

GEOGRAPHY PAPER 1

(Sample Paper)

Time allowed: 2 hours 30 minutes
This paper must be answered in English.

GENERAL INSTRUCTIONS

- 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 any **TWO** questions only in this section.
Section C – consists of 3 short essay questions. Choose **ONE** question only in this section.
 - Draw sketch maps and diagrams to supply additional, relevant information when appropriate.
 - A map extract is provided in this sample paper.
 - Answers to Section A should be marked on the Multiple-choice Answer Sheet while answers to Sections B and C should be written in the Answer Book. **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.**
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INSTRUCTIONS FOR SECTION A

- Read the instructions on the Answer Sheet carefully. Stick a barcode label and insert the information required in the spaces provided.
- 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.
- All questions carry equal marks.
- 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 should mark only **ONE** answer for each question. If you mark more than one answer, you will receive **NO MARKS** for that question.
- No marks will be deducted for wrong answers.

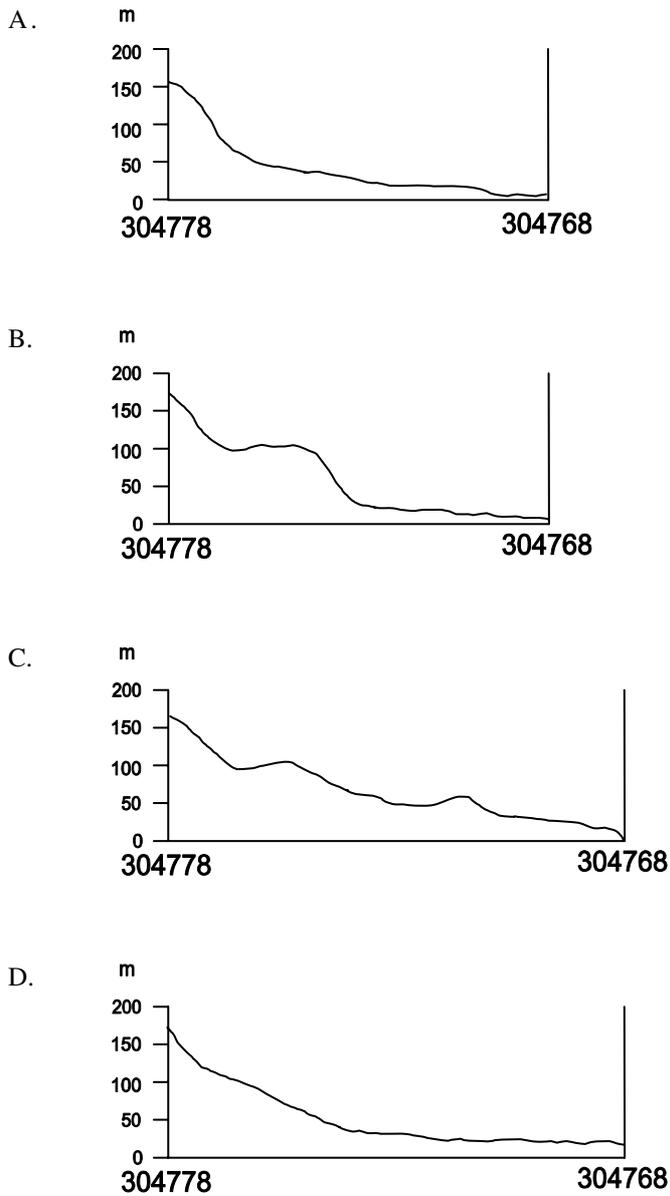
Not to be taken away before the
end of the examination session

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. (22%)

Questions 1 to 5 refer to the map extract of Hong Kong provided (Series HM20C, Sheet 8, Edition 13, 2007).

1. Which of the following CORRECTLY describe the characteristics of the river basin of Pak Hang in grid squares 2780 and 2781?
- (1) It follows a radial pattern.
 - (2) A floodplain and a delta are found in its lower course.
 - (3) The river drains southwards.
 - (4) Erosion is the dominant fluvial process in grid square 2780.
- A. (1) and (3) only
 - B. (2) and (4) only
 - C. (1), (3) and (4) only
 - D. (1), (2), (3) and (4)
2. Which of the following statement(s) CORRECTLY describe(s) the High Island Reservoir?
- (1) It has drowned land below 60m.
 - (2) It receives water from the Pak Hang river.
 - (3) The chance of pollution from the surrounding region is low.
 - (4) It was built because there was a flood risk in Sai Kung East Country Park.
- A. (2) only
 - B. (1) and (3) only
 - C. (3) and (4) only
 - D. (1), (2) and (4) only
3. Which of the following statements are CORRECT?
- (1) A tombolo is found in grid square 2477.
 - (2) Geos are found in grid square 3176.
 - (3) A rocky coast is found in grid square 3181.
 - (4) Dams are found in grid square 2975.
- A. (1) and (3) only
 - B. (2) and (4) only
 - C. (1), (2) and (3) only
 - D. (2), (3) and (4) only

4. Which of the following is a CORRECT representation of the long profile of the river from 304778 to 304768?



5. What is the vertical exaggeration of the long profile in Question 4?

- A. 2 times
- B. 2.5 times
- C. 3 times
- D. 3.5 times

6. The luxuriant growth of natural vegetation in tropical rainforests is due to
- (1) the fertile soil.
 - (2) hot and wet climate throughout the year.
 - (3) the intense sunlight for photosynthesis.
 - (4) seasonal change to facilitate nutrient absorption.
- A. (1) and (4) only
B. (2) and (3) only
C. (1), (2) and (3) only
D. (1), (2), (3) and (4)
7. What are the effects on tropical rainforest after large-scale deforestation?
- (1) Leaching increases.
 - (2) A large amount of energy flows from trophic levels I to II.
 - (3) There is a great loss of biomass.
 - (4) The nutrient cycle is disturbed or stopped.
- A. (1) and (3) only
B. (2) and (4) only
C. (1), (3) and (4) only
D. (1), (2), (3) and (4)
8. Fire is used in shifting cultivation because it helps
- (1) improve the soil structure.
 - (2) release nutrients from litter.
 - (3) keep indigenous people warm.
 - (4) kill bacteria and worms.
- A. (1) and (3) only
B. (1) and (4) only
C. (2) and (3) only
D. (2) and (4) only
9. The roles of decomposers in tropical rainforests are to
- (1) spread diseases to check the population size of tribal groups.
 - (2) break down litter for nutrient cycling.
 - (3) perform as a medium for nitrogen fixation from the atmosphere to the soil.
 - (4) absorb energy from the soil to facilitate energy flow of the ecosystem.
- A. (1) and (3) only
B. (1) and (4) only
C. (2) and (3) only
D. (2) and (4) only

10. Which of the following factors favour transnational corporations in developing IT industries in less developed countries?

- (1) low labour costs
- (2) stable government policy
- (3) an improved tele-communications system
- (4) a sufficient supply of raw materials

- A. (1), (2) and (3) only
- B. (1), (2) and (4) only
- C. (1), (3) and (4) only
- D. (2), (3) and (4) only

11. Which of the following are possible difficulties that the iron and steel industry in China will face in the future?

- (1) an insufficient supply of raw materials
- (2) a rise in power resource prices
- (3) pollution problems
- (4) insufficient skilled labour

- A. (1), (2) and (3) only
- B. (1), (2) and (4) only
- C. (1), (3) and (4) only
- D. (2), (3) and (4) only

12. Which of the following are CORRECT comparisons about the two following industries in Hong Kong?

	Textiles industry in the 1970s	IT industry in the 2000s
(1)	for local consumption	for export
(2)	low value-added	high value-added
(3)	market-oriented	power-oriented
(4)	dominantly semi-skilled labour	dominantly skilled labour

- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (4) only
- D. (3) and (4) only

13. Which of the following is/are major reason(s) for the Chinese Government shifting the location of the iron and steel industry from the coast to the interior in the 1950s?

- (1) for strategic reasons
- (2) sufficient skilled labour was available in the interior
- (3) cheap raw materials and power resources could be found in the interior
- (4) to solve pollution problems

- A. (1) only
- B. (2) and (4) only
- C. (1), (2) and (3) only
- D. (2), (3) and (4) only

14. Which of the following are CORRECT descriptions of the IT industry in the United States?

- (1) labour-intensive
 - (2) technology-intensive
 - (3) market-oriented
 - (4) power-oriented
- A. (1) and (4) only
B. (2) and (3) only
C. (1), (2) and (3) only
D. (1), (2), (3) and (4)

15. Which of the following measures have been taken by the HKSAR Government to alleviate the problems caused by industrial re-structuring?

- (1) improving air quality
 - (2) retraining labour
 - (3) offering subsidies to industrialists
 - (4) increasing employment opportunities in the service sector
- A. (1) and (3) only
B. (2) and (4) only
C. (1), (3) and (4) only
D. (2), (3) and (4) only

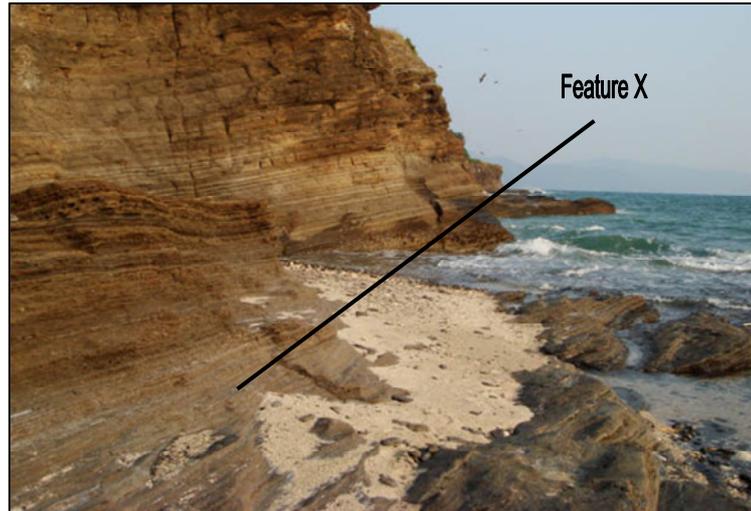
16.



The above photograph shows a river management strategy in Hong Kong. What are the beneficial effects of this strategy?

- (1) increase in river efficiency
 - (2) reduction in the flooding problem
 - (3) increase in the biodiversity of the channel
 - (4) reduction in the river velocity
- A. (1) and (2) only
B. (1), (2) and (3) only
C. (1), (3) and (4) only
D. (2), (3) and (4) only

17.



Feature X in the above photograph is formed under the following conditions:

- (1) a short fetch
- (2) the presence of joints or cracks in the headland
- (3) the deposition of rocks
- (4) strong hydraulic action and abrasion

- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (4) only
- D. (3) and (4) only

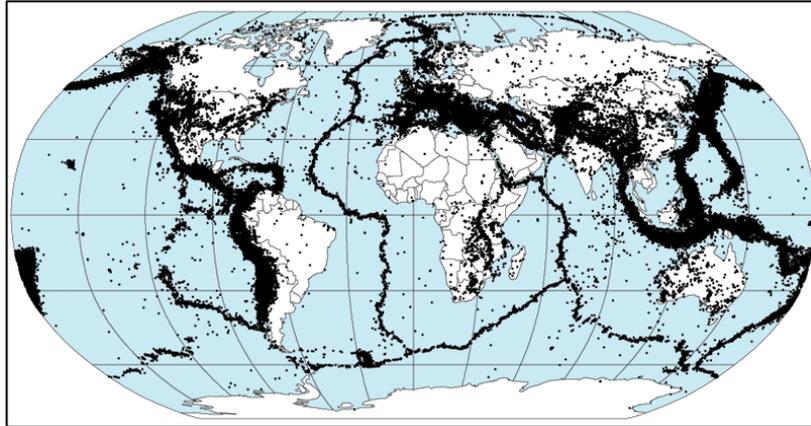
18. Which of the following comparisons between tombolos and beaches are correct?

	Tombolos	Beaches
(1) Location	between an island and a headland	on a bay
(2) Materials	sand and pebbles	sand only
(3) Process	erosion	deposition
(4) Example	Cheung Chau	Shek O

- A. (1) and (2) only
- B. (1) and (4) only
- C. (2) and (3) only
- D. (3) and (4) only

19. Wave erosion is more common on the east and southeast coasts of Hong Kong because of
- (1) the presence of weathered rock.
 - (2) the presence of constructive waves.
 - (3) a longer fetch.
 - (4) their exposure to easterly winds most of the time.
- A. (1) and (2) only
 - B. (1) and (4) only
 - C. (2) and (3) only
 - D. (3) and (4) only
20. A group of students are planning to do a field study on the changes of the velocity of a river in different courses. Which of the following data should be collected?
- (1) width of the river
 - (2) depth of the river
 - (3) gradient of that river section
 - (4) roughness of the river bed
- A. (1) and (2) only
 - B. (3) and (4) only
 - C. (2), (3) and (4) only
 - D. (1), (2), (3) and (4)
21. Subduction occurs when
- (1) an oceanic plate collides with a continental plate.
 - (2) an oceanic plate collides with another oceanic plate.
 - (3) a continental plate slides past another continental plate.
 - (4) an oceanic plate moves away from a continental plate.
- A. (1) and (2) only
 - B. (3) and (4) only
 - C. (1), (2) and (4) only
 - D. (1), (2), (3) and (4)
22. Which of the following descriptions about earthquakes is CORRECT?
- A. The Richter Scale is used to show the intensity of an earthquake.
 - B. The point under the Earth's surface where fracturing begins is the earthquake's epicentre.
 - C. All earthquakes occur along the plate boundary.
 - D. Most deep-focus earthquakes are found along the destructive plate margin.

23.



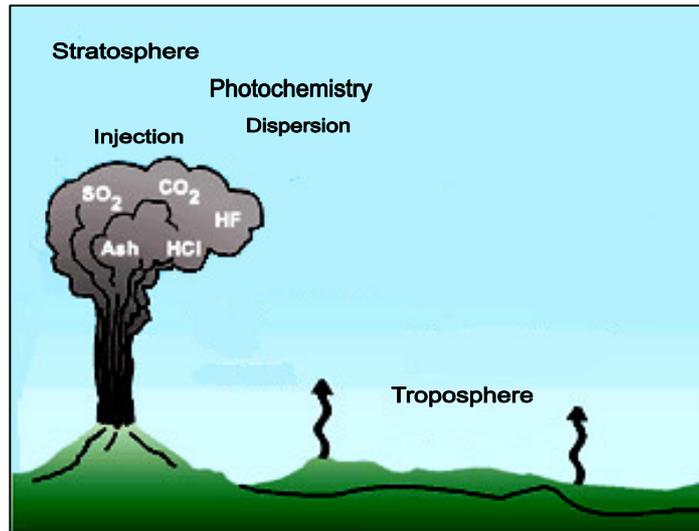
The blackened areas in the figure above are the zones of

- (1) active volcanoes.
 - (2) earthquakes.
 - (3) fold mountains.
 - (4) island arcs.
- A. (1) only
 - B. (2) only
 - C. (1), (2) and (3) only
 - D. (2), (3) and (4) only

24. _____ can effectively reduce the destruction and loss of life caused by tsunamis.

- A. Building floodgates and channels
- B. Strengthening housing structures
- C. Improving the warning system
- D. Planting trees along the coast

25.



With reference to the above figure, the effects of volcanic eruption in the atmosphere include _____.

- (1) cloud formation
 - (2) acid rain formation
 - (3) ozone layer depletion
 - (4) an increase in insolation
- A. (1) and (3) only
 - B. (2) and (4) only
 - C. (1), (2) and (3) only
 - D. (2), (3) and (4) only

26. Which of the following are CORRECT descriptions of the major sources of greenhouse gases?

	Greenhouse gases	Major sources
(1)	Carbon dioxide (CO ₂)	(i) fuel combustion (ii) deforestation
(2)	Methane (CH ₄)	biomass combustion
(3)	Ozone (O ₃)	photo-chemical reaction
(4)	Chlorofluorocarbons (CFCs)	deforestation

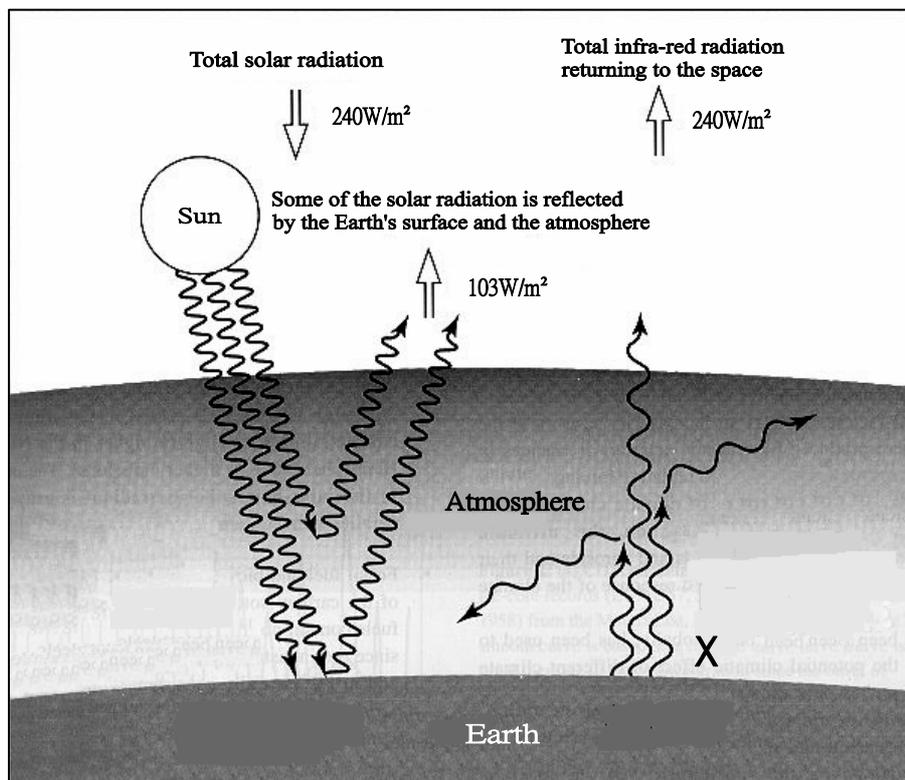
- A. (1), (2) and (3) only
- B. (1), (2) and (4) only
- C. (1), (3) and (4) only
- D. (2), (3) and (4) only

27. Which of the following descriptions about the Kyoto Protocol are CORRECT?

- (1) The U.S. and Australia did not implement the Kyoto Protocol.
 - (2) China did not ratify the Kyoto Protocol.
 - (3) All countries in the world sent representatives to sign the protocol in Japan.
 - (4) The protocol hopes that more developed countries will reduce their greenhouse gas emissions by 5% compared to levels in 1990.
- A. (1) and (2) only
B. (1) and (4) only
C. (2) and (3) only
D. (2) and (4) only

Refer to the following diagram for questions 28 and 29.

28.



With reference to the data above, the percentage of incoming solar radiation which is absorbed temporarily by the Earth and the atmosphere is

- A. 43%.
B. 46%.
C. 57%.
D. 60%.

29. Which of the following processes transfer energy from the Earth's surface to the atmosphere at X?

- (1) convection
- (2) conduction
- (3) radiation
- (4) condensation

- A. (1) and (2) only
- B. (3) and (4) only
- C. (1), (2) and (3) only
- D. (1), (2), (3) and (4)

30. Which of the following may result from a rise in global temperatures?

- (1) a rise in sea level
- (2) a retreat of the snowline
- (3) abnormal biological cycles of organisms
- (4) an extreme climate change

- A. (1) and (3) only
- B. (2) and (4) only
- C. (1), (3) and (4)
- D. (1), (2), (3) and (4)

31. What are the advantages of the urban renewal strategy as revealed in the following photographs taken of the same building?



- (1) to provide more open space for the residents
- (2) to improve the living conditions of the residents
- (3) to increase the value of the building
- (4) to reduce the chance of fire hazard

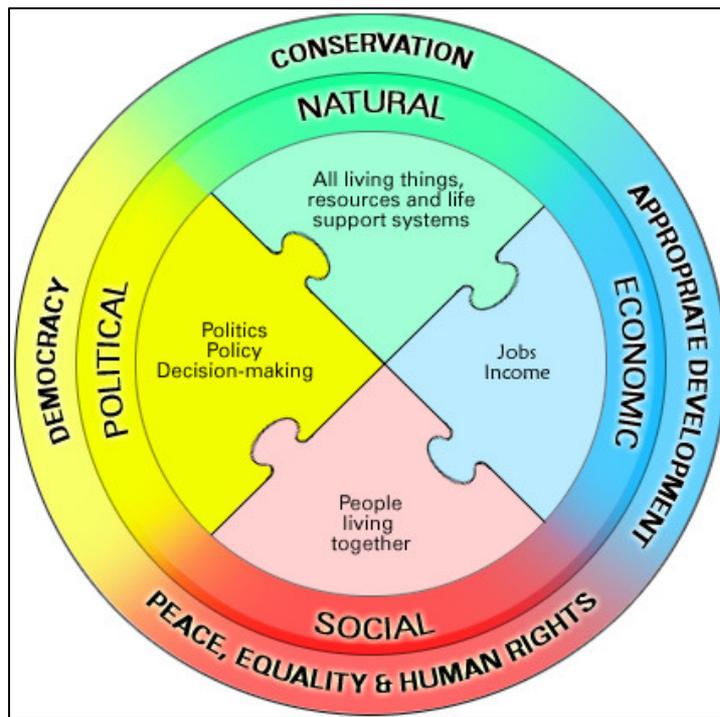
- A. (1) and (3) only
- B. (2) and (4) only
- C. (2), (3) and (4) only
- D. (1), (2), (3) and (4)

32. Which of the following are the effects of 'counter-urbanization'?

- (1) Commuting between rural and urban areas may increase.
- (2) Property prices in rural areas may rise.
- (3) The number of shops in rural areas may increase.
- (4) Air pollution in rural areas may increase.

- A. (1) and (2) only
- B. (3) and (4) only
- C. (2), (3) and (4) only
- D. (1), (2), (3) and (4)

33.



According to the figure above, which shows the four components of sustainable development, what should be done to ensure sustainable development in Hong Kong?

- (1) developing the economy without consideration to the environmental constraints
- (2) considering the needs of all species and their rights to enjoy the same quality of life
- (3) developing the economy as well as social resources
- (4) enhancing co-ordination and co-operation among all government departments

- A. (1) and (2) only
- B. (1), (3) and (4) only
- C. (2), (3) and (4) only
- D. (1), (2), (3) and (4)

34. Traffic congestion is a common problem in the CBD of Hong Kong because
- (1) road capacity in the CBD is far below demand.
 - (2) there is a high concentration of commercial activities.
 - (3) there is a high concentration of industrial activities.
 - (4) there is a large residential population in the CBD.
- A. (1) and (2) only
 - B. (3) and (4) only
 - C. (1), (2) and (4) only
 - D. (1), (2), (3) and (4)
35. 'The inner city area was redeveloped. New shopping centres, houses and related facilities were built. People began to move back and live there.' This describes the process of
- A. urbanization.
 - B. sub-urbanization.
 - C. counter-urbanization.
 - D. reurbanization.
36. Which of the following CORRECTLY describe the characteristics of organic farming activities?
- (1) using chemical fertilizers to improve soil fertility
 - (2) decomposing and fallowing being used frequently
 - (3) planting herbs with strong scent to control pests
 - (4) enjoying higher productivity per hectare
- A. (1) and (4) only
 - B. (2) and (3) only
 - C. (1), (3) and (4) only
 - D. (2), (3) and (4) only
37. A farmer in a semi-arid area claims that his farming practice is very environmentally friendly. Which of the following practices on his farm can justify his claim?
- (1) planting a tree belt
 - (2) practising crop rotation
 - (3) carrying out a large scale irrigation system
 - (4) using organic fertilizers
- A. (3) and (4) only
 - B. (1), (2) and (4) only
 - C. (1), (3) and (4) only
 - D. (1), (2), (3) and (4)

38. Which of the following are the major causes of famine in the Sahel region?
- (1) a long-term drought
 - (2) poor governance
 - (3) civil war
 - (4) spread of disease
- A. (1) and (3) only
 - B. (2) and (4) only
 - C. (1), (3) and (4) only
 - D. (1), (2), (3) and (4)
39. Which of the following statements about nomadic herding is CORRECT?
- A. It is a type of subsistence farming.
 - B. The livestock is raised to sell.
 - C. The livestock is left free to graze near the villages.
 - D. The level of farming technology is relatively high.
40. Which of the following are CORRECT descriptions about irrigation farming in southern California?
- (1) Dams, canals and aqueducts have been built to transfer water for farming.
 - (2) Computers and related software programmes are used to assist irrigation management.
 - (3) Sprinklers, furrows and different micro-irrigation methods are used.
 - (4) Most irrigated farms are owned by the government.
- A. (1), (2) and (3) only
 - B. (1), (2) and (4) only
 - C. (1), (3) and (4) only
 - D. (2), (3) and (4) only

END OF SECTION A

Section B: Answer any **TWO** questions from this section. Each question carries 18 marks. (36%)

1.

Photograph 1a



Photograph 1b



Photograph 1c



- (a) Study Photograph 1a, which shows the occurrence of a natural hazard.
- (i) On the outline map (Figure 1d, see page 64) provided, mark **two** areas along the plate boundaries which are prone to a similar hazard. (2 marks)
 - (ii) Apart from areas along the plate boundaries, mark **one** other area where we can find the same hazard. (1 mark)
 - (iii) With reference to plate movement, choose **one** area that you have marked and explain why the hazard occurred there. (4 marks)
- (b) Study Photographs 1b and 1c, which were taken in Taiwan.
- (i) The natural hazard shown in Photograph 1b is also related to plate movement. Explain how it happened. (3 marks)
 - (ii) Photograph 1c was taken three years after the hazard had occurred. It shows the destruction to the transport route and the completed remedial work. The progress of work has been slow. Explain why. (3 marks)
- (c)
- (i) The areas shown in Photographs 1a to 1c are hazard-prone. Why do people still live in these areas? (3 marks)
 - (ii) If you were a tourist, would you like to visit these areas? Justify your answer. (2 marks)

Candidate Number

Centre Number

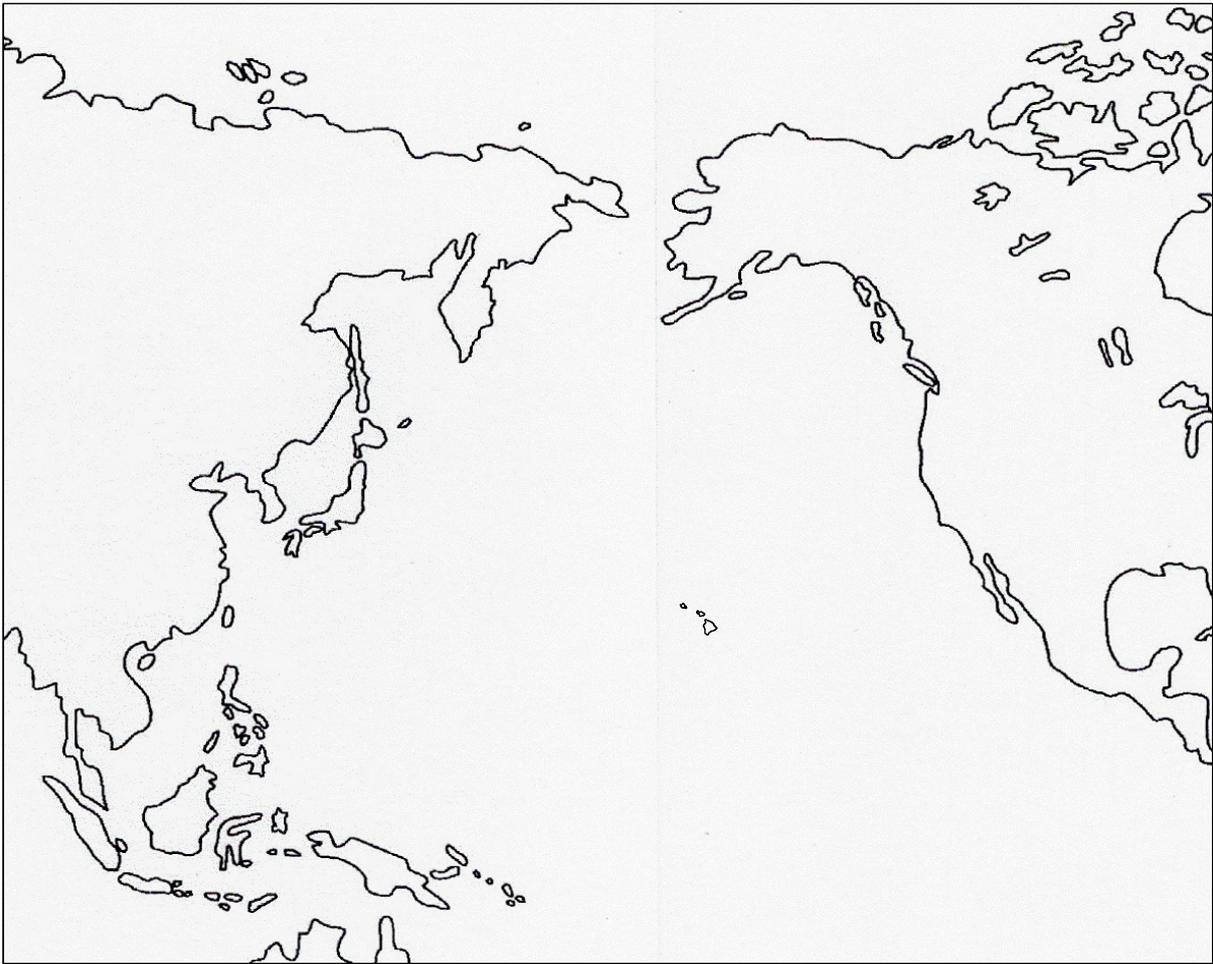
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If you attempt this question, fill in the details in the first three boxes above, tear this sheet off and tie it inside your answer book.

For Question 1.

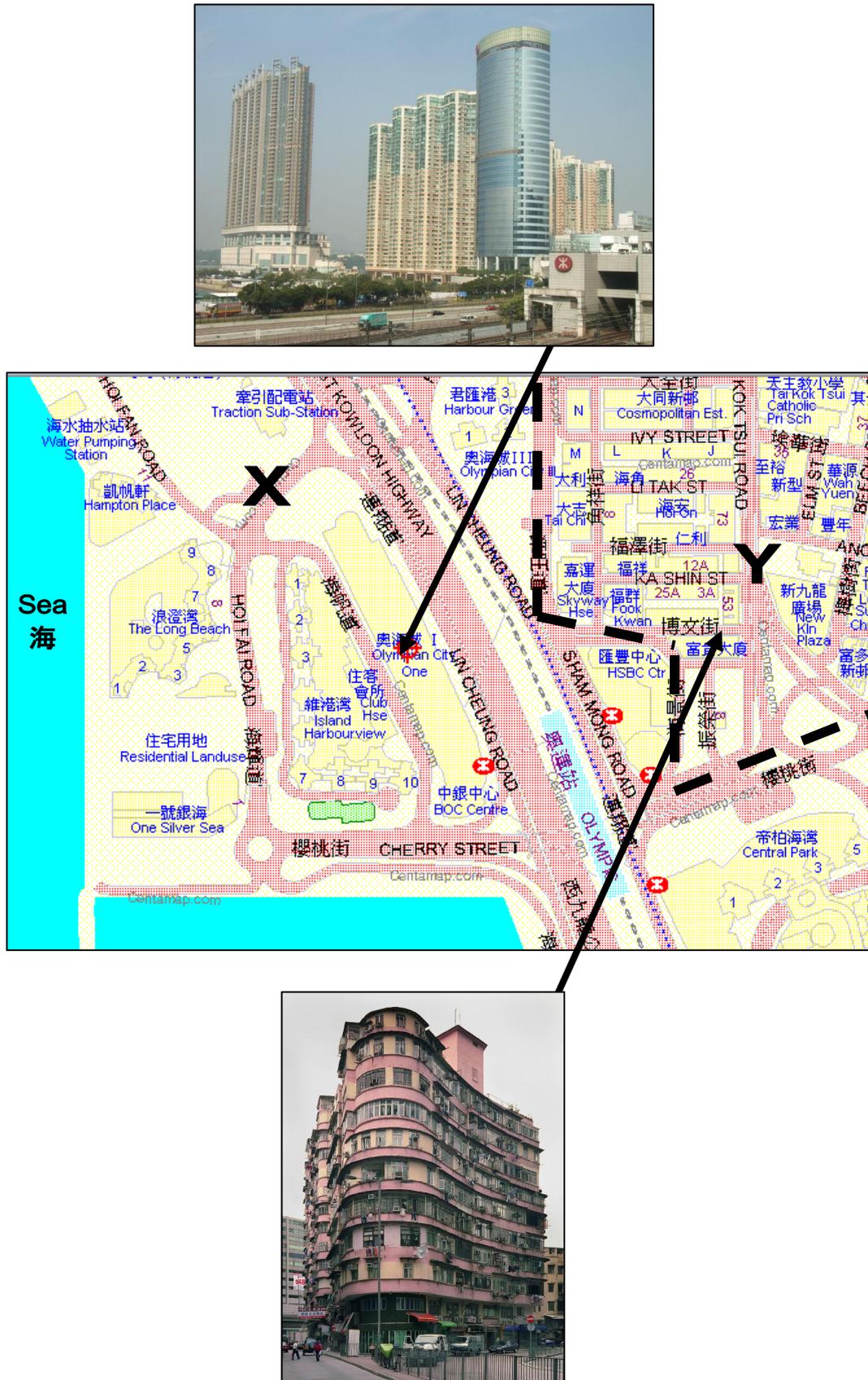
Figure 1d



2. Study the map extract of Hong Kong provided (Series HM20C, Sheet 8, Edition 13, 2007).
- (a) Refer to the landforms at 330749 and 298806.
- (i) Identify these two coastal features. (2 marks)
 - (ii) Using map evidence, contrast the conditions that have favoured their formation. (4 marks)
 - (iii) Using annotated diagrams, illustrate the formation of the landform at 300749. (4 marks)
- (b) Refer to the agricultural activities in grid square 2981.
- (i) In what ways have the physical and human environment favoured the agricultural activities? Support your answer with map evidence. (4 marks)
 - (ii) How do agricultural activities affect the nearby river and coastal characteristics? (4 marks)

3. Refer to Figure 3, which shows areas X and Y (divided by dashed line) in the west Kowloon district.

Figure 3



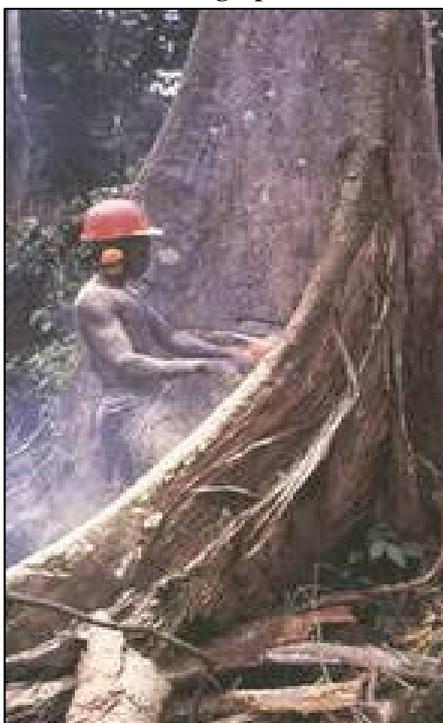
- (a) Referring to Figure 3, contrast the land use characteristics of areas X and Y. (4 marks)
- (b) What urban problems may be found in area Y? (4 marks)
- (c) Explain why the recent development on reclaimed land (area X) may bring about both positive and negative impacts on the residents and the economic activities in area Y. (6 marks)
- (d) Urban renewal is being carried out in area Y. Give suggestions to redevelop the area in a sustainable way. (4 marks)

4. Table 4a shows the annual change and the total change of forest cover in some African countries in the period 1990-2005. Photograph 4b shows a major economic activity in tropical rainforests.

Table 4a

Country	Forest cover area, 2005 (' 000 ha)	1990-2005	
		Annual change (ha)	Total change (%)
Congo	22 471	-17 000	-1.1
Côte d'Ivoire	10 405	12 200	1.8
Ghana	5 517	-128 733	-25.9
Guinea	6 724	-45 600	-9.2
Nigeria	11 089	-409 667	-35.7

Photograph 4b



- (a) (i) On a piece of graph paper, draw a bar chart to show the total changes of forest area in some African countries in the period 1990-2005 shown in Table 4a. (4 marks)
- (ii) Describe the changes. (2 marks)
- (b) The economic activity shown in Photograph 4b is the main reason which has led to the changes of the forest area.
- (i) What are the effects on the drainage system? (4 marks)
- (ii) What are the ecological implications on the livelihoods of the indigenous people? (4 marks)
- (c) How can the local governments help control the loss of forest cover in view of the economic activity shown in Photograph 4b? (4 marks)

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

5. Explain why some new iron and steel plants in China are located near large urban centres. Discuss the socio-economic and environmental impacts of these plants on those large urban centres. (12 marks)

6. With reference to a farming region you have studied, explain how physical factors have influenced the agricultural characteristics of the region. To what extent do you think technology is becoming more important in affecting the agricultural activities in the region? (12 marks)

7. Is global warming a consequence brought about by human activities which have not been carried out in accordance with the principle of sustainable development? Would international cooperation help solve the related problems? Give reasons and cite examples to justify your viewpoints. (12 marks)

END OF PAPER