# 2016-DSE GEOG

PAPER 2

HONG KONG EXAMINATIONS AND ASSESSMENT AUTHORITY HONG KONG DIPLOMA OF SECONDARY EDUCATION EXAMINATION 2016

# **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

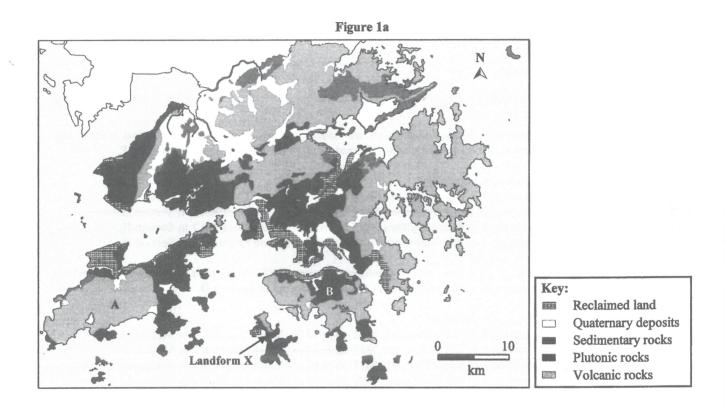
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Section D: Answer ONE question from this section, which must be in a different elective from that chosen in Section E. Each question carries 18 marks.

# 1. Elective: Dynamic Earth

Candidates attempting this question are NOT allowed to choose Question 5 in Section E.

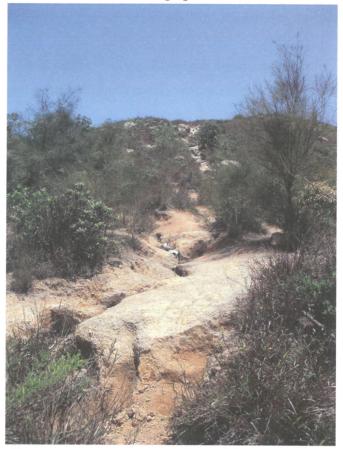
Figure 1a is a simplified geological map of Hong Kong. It shows the locations of areas A and B and landform X. Photograph 1b shows a specimen of an igneous rock. Photograph 1c shows landform X.



Photograph 1b



# Photograph 1c



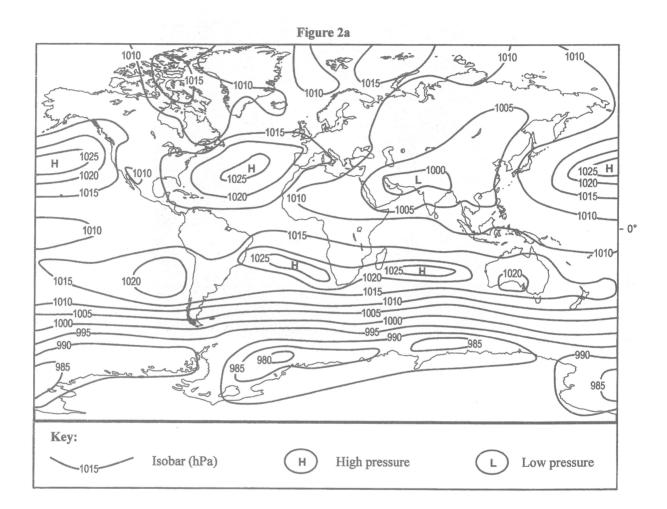
(a) Refer to Figure 1a and Photograph 1b.

	(i)	Name the rock shown in Photograph 1b. At which location, area A or B in Figure 1a, is the
		rock located? (2 marks)
	(ii)	Explain the formation of the rock. (4 marks)
(b)	Refe	to Figure 1a, Photographs 1b and 1c.
	(i)	Identify landform X. (1 mark)
	(ii)	Explain how the characteristics of rock favour the formation of landform X. (6 marks)
	(iii)	Discuss the effectiveness of tree-planting in slowing down the formation process of landform X. (5 marks)

#### 2. Elective: Weather and Climate

Candidates attempting this question are NOT allowed to choose Question 6 in Section E.

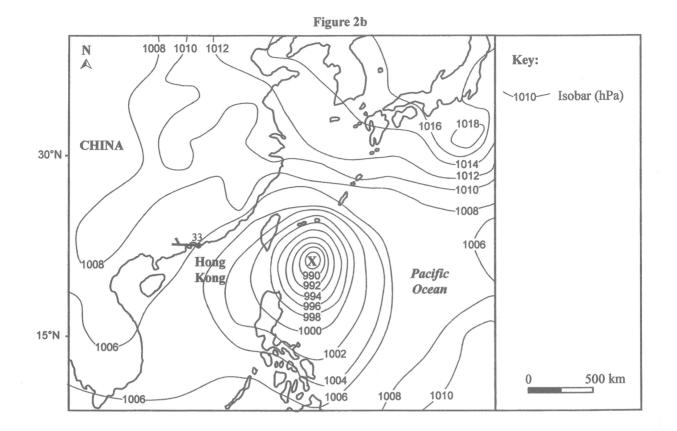
Figure 2a shows the global pressure pattern in a specific season. Figure 2b is a simplified weather map on a specific day in the same season. It shows weather system X and the weather conditions in Hong Kong.



- (a) Refer to Figure 2a.
  - (i) In which season is the northern hemisphere? (1 mark)
    (ii) Describe the pressure pattern in the northern hemisphere. (3 marks)
    (iii) Account for the factors affecting the pressure pattern mentioned in (a) (ii). (5 marks)
  - (iv) Explain how the pressure pattern mentioned in (a) (ii) controls the wind direction at the southeastern coast of China. (3 marks)

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2016-DSE-GEOG 2-4



(b) Refer to Figure 2b.

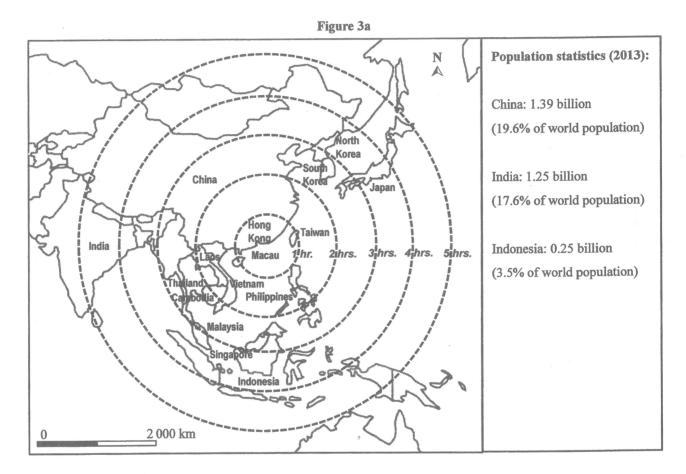
Describe and explain the weather conditions in Hong Kong on that day.

(6 marks)

## 3. Elective: Transport

Candidates attempting this question are NOT allowed to choose Question 7 in Section E.

Figure 3a shows a range of destinations within five hours by plane from the Hong Kong International Airport and the population statistics of three countries in 2013. Table 3b shows the passenger and cargo traffic of the Hong Kong International Airport from 2014 to 2030. Table 3c shows some information of the Hong Kong International Airport, Guangzhou Baiyun International Airport and Shenzhen Bao'an International Airport in 2014.



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Year	Passenger traffic (million trips)	Cargo traffic (million tonnes)
2014	63.3	4.4
2020*	72.0	6.1
2025*	88.0	7.9
2030*	105.0	9.8

\* Estimated amount

Table 3c						
	Hong Kong International Airport		Guangzhou Baiyun International Airport		Shenzhen Bao'an International Airport	
	Amount	Annual increase rate (%)	Amount	Annual increase rate (%)	Amount	Annual increase rate (%)
Total passenger traffic (million trips)	63.3	6.1	54.8	4.4	36.3	12.4
International passenger traffic (million trips)	63.3	6.1	10.9	14.5	12.4	28.1
Cargo traffic (million tonnes)	4.40	6.0	1.50	11.0	0.96	5.5
Aircraft movement (thousand)	392.0	5.8	412.0	4.5	286.3	11.2
Number of planned runways	3		4	5	3	}

(a) Refer to Figure 3a.

(i) Describe the characteristics of air transport.

(3 marks)

(ii) Explain the factors favouring the Hong Kong International Airport as a regional aviation hub.

(5 marks)

# (b) Refer to Tables 3b and 3c.

- Account for the development trend of passenger and cargo traffic of the Hong Kong International Airport from 2014 to 2030.
   (2 marks)
- (ii) Suggest the challenges towards the Hong Kong International Airport. (3 marks)
- (iii) A local organisation suggested improving the air traffic management in order to meet the rising demand for air transport.

Discuss the reasons for and against this suggestion. (5 marks)

2016-DSE-GEOG 2-7

36

# 4. Elective: Regional Study of Zhujiang Delta

Candidates attempting this question are NOT allowed to choose Question 8 in Section E.

Table 4a shows the economic and industrial characteristics of the Zhujiang Delta Region in the 1990s and 2010s. Table 4b shows some information related to industrial development in the Zhujiang Delta Region in 2010 and 2015.

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	Table 4a			
	*	<b>1990s</b>	2010s	
Gross Industrial Output (100 million RMB)		8 500	85 800	
	Labour-intensive (%)	52.6	31.8	
	Technology-intensive (%)	26.3	44.9	
Types of industry	Capital-intensive (%)	16.0	19.9	
	Others (%)	5.1	3.4	
Land value (RMB/m <sup>2</sup> )		180	640	
Average monthly salary (RMB)		1 378	3 233	
Foreign direct investment (100 milion USD)		174.8	355.9	
Government policy		Discount on land price	Tightening of environmental protection ordinance	

Table	<b>4</b> b
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	2010	2015*
Gross Domestic Product (billion RMB)	45	67
Percentage of R & D in GDP	1.8	4.0
Population receiving tertiary education (%)	28.0	36.0
Value-addedness of high-tech manufacturing (%)	20.6	26.0
Reduction in carbon dioxide emissions (%)	17.0	

\* Predicted value

- (a) Refer to Table 4a.
  - (i) Describe the trend of industrial development in the Zhujiang Delta Region between the 1990s and 2010s. (3 marks)
  - (ii) With reference to this trend of development, account for the challenges encountered by industries in the 2010s.
     (5 marks)
- (b) Refer to Table 4b.
  - (i) Suggest the measures entrepreneurs may take to tackle the challenges mentioned in (a) (ii).
     (5 marks)
  - (ii) The policy of 'Emptying the Cage for New Birds' was implemented in 2013.

Comment on the significance of this policy in the changing industrial patterns in the 2010s. (5 marks)

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Section E: Answer ONE question from this section, which must be in a different elective from that chosen in Section D. Each question carries 12 marks.

# 5. Elective: Dynamic Earth

Candidates attempting this question are NOT allowed to choose Question 1 in Section D.

In terms of rock cycle, explain how sedimentary rocks changed into metamorphic rocks. Discuss the significance of the nature of sedimentary rocks in shaping the physical landscape of Hong Kong.

(12 marks)

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## 6. Elective: Weather and Climate

Candidates attempting this question are NOT allowed to choose Question 2 in Section D.

Discuss the impact of drought on agriculture and industries in North China. Evaluate the effectiveness of water resource management in reducing the impact. (12 marks)

## 7. Elective: Transport

Candidates attempting this question are NOT allowed to choose Question 3 in Section D.

Explain how the distribution of urban land use induces transport problems in Hong Kong. Evaluate the effectiveness of electronic road pricing in alleviating the transport problems. (12 marks)

### 8. Elective: Regional Study of Zhujiang Delta

Candidates attempting this question are NOT allowed to choose Question 4 in Section D.

Discuss the impact of land use conflict and labour shortage on the agricultural production of the Zhujiang Delta Region in the last decade. Evaluate the effectiveness of the adoption of modern farming technology in reducing the impact. (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.