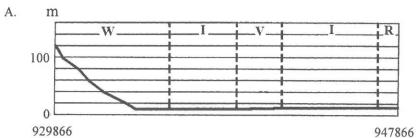
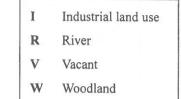
Section A: There are 40 questions in this section. Answer ALL questions in this section. All the answers must be marked on the Answer Sheet.

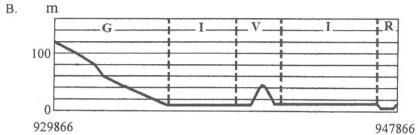
Questions 1 to 5 refer to the map extract of Hong Kong (1:20 000) provided.

- 1. In Nam Sang Wai which is bounded by Kam Tin River and Shan Pui River, there are
 - (1) swamp.
 - (2) mangrove.
 - secondary road.
 - power line.
 - A. (1) and (3) only
 - B. (2) and (4) only
 - C. (1), (2) and (4) only
 - D. (1), (2), (3) and (4)
- 2. The approximate size of the fish ponds in the area of Question 1 is
 - A. 0.6 km^2 .
 - 1.3 km^2 .
 - 2.0 km^2 .
 - D. 2.6 km^2 .
- 3. The average gradient of the footpath from Shing Uk Tsuen (930870) to Kai Shan (929866) is approximately
 - A. 1:3.
 - B. 1:5.
 - C. 1:7.
 - D. 1:9.
- 4. The whole circle bearing of Kam Tin River (960866) from Kai Shan (929866) is
 - A. 90°.
 - B. 270°.
 - C. N 90° E.
 - D. S 90° W.

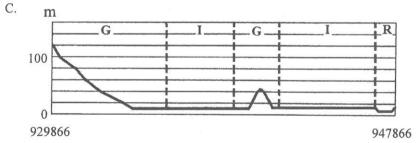
Which of the following shows the correct cross section annotated with land uses from grid reference 929866 to grid reference 947866?

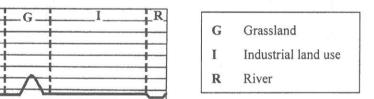


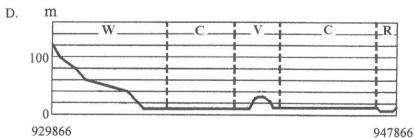


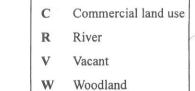




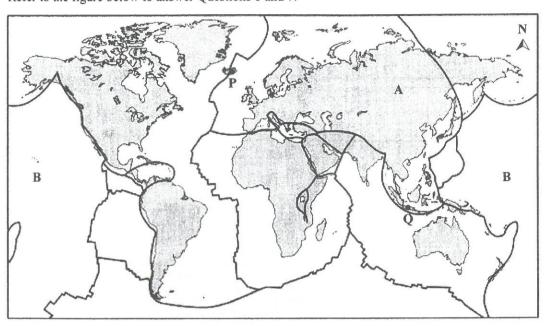








Refer to the figure below to answer Questions 6 and 7.



6. Which of the following correctly describe the characteristics of plate A and plate B?

	Plate A	Plate B
Thickness	thicker	thinner
Density	higher	lower
Composition	continental and oceanic crusts	oceanic crust only

A. (1) and (2) only

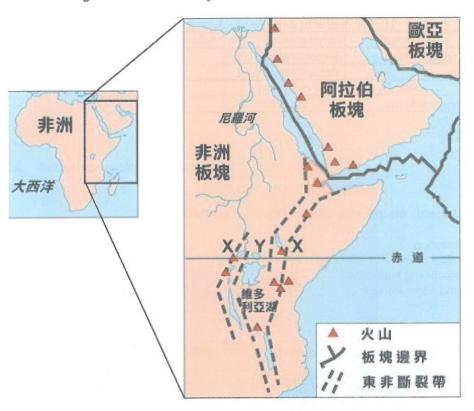
Plate boundary

- (1) and (3) only
- C. (2) and (3) only
- (1), (2) and (3)

Which of the following correctly describes the characteristics of island P and island Q?

	Island P	Island Q
Plate boundary	destructive	constructive
Type of volcano	active volcano	extinct volcano
Landform	volcanic island arc	volcanic island
Internal force	tension	compression

Refer to the figure below to answer Questions 8 and 9.



- 8. Landform X and landform Y are respectively
 - A. rift valley and fold mountain.B. rift valley and block mountain.

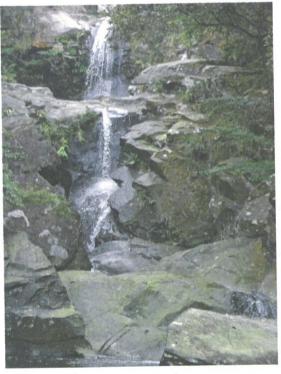
 - fold mountain and rift valley.
 - D. block mountain and rift valley.
- Which of the following descriptions about the East African Rift Zone are correct?
 - (1) mainly formed by compression
 - (2) located at the constructive plate boundary
 - (3) faulting occurs

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

10. Which of the following correctly explain the factors affecting the degree of damage by a tsunami?

	Higher degree of damage	Lower degree of damage
Relief	lowlying	highland
Depth of coastal water	deeper	shallower
Population density	dense	sparse

- A. (1) and (2) only
- B. (1) and (3) only
- C. (2) and (3) only
- D. (1), (2) and (3)
- 11. Which of the following correctly describes the effect of vegetation on water cycle?
 - A. reduces interception
 - B. increases surface runoff
 - C. increases atmospheric humidity
 - D. reduces ground water storage
- 12. Which of the following statements about the photograph below is INCORRECT?



- A. Hydraulic action is prominent.
- B. Deposition does not occur.
- C. This landform is located at the upper course of a river.
- D. The major fluvial process is vertical erosion.

13. Which of the following correctly describes the relationship between the amount of rainfall and fluvial processes?

	Amount of rainfall	Erosion	Deposition
	increase	increase	increase
	increase	decrease	decrease
	decrease	increase	decrease
``	decrease	decrease	increase

14. Refer to the photograph below.



Which of the following pairs of comparison between landform X and landform Y are correct?

Landform X	Landform Y
erosional landform	depositional landform
higher energy concentration	lower energy concentration
located at exposed headland	located at sheltered bay

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

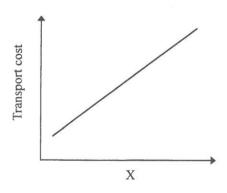
15. Refer to the photograph below which shows a coastal management strategy in Hong Kong.



Which of the following statements are correct?

- (1) This is a hard strategy.
- (2) This strategy helps reduce wave energy.
- (3) The construction cost of this strategy is high.
 - A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

16.



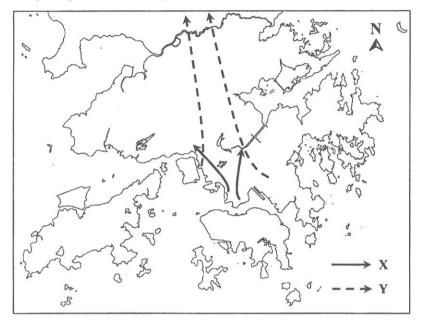
Which of the following CANNOT be represented by X in the above figure?

- A. weight of raw material
- B. distance from market
- C. perishability of product
- D. life cycle of product

17. Which pair of statements about iron and steel industry in China below is INCORRECT?

<	1960s	2000s
Direction of expansion	inland	coastal
Industrial orientation	raw material	market
Transport network	mainly highway	mainly railway
Market	local	local and overseas

Refer to the figure below to answer Questions 18 and 19. X and Y represent the change of industrial location of Hong Kong in two different periods of time.



18. Which of the following descriptions about X is correct?

- A. It occurred in the 1960s.
- B. It lowered the land rent of the city centre.
- C. It caused a loss of jobs in Hong Kong.
- D. It was part of the new town development.

19. Which of the following are the factors for the change of industrial location represented by Y?

- (1) tax concession
- (2) lower labour costs
- (3) abundant cheap land
 - 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 measures CANNOT alleviate the problems brought by industrial relocation?
 - A. lowering wages
 - B. improving the business environment
 - C. developing new industries
 - D. promoting vocational retraining
- 21. Which of the following is NOT a reason for the occurrence of heat island effect in the urban area?
 - A. dense roads
 - B. lack of green belt
 - C. high population density
 - D. dense and tall buildings
- 22. The table below shows the percentage share from a pollution source in the total emission amount of air pollutants in Hong Kong in 2007.

Sulphur dioxide	Nitrogen oxides	Respirable suspended particulates	Volatile organic compounds	Carbon monoxide
89%	46%	28%	1%	5%

The pollution source is/ are

- A. power plants.
- B. dyeing factories.
- C. air transport.
- D. sea transport.
- 23. Which of the following can be achieved by urban rehabilitation in Hong Kong?
 - A. lowering the building density
 - B. improving the living environment
 - C. increasing urban land resources
 - D. providing more space for transport, institutional and recreational uses

24. The figure below shows the location and landscape of West Kowloon.



Which of the following does NOT apply to the expansion of West Kowloon?

- A. land increased by reclamation
- B. urban renewal
- C. outward expansion
- D. upward expansion
- 25. How would the construction of the third runway of Hong Kong International Airport enhance the sustainable development in Hong Kong?
 - A. increase employment opportunities
 - B. improve air quality
 - C. preserve habitat of the Chinese white dolphins
 - D. increase land supply for urban development
- 26. Nomads in the Sahel practise transhumance because of
 - (1) seasonal rain.
 - (2) low carrying capacity of the land.
 - (3) large annual range of temperature.
 - A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

- 27. Which of the following can be used to restore soil fertility after growing the same crop for a number of years?
 - A. irrigation
 - B. fallowing
 - C. contour ploughing
 - D. planting windbreaks
- 28. Which of the following are sustainable farming methods?
 - (1) drip irrigation
 - (2) use of naturally decomposed fertilisers
 - (3) pest control by natural predators
 - A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)
- 29. The photograph below shows a local farm.



Which of the following are correct descriptions of the farm?

- (1) intensive farming is practised
- (2) farm produce are market-oriented
- (3) crop rotation is practised
 - 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 measures is NOT used to deal with the farming constraints in Southern California?
 - A. dry farming
 - B. use of fertilisers
 - C. use of greenhouse
 - D. irrigation system
- 31. How can Hong Kong citizens help to protect the tropical rainforests?
 - (1) supporting ecotourism
 - (2) passing legislation to control illegal lumbering
 - (3) purchasing products from secondary forest
 - A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

32.

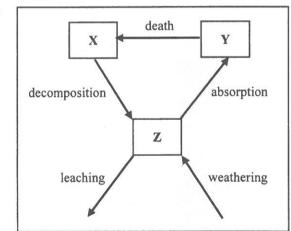


Refer to the photograph above which shows the vegetation of the tropical rainforest. Which of the following correctly describe the characteristics of plant X?

- (1) canopy vegetation
- (2) supported by buttress roots
- (3) shallow roots
 - A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

- 33. How does large scale deforestation change the micro-climate in the tropical rainforest?
 - (1) increase in rainfall
 - (2) increase in wind speed
 - (3) reduction in diurnal range of temperature
 - (4) decrease in humidity
 - A. (1) and (3) only
 - B. (1) and (4) only
 - C. (2) and (3) only
 - D. (2) and (4) only
- 34. Which of the following correctly describes the impact of plantation agriculture on the tropical rainforest?
 - A. increasing vegetation cover
 - B. decreasing soil erosion
 - C. reducing biodiversity
 - D. increasing emission of greenhouse gases

35.



(Boxes in the figure not drawn to scale)

The above figure shows the nutrient cycle in the tropical rainforest. Which of the following is correct for nutrient storages X, Y and Z?

X	Y	Z
soil	litter	biomass
biomass	soil	litter
litter	biomass	soil
litter	soil	biomass

- 36. Which of the following result from global warming?
 - (1) rainfall anomalies
 - (2) more severe tropical cyclones
 - (3) lower evaporation rates
 - 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 correctly explain the effectiveness of a mass transit system in alleviating global warming?
 - (1) higher energy efficiency
 - (2) reduction of greenhouse gas emissions
 - (3) lower private car ownership ratio
 - A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

38.

Canada pulls out of Kyoto Protocol

The above news title reflects that

- (1) the high-latitude countries may benefit from the impact of global warming.
- (2) the cost of cutting carbon dioxide emissions in more developed countries is high.
- (3) international cooperation in combating global warming is difficult.
 - A. (1) and (2) only
 - B. (1) and (3) only
 - C. (2) and (3) only
 - D. (1), (2) and (3)

A. B. C. D.

- 39. Which of the following is the evidence of global warming?

 - (1) retreating glaciers(2) seasonal melting of sea ice
 - (3) expanding deserts
 - A. (1) and (2) only B. (1) and (3) only C. (2) and (3) only

 - D. (1), (2) and (3)
- 40. Which of the following is a benefit of global warming?
 - A. increasing areas of tropical rainforest
 - B. increasing long-term fresh water supply
 - C. reducing heating costs in temperate regions
 - D. lengthening the growing season in low-latitude countries

END OF SECTION A

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

1. Figure 1a shows the location of a hazard which occurred in Haiti in 2010. Table 1b shows some information of the country and the hazard. Photograph 1c shows Port-au-Prince, capital city of Haiti after the hazard.

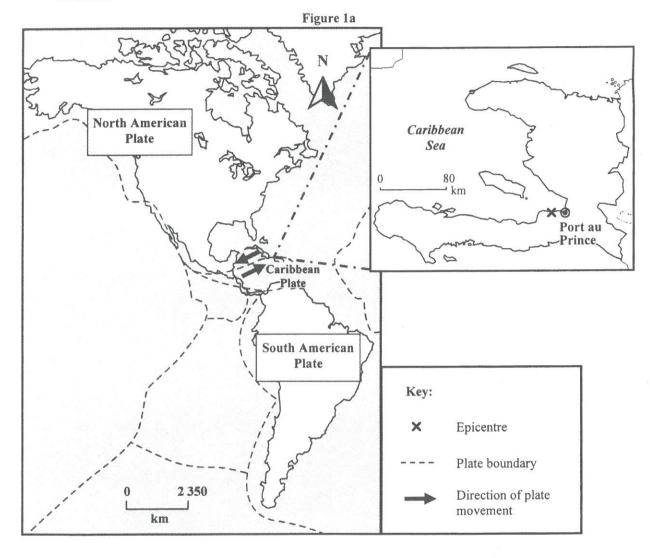


Table 1b

	Tal	ne io	
Magnitude	Richter Scale 7.0	Literacy rate	• 65.3%
Depth of focus	• 13 km	GDP per capita	• US \$673
Location of epicentre	approximately 16 km southwest of Port-au-Prince	Economic condition	high unemployment rateabout 66% of population engaged in agriculture
Number of casualties	• about 530 000	Political condition	unstable
Damage	 around 300 000 buildings collapsed communication system, sea, land and air traffic facilities were damaged 	International assistance	 voluntary organisations raised US\$ 1.1 billions many victims have not yet received any aid

Photograph 1c



Refer to Figure 1a, Table 1b and Photograph 1c.

- (a) (i) Name the hazard. (1 mark)
 - (ii) With reference to the theory of plate tectonics, explain the occurrence of the above hazard. (5 marks)
- (b) (i) Explain why the hazard caused serious damage in Haiti. (4 marks)
 - (ii) How could technology have reduced some of the damage caused by the above hazard to the country? (4 marks)
- (c) Explain the slow progress of reconstruction work in Haiti. (4 marks)

2. Refer to the map extract (1:20 000) of Hong Kong. The dotted line delimits the proposed new development area of Hung Shui Kiu. The existing population of the area is about 25 000 and the new development area plans to accommodate a population of 160 000 and to provide 48 000 jobs. Photograph 2 shows the land uses in part of grid square 0785.

Photograph 2



(a) Refer to the proposed new development area of Hung Shui Kiu shown in the map extract and Photograph 2.

(i) Identify the land uses at sites A and B in the map extract respectively. (2 marks)

(ii) Name the urban process that has occurred in the area. (1 mark)

(iii) Using map evidence, explain the conditions leading to the occurrence of the urban process in the area. (6 marks)

(iv) Describe the problems that might occur in the area due to this urban process. (4 marks)

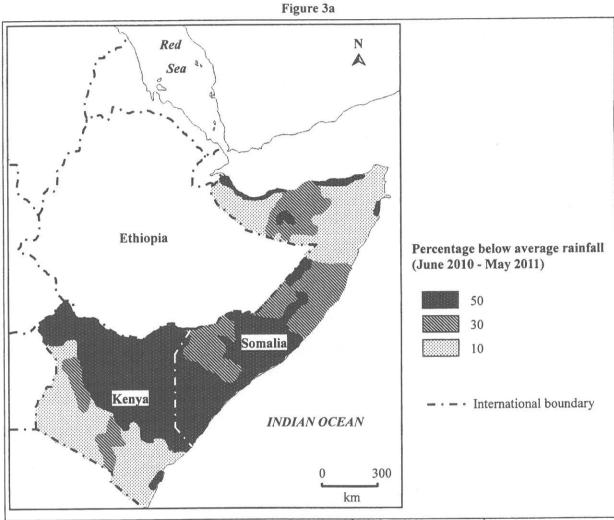
(b) With reference to

(i) the location and site, and (3 marks)

(ii) the existing infrastructure, (2 marks)

discuss how the proposed new development area of Hung Shui Kiu could be sustainably developed.

3. Figure 3a shows the rainfall, population and cereal production of Kenya and Somalia. Table 3b shows some socio-economic information of these two countries.



		Kenya	Somalia
Average annual rainfall (mm)		800	400
Total population (millions)		41.1	9.9
Estimated population in need of food relie	f (millions)	3.7	3.7
Percentage of population in need of food r	elief	X	37.4
	2010	3 431	295
Cereal production (thousand tonnes)	2011	2 999	172
Percentage change of cereal production		-12.6	Y

25

Table 3b

Country	GDP per capita (US dollars)		
		• Primary: 22	
Kenya	1 600	• Secondary: 16	85.1
		• Tertiary: 62	
		• Primary: 60	
Somalia	600	• Secondary: 7	37.8
		• Tertiary: 33	

(a) Refer to Figure 3a.

(i) Calculate X and Y. (2 marks)

(ii) Describe and explain the change in cereal production of the two countries. (2 marks)

(iii) Which country has a greater problem in food shortage? Quote evidence from Figure 3a to support your answer. (3 marks)

(b) Refer to Table 3b. Describe the socio-economic factors which could explain the difference in severity of food shortage of the two countries. (5 marks)

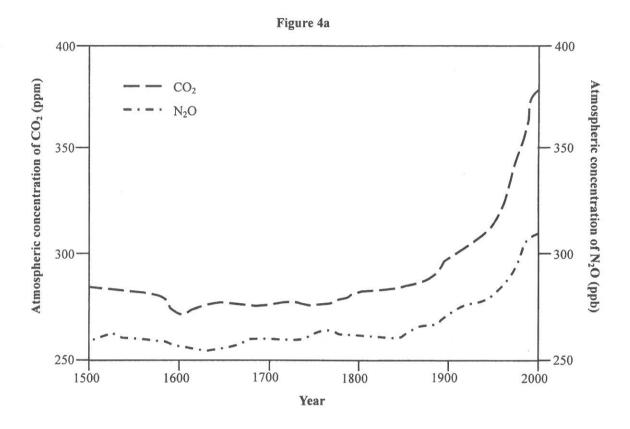
(c) Evaluate the effectiveness of the following farming techniques in helping the country with the greater food shortage raise cereal production:

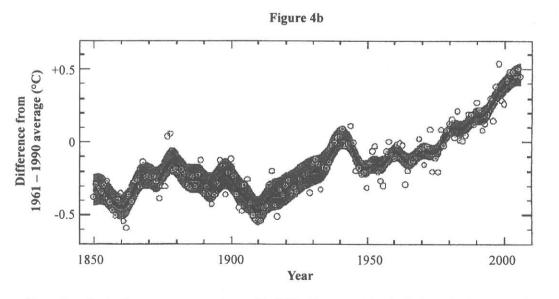
(i) a large-scale mechanised irrigation scheme

(ii) multiple cropping (3 marks)

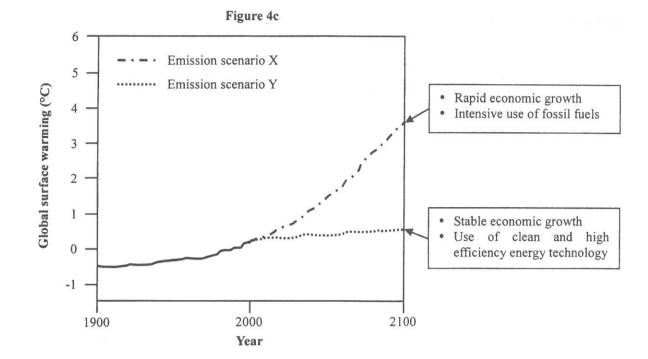
(3 marks)

4. Figure 4a shows the changes in atmospheric concentration of two greenhouse gases. Figure 4b shows the changes in global mean surface temperature. Figure 4c shows the predicted global surface warming under emission scenarios X and Y.





(Note: Dots in the figure represent values of individual years. The shaded area is the uncertain range.)



- (a) (i) Refer to Figure 4a. Explain the changes in concentration of two greenhouse gases respectively after 1900. (4 marks)
 - (ii) Account for the relationship between the above changes and the changes in global mean surface temperature as shown in Figure 4b. (4 marks)
- (b) Refer to Figure 4c.
 - (i) Describe and explain the different results of global surface warming brought by emission scenarios X and Y. (2 marks)
 - (ii) How could inter-governmental cooperation help to achieve emission scenario Y? (4 marks)
 - (iii) Account for the factors which may affect the effectiveness of inter-governmental cooperation in (b) (ii). (4 marks)

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

- Account for the physical factors leading to the occurrence of floods in the lower course of a river. Discuss (12 marks) the effectiveness of dam construction in preventing floods.
- Describe the mode of production and locational distribution of the IT industry. How does globalisation (12 marks) lead to the occurrence of this mode of production?
- Why are tropical rainforests in the world vanishing at an increasing rate in recent years? Discuss the effectiveness of the establishment of national parks in conserving the tropical rainforests. (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.

2012-DSE **GEOG** PAPER 2

HONG KONG EXAMINATIONS AND ASSESSMENT AUTHORITY HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION 2012

GEOGRAPHY PAPER 2

11.45 am - 12.45 pm (1 hour) This paper must be answered in English

GENERAL INSTRUCTIONS

- 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.

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.

- Answer a total of TWO questions.
- Write your answers in the Answer Book. Start each question (not part of a question) on a new page.
- Draw sketch maps and diagrams to supply additional, relevant information when appropriate.

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