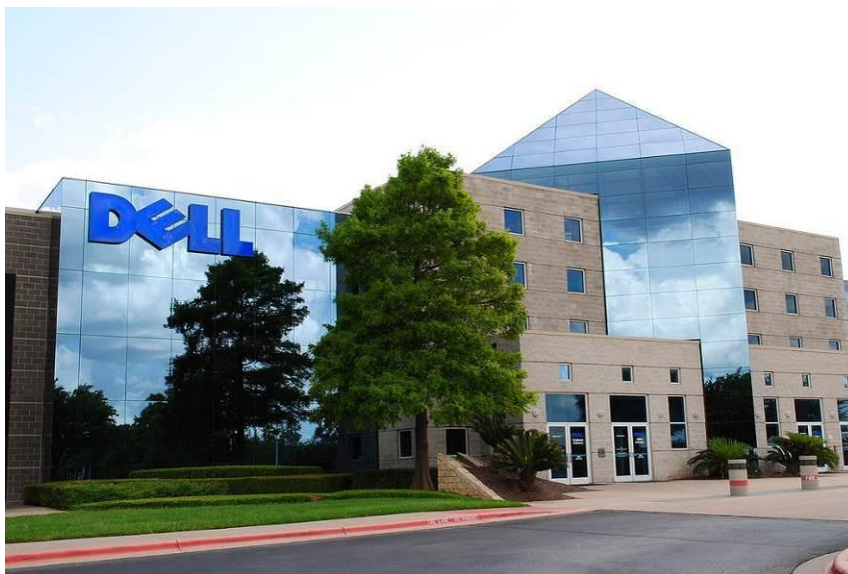


Figure 4b

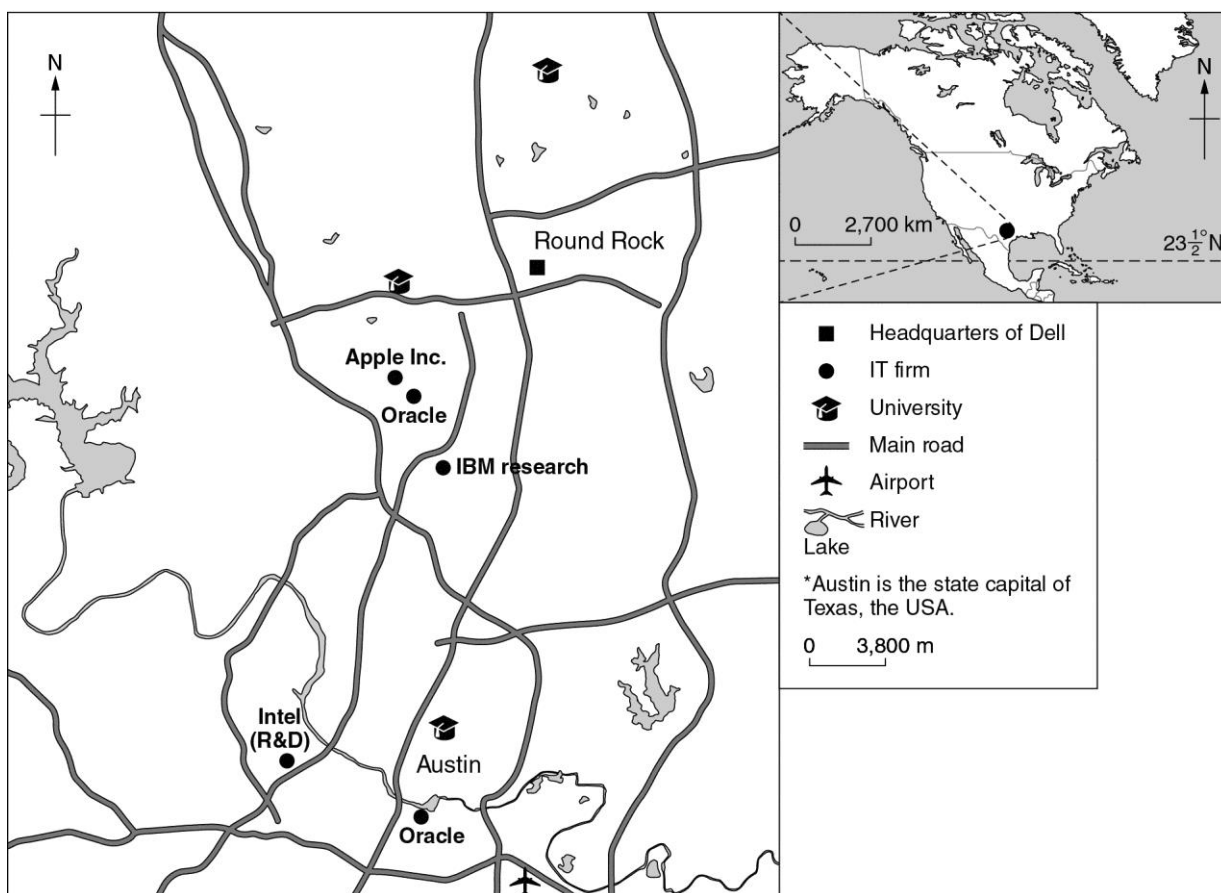
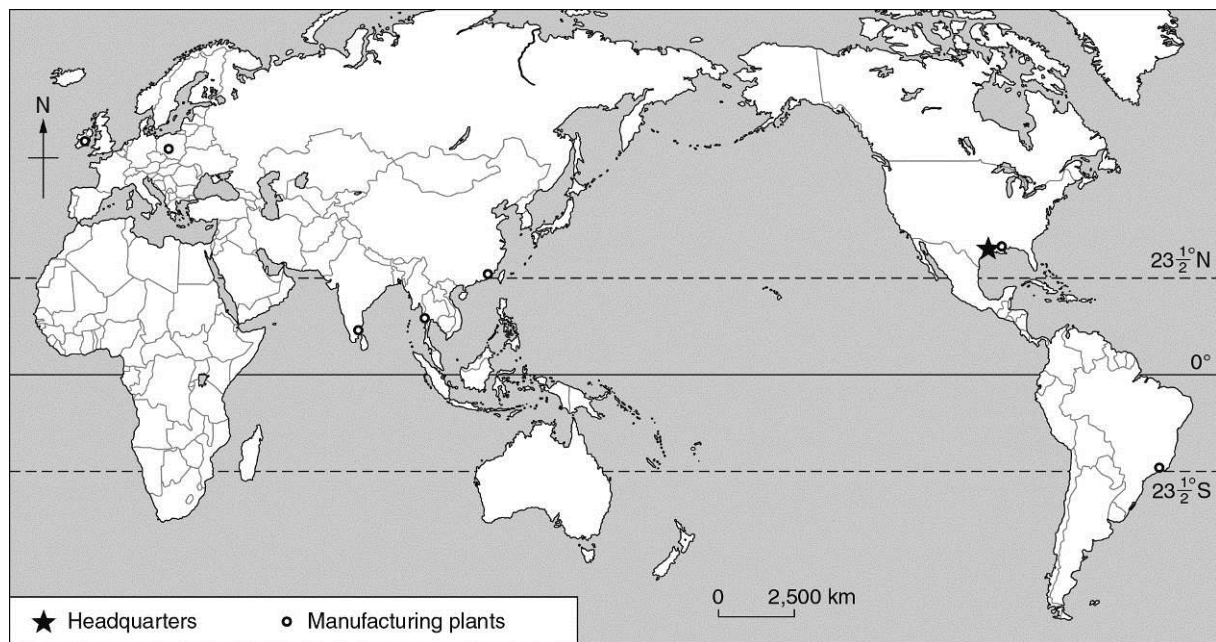


Figure 4c

- (a) (i) Classify the type of industry shown in Photo 4a. (1 mark)
- (ii) Refer to Figure 4b. Explain the locational factors of the headquarters of manufacturing firm A with map evidence. (4 marks)
- (b) Refer to Figures 4b and 4c. Explain the mode of production of manufacturing firm A. (5 marks)
- (c) *Due to the trade battle between the USA and China, manufacturing firm A and other global manufacturing firms are considering shifting their production line out of China to Vietnam or the Philippines.*
- (i) Describe the possible socio-economic impacts of such a decision on China. (4 marks)
- (ii) Discuss the pros and cons of the decision on manufacturing firm A. (4 marks)

5. Table 5a shows some statistics on population and forest area of the three rainforest basins in 1990 and 2010. Photos 5b and 5c show a cassava farm and a primary rainforest in the Amazon Basin respectively.

Table 5a

Rainforest region	Percentage Change (%) (1990-2010)		Forest Cover (1000 ha)	
	Population	GDP per capita	1990	2010
Amazon Basin	+35.5	+380	874 321	799 394
Congo Basin	+67.3	+71	316 078	301 807
Southeast Asia	+35.5	+356	277 817	242 048

Photo 5b**Photo 5c**

- (a) Refer to Figure 5a.
- Draw a bar chart to show the percentage changes of forest cover of the three rainforest regions between 1990 and 2010. (4 marks)
 - Explain the forest cover changes of the three regions. (3 marks)
- (b) With reference to Photos 5b and 5c, compare the ecological characteristics between the landscapes shown. (4 marks)
- (c) How does the large-scale development of cassava farm in the Amazon Basin by transnational corporations threaten the living of indigenous people? (3 marks)
- (d) Discuss whether the development of national park in the Amazon Basin can help conserve the rainforest. (4 marks)

Section C: Answer ONE question from this section. Each question carries 12 marks. (12%)

6. Compare the physical agricultural constraints encountered by the farmers in the southern California and the Sahel. Discuss whether farming technology can reduce the physical constraints in the southern California. (12 marks)

7. Describe the problems found in the inner city of Hong Kong. Discuss whether redevelopment and rehabilitation can effectively solve these inner city problems. (12 marks)

8. Account for the possible adverse impacts of climate change on Hong Kong. Discuss whether mitigation measures can tackle the adverse impacts of climate change on Hong Kong. (12 marks)

END OF PAPER