

HONG KONG EXAMINATIONS AND ASSESSMENT AUTHORITY
HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION 2019

GEOGRAPHY PAPER 2

12:00 noon – 1:15 pm (1¼ hours)
This paper must be answered in English

GENERAL INSTRUCTIONS

1. This paper consists of **TWO** sections:
Section E – consists of 4 data / skill-based structured questions. Attempt any **ONE** question in this section.
Section F – consists of 4 short essay questions. Attempt any **ONE** question in this section.
2. Answer a total of **TWO** questions. The two questions chosen can be taken from the same or different electives.
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.

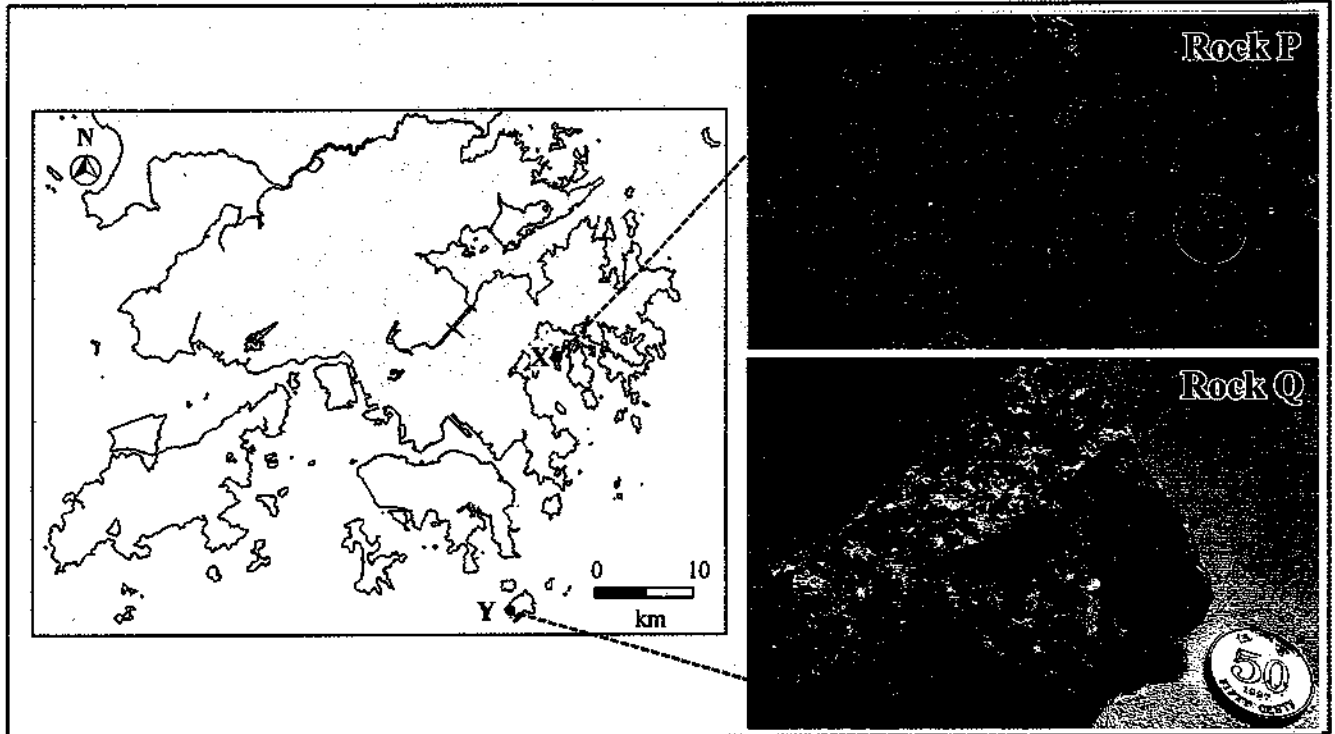
Not to be taken away before the
end of the examination session

Section E: Answer any ONE question from this section. Each question carries 18 marks.

1. Elective: Dynamic Earth

Figure 1a shows sites X and Y, and the photographs of the different types of igneous rocks (rocks P and Q) found there. Photograph 1b shows feature R at site Y. Photograph 1c shows a weathering feature on the shore at site X.

Figure 1a



Photograph 1b

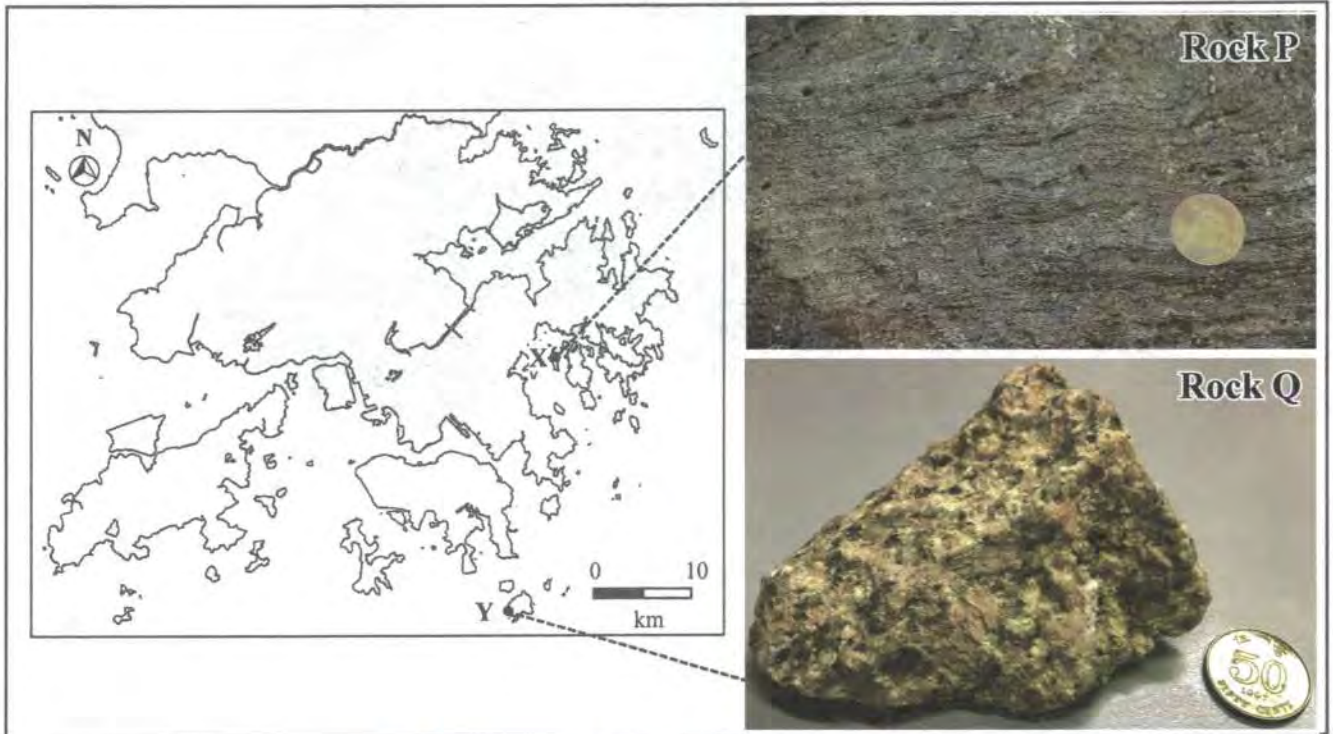


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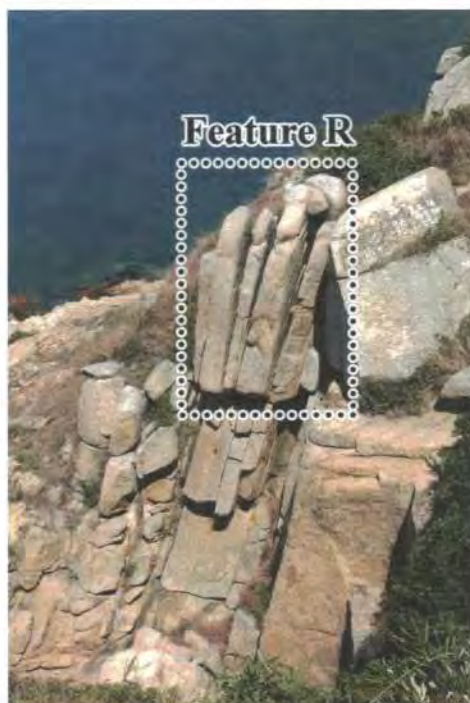
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Figure 1a



Photograph 1b



Photograph 1c



- (a) Refer to Figure 1a.

Identify rocks P and Q. Compare the formation and characteristics of the two types of rocks.

(7 marks)

- (b) Refer to Figure 1a and Photograph 1b.

(i) Explain the formation of feature R.

(4 marks)

(ii) Account for the type of mass wasting at the site of feature R.

(2 marks)

- (c) Refer to Figure 1a and Photograph 1c.

(i) What is the physical weathering process shown in Photograph 1c?

(1 mark)

(ii) Discuss the importance of rock structure and water in the above weathering process.

(4 marks)

2. Elective: Weather and Climate

Figure 2a shows some physical conditions in China and the locations of Hong Kong and Urumqi. Table 2b shows the climatic conditions of Hong Kong and Urumqi. Table 2c shows the weather conditions of three consecutive days in Hong Kong under the influence of winter monsoon.

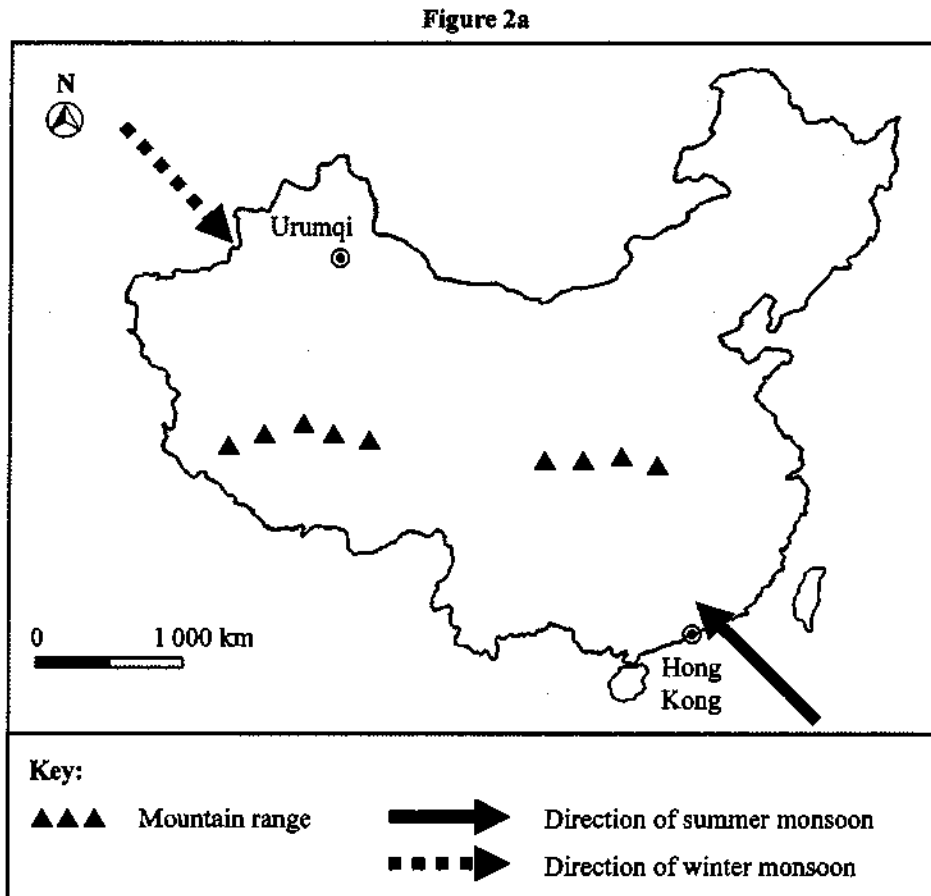


Table 2b

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hong Kong	Temperature (°C)	16.3	16.8	19.1	22.6	25.9	27.9	28.8	28.6	27.7	25.5	21.8	17.9
	Precipitation (mm)	24.7	54.4	82.2	174.7	304.7	456.1	376.5	432.2	327.6	100.9	37.6	26.8
Urumqi	Temperature (°C)	-16.1	-14.7	-5.4	7.5	15.4	20.3	22.0	20.3	14.4	5.8	-4.8	-13.4
	Precipitation (mm)	11.5	9.7	8.7	10.9	18.1	14.2	22.0	13.6	15.4	16.6	19.0	15.6

Table 2c

	Date		
	8 January	9 January	10 January
Air pressure (hPa)	1 015.2	1 023.1	1 024.9
Temperature (°C)	15.1	9.0	12.8
Rainfall in 24 hours (mm)	11.6	9.9	Trace
Relative humidity (%)	95	82	46
Wind direction	N	N	N

(a) Refer to Figure 2a and Table 2b.

(i) Describe the differences in climate between Hong Kong and Urumqi. (3 marks)

(ii) Explain the above differences. (6 marks)

(b) Refer to Figure 2a and Table 2c.

Account for the relationship between the winter monsoon and the weather conditions of Hong Kong shown in Table 2c. (5 marks)

(c) Refer to Table 2b. The influence of winter monsoon on Hong Kong starts weakening between March and April.

Explain the reasons for the weakening of the influences of winter monsoon on Hong Kong at the above mentioned period. (4 marks)

3. Elective: Transport Development, Planning and Management

Table 3a shows some information of the three road harbour crossings in Hong Kong. Figure 3b is a sketch map drawn according to the information of the Hong Kong transport information system. It shows the traffic condition of some major roads (including the road harbour crossings) at 8:30 am on a certain day. Figure 3c shows the traffic condition towards Hong Kong Island at site P of Figure 3b at the above time.

Table 3a

	Designed capacity (000 vehicles/day)	Average daily traffic flow in 2017 (100 vehicles)	Existing toll rates	
			Private cars	Heavy goods vehicles
Western Harbour Crossing	118	67.6	\$70	\$135
Cross-Harbour Tunnel	78	113.8	\$20	\$30
Eastern Harbour Crossing	78	77.2	\$25	\$75

Figure 3b

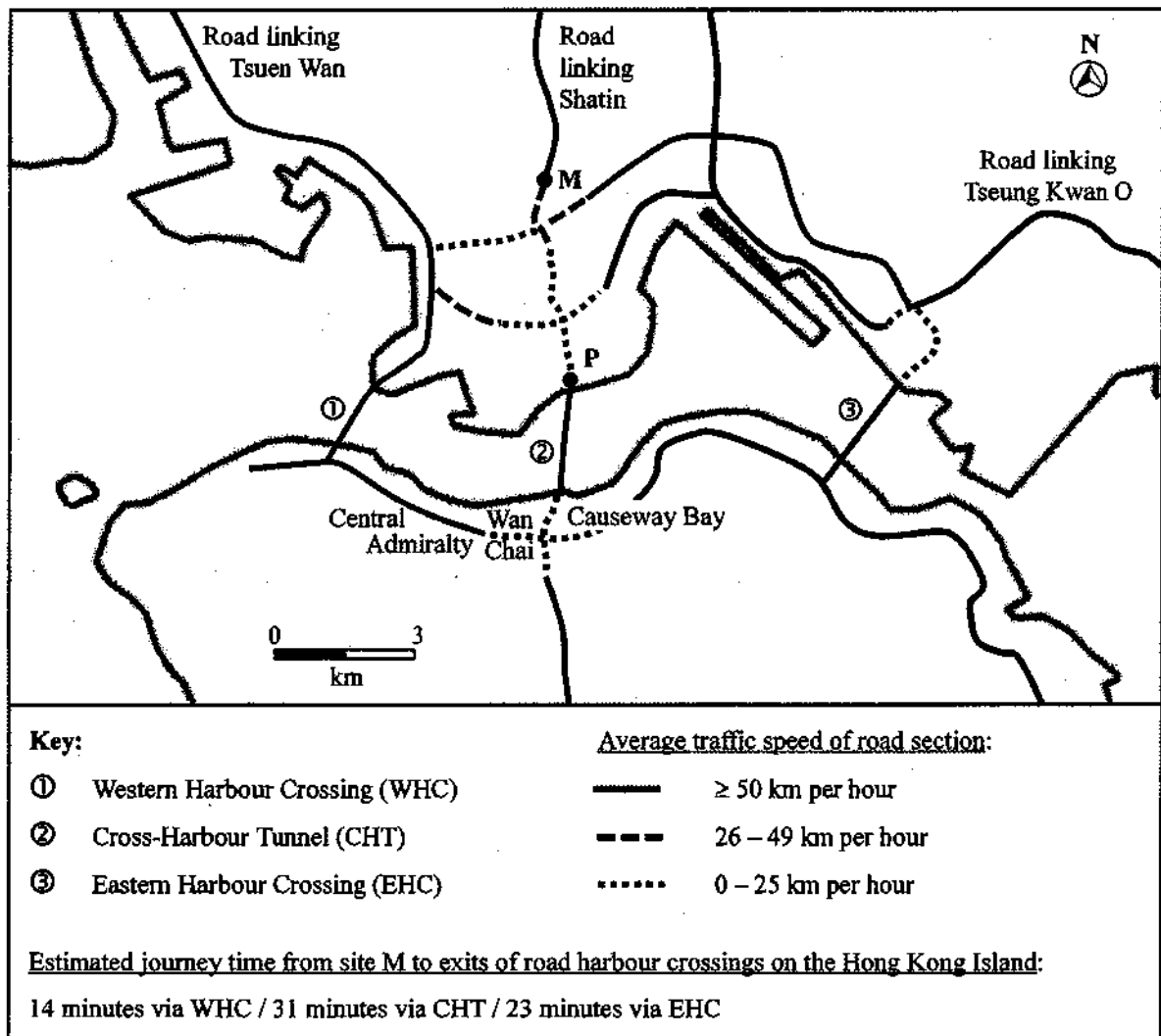
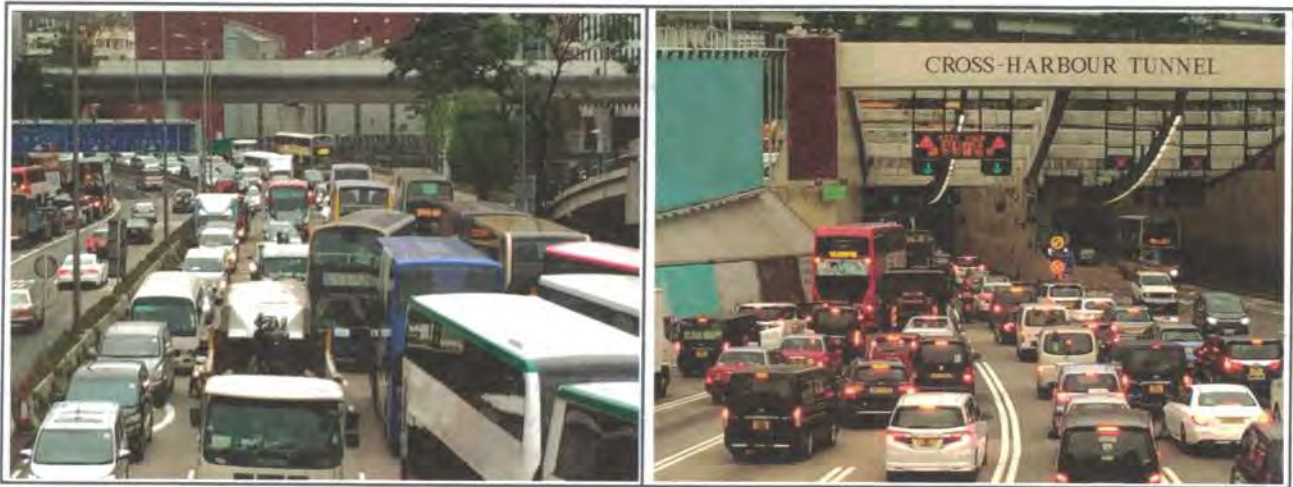


Figure 3c



Refer to Table 3a, Figure 3b and Figure 3c.

- (a) What is the transport problem occurring at site P as shown in Figure 3c? (1 mark)
- (b) Explain respectively the causes of the transport problem at site P mentioned in (a) by quoting information from:
- (i) Table 3a (3 marks)
- (ii) Figure 3b (5 marks)
- (c) Explain the environmental and social impacts brought about by the transport problem mentioned in (a). (5 marks)
- (d) *Road users can choose the driving directions with reference to the traffic information of the Hong Kong transport information system.*

Discuss whether the above information may help relieve the transport problem at site P. (4 marks)

4. Elective: Regional Study of Zhujiang (Pearl River) Delta

Figure 4a shows some physical conditions of the Zhujiang Delta Region. Figure 4b shows the general climatic conditions of Zhaoqing. Table 4c shows some information of farming in Zhaoqing. Photograph 4d shows a modern farming method in the Zhujiang Delta Region.

Figure 4a

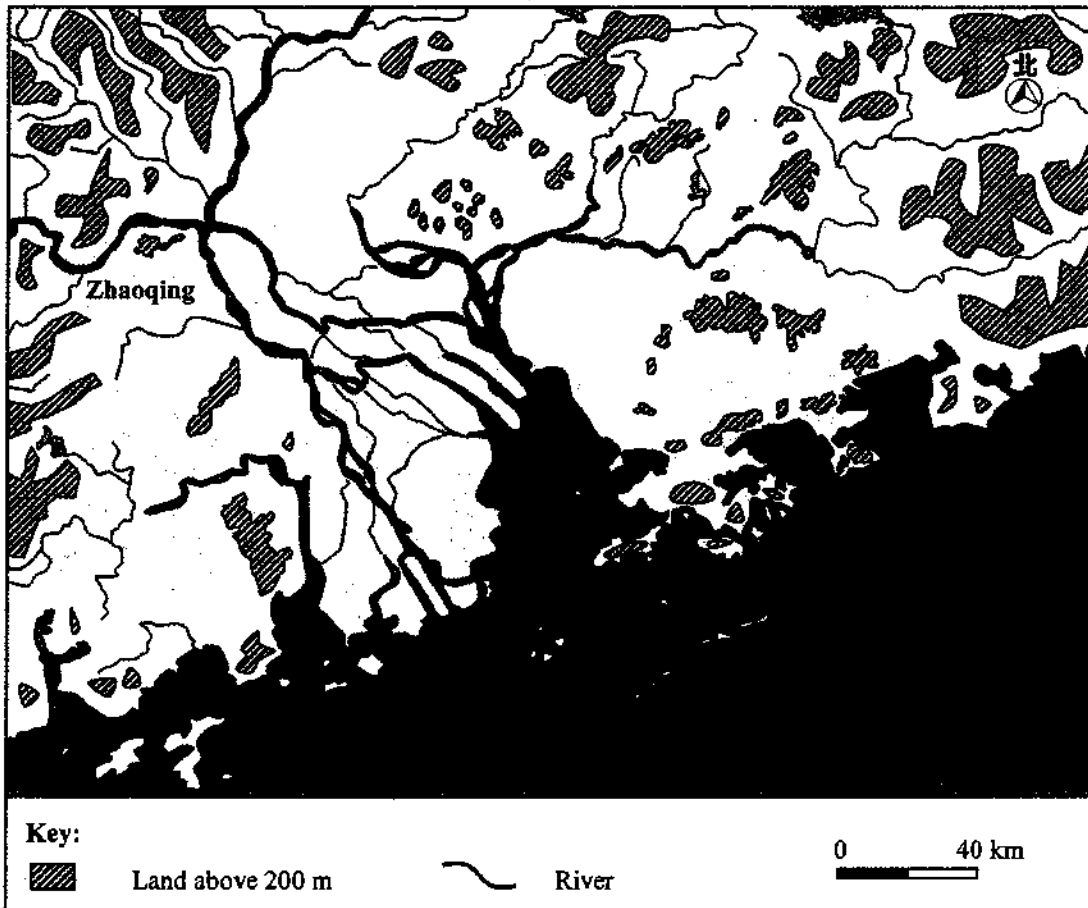


Figure 4b

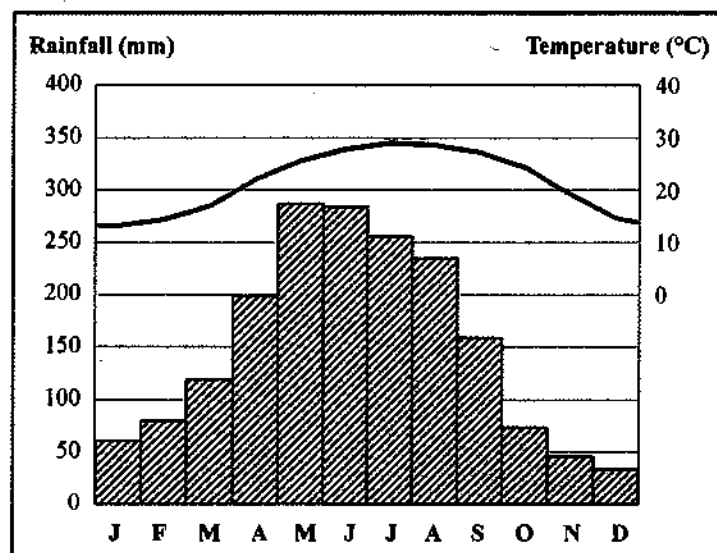


Table 4c

		Year	
		2000	2016
Area of cultivated land ('000 ha)		202.6	145.9
Gross value of agricultural output (hundred million RMB)		160.4	480.7
Output percentages of major farming products	Staple crops	38.6	25.9
	Fruits	3.8	9.4
	Vegetables	45.2	55.8
	Others	12.4	8.9
Farming labour (% of population)		75.8	38.3
Number of agricultural technicians		478	2 195



Photograph 4d

- (a) Refer to Figures 4a and 4b. Account for the favourable physical conditions for agricultural development in Zhaoqing. (4 marks)
- (b) Refer to Table 4c. Based on the information from the table, explain the change in gross value of agricultural output between 2000 and 2016 in Zhaoqing. (4 marks)
- (c) Refer to Table 4c and Photograph 4d.
- (i) Identify the modern farming method shown in Photograph 4d. Explain how it is related to the changes in area of cultivated land and number of agricultural technicians shown in Table 4c. (6 marks)
- (ii) Discuss whether the above modern farming method could be widely adopted in the Zhujiang Delta Region. (4 marks)

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

5. Elective: Dynamic Earth

Explain the influences of the climatic conditions in Hong Kong on slope stability. Discuss whether afforestation may help increase the stability of slopes. (12 marks)

6. Elective: Weather and Climate

Describe and explain the formation of the trade wind belts. Explain the relationship between trade winds and the climatic characteristics of the equatorial region. (12 marks)

7. Elective: Transport Development, Planning and Management

Account for the advantages of Hong Kong as a logistics and transport hub. Discuss whether the opening of the Hong Kong-Zhuhai-Macao Bridge may help Hong Kong to maintain those advantages. (12 marks)

8. Elective: Regional Study of Zhujiang (Pearl River) Delta

Account for the major sources of water pollution in the Zhujiang Delta Region in the last decade. Discuss whether the establishment of sewage treatment plants may help improve the water quality in the Zhujiang Delta Region. (12 marks)

END OF PAPER

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