

Marking Schemes

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.

**Paper 1
Section A**

5. Elective: Dynamic Earth

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

Explain the occurrence of intensive weathering in granite areas in Hong Kong. Discuss the relative importance of weathering in shaping the landforms in Hong Kong. (12 marks)

Question No.	Key	Question No.	Key
1.	D (91%)	21.	A (87%)
2.	D (37%)	22.	B (81%)
3.	B (47%)	23.	D (75%)
4.	B (53%)	24.	C (94%)
5.	D (48%)	25.	B (64%)
6.	B (87%)	26.	A (67%)
7.	D (61%)	27.	C (50%)
8.	A (87%)	28.	C (84%)
9.	B (47%)	29.	A (93%)
10.	B (54%)	30.	A (30%)
11.	C (93%)	31.	D (44%)
12.	B (56%)	32.	C (21%)
13.	D (96%)	33.	A (83%)
14.	A (78%)	34.	D (66%)
15.	C (80%)	35.	B (80%)
16.	C (29%)	36.	C (71%)
17.	B (73%)	37.	D (84%)
18.	C (63%)	38.	A (71%)
19.	A (25%)	39.	A (25%)
20.	D (83%)	40.	C (41%)

6. Elective: Weather and Climate

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

Describe and explain the formation of the planetary wind systems. Discuss the relative importance of the planetary wind systems in affecting the distribution of major global climatic zones. (12 marks)

7. Elective: Transport

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

Describe the favourable factors for the development of the logistics industry in Hong Kong. Discuss the impact of the rapid development of transport infrastructure in the Zhujiang Delta Region on the future of Hong Kong's logistics industry. (12 marks)

8. Elective: Regional Study of Zhujiang Delta

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

'Branding' refers to manufacturing enterprises designing, producing and selling products in their own brand.

Explain the challenges that manufacturing industries in the Zhujiang Delta Region have faced since 1990. Evaluate the effectiveness of using branding strategy by manufacturing enterprises in the Zhujiang Delta Region to tackle these challenges. (12 marks)

Note: Figures in brackets indicate the percentages of candidates choosing the correct answers.

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.

Section B

Question 1

- (a) - coastal areas
 - mainly along destructive plate boundaries
 - mainly at subduction zones
 - linear pattern
 - mainly in the Circum-Pacific Belt

Marks

1
 1
 1
 1
 1 (3)

- (b) (i) Similarities:
 - both are located near plate boundaries/ caused by plate movement
 - both are caused by earthquake
 - both are caused by stress accumulation/ rocks fracture
 - both with large scale disturbance/ displacement of seawater

1
 1
 1
 1

Differences:

X	Y
- close to plate boundaries/ reverse fault/ plate collision	- close to transform faults/ crustal rocks slide past each other
- compressional force	- shear/ lateral force
- epicentre at seafloor	- epicentre on land
- vibration of seafloor/ submarine earthquake/ displacement of seafloor	- shaking causes landslide/ large amount of debris falls into bay

1+1
 1+1
 1+1
 1+1 (6)

- (ii) - close to epicentre
 - high magnitude of earthquake
 - large amount of debris moved downwards
 - located in narrow/ closed bay
 - limited the dispersion of wave energy

1
 1
 1
 1
 1 (2)

- (c) (i) - higher at X/ lower at Y

1 (1)
 1
 1
 1
 1 (2)

Question 1 (cont.)

(c) (ii) Marking criteria:

Notes:

1. Award appropriate marks according to the **QUALITY** and **DEPTH** of arguments;
do not count the number of points only.

2. Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.

- Evaluation on 'land use zoning' can be either **effective or ineffective, or both** (Max. 4)
 • *Arguments of 'effective': e.g. buffer zone established, high risk facilities suspended*
 • *Arguments of 'ineffective': e.g. high cost, technical infeasibility*
 - **2 marks** for any argument with **description and elaboration**
 • *Example: Restricting the development of high risk facilities/ nuclear plants/ oil depots in coastal areas, loss from secondary hazards can be minimised.*
 - **1 mark** for any argument with **description only**
 • *Example: Restricting the development of high risk facilities/ nuclear plants/ oil depots in coastal areas.*

Max. 18

Question 2

- (a) (i) - velocity increases from sites 1 to 4/ sites 1 to 7
 - velocity drops from sites 4 to 5
 - then increases again from sites 5 to 7

Marks

1
1
1 (2)

(ii)

Sites	Reasons for changes in velocity	Map evidence	Remarks
1 to 4	- large amount of water collected	- many tributaries	Max. 3 marks
5 to 7	- higher discharge	- tributaries join at sites 3/ 4/ 7 - confluence point at site 4	
4 to 5	- river water used for irrigation - lower discharge	- presence of pumping station - presence of farmland	Max. 3 marks

- (b) (i) 1.026 / 1.03 / 1

1 (1)

- (ii) - channel width increases

1 (1)

- discharge increases/ high discharge
- greater/ large river energy/ velocity
- strong erosion
- e.g. abrasion/ hydraulic action
- lateral erosion
- more transportation
- especially strong at concave/ outer bank of meander

1
1
1
1
1
1
1 (5)

(iii)

Favourable physical condition	Map evidence
- at lower course of river	- < 20 metres/ contour lines widely spaced/ river entering the sea/ at river mouth
- gentle gradient	- contour lines widely spaced
- large amount of load	- joining of tributaries
- lower velocity at convex/ inner bank of river	- presence of meander/ winding river
- lower velocity/ flocculation	- river entering the sea/ at river mouth

1+1
1+1
1+1
1+1 (4)

Max. 18

Question 3

(a)

- (i) Low density residential land use: (At least 1)
 - mainly concentrated in the north/ northwest
 - along the coast
 - far away from highway/ MTR
 - proximity to open space/ green belt/ green area

Marks

1
1
1
1

Commercial land use: (At least 1)

- concentrated in the south/ southeast
- proximity to roads/ highway/ MTR station/ railway station
- adjacent to high density residential area

1
1
1 (3)

(ii) Low density residential land use: (At least 1; must refer to description above)

- pleasant scenery/ higher property value
- reduces noise pollution from highway
- improves air quality/ fresh air

1
1
1

Commercial land use: (At least 1; must refer to description above)

- high accessibility
- attracts customers/ high customer flow
- convenient for employees to go to work
- serves the residents nearby

1
1
1
1 (4)

(b)

Locational advantage (At least 1)	Map evidence
- higher accessibility	- area X closer to North Lantau Highway/ Tung Chung Line/ area Y far away from highway/ railway line
- better view	- area X at wider open sea/ area Y at narrower bay

1+1
1+1

Site advantage (At least 1)

Site advantage (At least 1)	Map evidence
- less ecological impact/ lower ecological value/ less environmental damage	- no mangrove (swamp/ mud-flat/ estuary) in area X/ presence of mangrove (swamp/ mud-flat/ estuary) in area Y
- less water pollution	- area X at wider open sea/ area Y at narrower bay
- larger space for reclamation	- area X farther away from airport/ area Y closer to airport; or - area X at wider open sea/ area Y at narrower bay

1+1
1+1
1+1 (6)

(c) Marking criteria:

Notes:

- Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; do not count the number of points only.
- Max. marks should be given to good quality answers with well-elaborated arguments and demonstrating good knowledge on relevant geographical concepts.

(Max. 5)

- Candidates should refer to the following perspectives when discussing whether the land use planning of area X aligns with the principles of sustainable development:
 - economic: economic development, employment opportunities, diversification in economy
 - social: social facilities and services, quality of life, protection on the right of equal access to resources
 - environmental: level of pollution, open space
- **2 marks** for discussion of any perspective with detailed description and explanation

• Example:

The planning of area X aligns with the principles of sustainable development: high percentage of subsidised housing, providing large amount of low-rent housing and protecting the housing right of the low-income class.

- **1 mark** for discussion of any perspective with brief description only

• Example:

The planning of area X aligns with the principles of sustainable development: high percentage of subsidised housing, providing large amount of low-rent housing.

- **No marks** for direct copying of information from Table 3b only

Max. 18

Question 4

	Marks
(a) (i) 4 300 000 km ² ~ 5 200 000 km ² (No unit of area: 1 mark)	2 (2)
(ii) decreased by/ minus (-) 27.78% / 27.8% / 28% to 40.28% / 40.3% / 40%	1 (1)
(b) (i) - amount of global carbon dioxide emissions <u>increased</u> while area of sea ice extent <u>decreased</u> - carbon dioxide is a kind of greenhouse gases - blocks/ absorbs - long wave radiation/ terrestrial radiation - heat is <u>trapped</u> in the atmosphere/ counter radiation/ blanketing effect - greenhouse effect is <u>intensified</u> - rise in global air temperature/ global warming - melting of sea ice	1 (1) 1 1 1 1 1 1 1 (5)
(ii) <u>Positive impact:</u> (At least 1) - shorter sea transport route/ more/ new sea transport routes/ favours navigation - reduces transport time/ cost - easy to exploit natural resources/ oil - favours fishing industry <u>Negative impact:</u> (At least 1) - <u>reduces habitat of polar bears</u> - reduces hunting ground for natives/ reduces food supply/ threatens livelihood of natives - <u>drifting ice blocks</u> affect shipping safety - <u>transportation on ice surface</u> disrupted	1 1 1 1 1 (5)
(c) <u>Marking criteria:</u> Notes: 1. Award appropriate marks according to the QUALITY and DEPTH of arguments; do not count the number of points only . 2. Max. marks should be given to good quality answers with well-elaborated arguments and demonstrating good knowledge on relevant geographical concepts. - Evaluation on ‘international cooperation’ can be either effective or ineffective, or both - Arguments of ‘effective’: EU countries cooperate; technology transfer; financial assistance - Arguments of ‘ineffective’: some countries do not cooperate; economic concerns; political consideration - 2 marks for any argument with description and elaboration • <u>Example (Ineffective): Less developed countries are reluctant to cooperate as reduction in emission will hinder their economic development.</u> - 1 mark for any argument with description only • <u>Example (Ineffective): Less developed countries are reluctant to cooperate.</u>	(Max. 4) Max. 18

Section C

Question 5

Account for the major factors affecting the spatial distribution of the iron and steel industry in China before 1978. Explain how the ‘Reform and Opening-up’ policy has changed the spatial distribution of iron and steel industry in China since 1978.

Description & explanation	6
Explanation	6

Notes:

- Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; **do not count the number of points only**.
- Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
- Award appropriate marks to **relevant and reasonable answers** not included in this marking scheme.

Generic Marking Guidelines		Marks
Performance of Candidates	Describe and explain the major factors affecting the spatial distribution of the iron and steel industry in China before 1978	
	<ul style="list-style-type: none"> Demonstrate comprehensive knowledge on the major factors affecting the spatial distribution of the iron and steel industry in China before 1978 <ul style="list-style-type: none"> clear and well-organised description of the major factors affecting the spatial distribution of iron and steel industry in China, such as raw materials, energy resources, government policy, etc. clear and logical explanation on the relationship between the spatial distribution of iron and steel industry in China and the major factors Major steel centres and their physical/ human conditions, e.g. Anshan, Urumqi, Changjiang Pingyuan Extensive and accurate use of geographical terminology 	6
	<ul style="list-style-type: none"> Demonstrate adequate knowledge on the major factors affecting the spatial distribution of the iron and steel industry in China before 1978 Adequate examples Accurate use of geographical terminology 	3 – 5
	<ul style="list-style-type: none"> Demonstrate preliminary knowledge on the major factors affecting the spatial distribution of the iron and steel industry in China before 1978 Few or no examples Absence or inaccurate use of geographical terminology 	1 – 2
	Explain how the ‘Reform and Opening-up’ policy has changed the spatial distribution of iron and steel industry in China since 1978	
	<ul style="list-style-type: none"> Coherent, logical and in-depth explanation on how the “Reform and Opening-up” policy has changed the spatial distribution of iron and steel industry in China since 1978 <ul style="list-style-type: none"> “Reform and Opening-up” policy: <ul style="list-style-type: none"> opening-up policies: special economic zones, government interventions, trade policy (e.g. relaxing restrictions on trade barriers)/ attracts foreign investment changes in <u>factors affecting iron and steel industry</u>: production flexibility, coastal advantages, infrastructure and technology (e.g. scrap iron, bulk carriers), market-oriented, local market changes in <u>spatial distribution of iron and steel industry</u>: coastal development Examples of newly developed iron and steel centres, e.g. Baoshan steel centres Extensive and accurate use of geographical terminology 	6
	<ul style="list-style-type: none"> General explanation on how the “Reform and Opening-up” policy has changed the spatial distribution of iron and steel industry in China since 1978 <ul style="list-style-type: none"> Adequate examples Accurate use of geographical terminology 	3 – 5
	<ul style="list-style-type: none"> Superficial explanation on how the “Reform and Opening-up” policy has changed the spatial distribution of iron and steel industry in China since 1978 <ul style="list-style-type: none"> Few or no examples Absence or inaccurate use of geographical terminology 	1 – 2
		Max. 12

Question 6

How does the physical environment cause high risk of famine in the Sahel region? Evaluate the effectiveness of biotechnology in lowering the risk of famine in the Sahel region.

Explanation	6
Evaluation	6

Notes:

1. Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; **do not count the number of points only**.
2. Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
3. Award appropriate marks to **relevant and reasonable answers** not included in this marking scheme.

Generic Marking Guidelines	
Performance of Candidates	Marks
Explain how the physical environment causes high risk of famine in the Sahel region	
• Demonstrate comprehensive knowledge of how the physical environment causes high risk of famine in the Sahel region	6
• Answers may include some of the following with explanations: - climatic factors and impact of climate change - soil - vegetation - drainage	
• Explanations on environmental factors must be related to the high risk of famine	
• Answers that list out points without explanation should not reach this band	
• Extensive and accurate use of geographical terminology	
• Demonstrate adequate knowledge of how the physical environment causes high risk of famine in the Sahel region	3 – 5
• Accurate use of geographical terminology	
• Demonstrate elementary knowledge of how the physical environment causes high risk of famine in the Sahel region	1 – 2
• Absence or inaccurate use of geographical terminology	
Evaluate the effectiveness of biotechnology in lowering the risk of famine in the Sahel region	
• Coherent and logical evaluation on the effectiveness of biotechnology in lowering the risk of famine in the Sahel region	6
• Biotechnology and hybrid crops improve quality and quantity of farm outputs because these crops are more resistant to drought, alkaline soil and pest, leading to higher yield and more food supply	
• The effectiveness is undermined as: - lack of capital and technology for the development of biotechnology and introducing hybrid crops - corruption and wars also cause high risk of famine - food produced with biotechnology by large enterprises and companies may be export-oriented - farms may be changed to the growing of cash crops	
• Extensive and accurate use of geographical terminology	
• Appropriate evaluation on the effectiveness of biotechnology in lowering the risk of famine in the Sahel region	3 – 5
• Accurate use of geographical terminology	
• Brief description of biotechnology in lowering the risk of famine in the Sahel region	1 – 2
• Absence or inaccurate use of geographical terminology	
Max. 12	

Question 7

Describe and explain the negative socio-economic consequences of large-scale deforestation in tropical rainforests. Discuss the roles of more developed countries in the deforestation of tropical rainforests.

Description & explanation	6
Discussion	6

Notes:

1. Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; **do not count the number of points only**.
2. Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
3. Award appropriate marks to **relevant and reasonable answers** not included in this marking scheme.

Generic Marking Guidelines		Marks
Performance of Candidates		
Describe and explain the negative socio-economic consequences of large-scale deforestation in tropical rainforests		
• Demonstrate comprehensive knowledge of the negative socio-economic consequences of large-scale deforestation in tropical rainforests		6
• Answers may include some of the following areas with explanations and details: - food supply - cultural and health - medicine - economy		
• Answers that list out points without details and explanation should not reach this band		
• Some examples should be included		
• Extensive and accurate use of geographical terminology		
• Demonstrate adequate knowledge of the negative socio-economic consequences of large-scale deforestation in tropical rainforests		3 – 5
• Accurate use of geographical terminology		
• Demonstrate elementary knowledge of the negative socio-economic consequences of large-scale deforestation in tropical rainforests		1 – 2
• Absence or inaccurate use of geographical terminology		
Discuss the roles of more developed countries in the deforestation of tropical rainforests		
• Coherent and logical discussion of the positive and negative roles of more developed countries in the deforestation of tropical rainforests		6
• <u>Positive role:</u> • conserving the rainforests, reafforestation scheme • funding and technology to help preserve rainforests • effort of NGOs • general public's support, e.g. using recycled paper		
• <u>Negative role:</u> • exploitation of rainforest resources, e.g. cattle ranching/ plantation/ mining/ transportation/ lumbering • unfair trading with rainforest countries		
• Extensive and accurate use of geographical terminology		
• Appropriate discussion of the roles of more developed countries in the deforestation of tropical rainforests		3 – 5
• Accurate use of geographical terminology		
• Brief and general discussion of the roles of more developed countries in the deforestation of tropical rainforests		1 – 2
• Absence or inaccurate use of geographical terminology		
		Max. 12

Question 1

- (a) (i) tuff/ volcanic rock/ extrusive igneous rock
- (ii) - fine-grained crystals/ volcanic ash particles
- hexagonal columnar joints
- resistant rock
- acidic rock
- light colour
- (iii) - destructive plate boundary
- extrusive vulcanicity
- a series of volcanic eruptions
- a large volcano formed
- large-scale collapse of the crater/ volcano
- caldera filled with hot volcanic ash and lava
- ash and lava cooled down/ solidified/ crystallized
- rapidly
- when contacted with air

- (b) (i) - rockfall
- large amount of rock debris/ talus found at base of slope

Explanation on causes	Photograph evidence
- rock structure weakened	- rusty colour weathered rock
- great stress on the slope	- vertical/ steep slope surface
- lower internal strength	- vertical joints
- lower strength at slope	- overhanging rocks

(c) Marking criteria:

Notes:

- Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; do not count the number of points **only**.
- Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
- Max. marks **should not** be given if the candidate did not make an **appropriate conclusion**.
 - Identifying the measure as a warning sign/ **Function and purpose** of the measure, e.g. raising awareness of citizens
 - Candidates should discuss the appropriateness of the measure in response to mass wasting at area X from the following perspectives:
 - function
 - environment and land use
 - potential impact on the general public
 - 2 marks** for any perspective with **description and appropriate discussion**
 - Example: Area X is inside a geological park; the measure can conserve the natural landscapes of the park.
 - 1 mark** for any perspective with **description only**
 - Example: Area X is inside a geological park, therefore the measure is appropriate.

Marks

1 (1)

1

1

1

1

1

1

1

1

1

1

1

1

1+1

1+1

1+1

1+1 (4)

1

4

(Max. 5)

Max. 18

Question 2

- (a) (i) city X: data set A; city Y: data set B

(ii) Description: (Max. 3)

- city X has greater annual range of temperature than city Y
- 29°C versus 14°C
- city X has lower annual mean of temperature than city Y
- 12.7°C versus 25.3°C

Explanation:

- city X is located at higher latitude than city Y
- angle of insolation/ angle of the sun is smaller at city X than that at city Y (angle of incidence is larger at city X than that at city Y)
- insolation is less concentrated/ weaker at city X than that at city Y
- seasonal variations in duration of sunlight is greater at city X
- city X is at inland location/ city Y is at coastal location
- land absorbs and releases heat more quickly than sea
- lower temperature in winter at city X than city Y
- cold air from interior blocked by mountains north of city Y

- (b) - seasonal variations in wind directions/ monsoon

- in December, wind mainly blows from NE & N
- in winter, the continental interior of Asia loses heat quickly/ air temperature above the landmass drops
- high pressure forms over the landmass
- air moves from high pressure to low pressure
- wind blows from inland to coast/ offshore wind
- in July, wind mainly blows from SW, S & W
- in summer, the continental interior of Asia absorbs heat more quickly than the sea/ air temperature above the sea is lower
- high pressure forms over the sea
- wind blows from the sea to inland/ onshore wind

- (c) (i) drought/ sandstorm

(ii) Marking criteria:

Notes:

- Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; do not count the number of points **only**.
- Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
- Discussion can focus on 'role of wind' **only or together with 'other human factors'**

(Max. 4)

Occurrence of drought	Occurrence of sandstorm
<ul style="list-style-type: none"> Role of wind: <ul style="list-style-type: none"> offshore wind in winter brought dry air, leading to low rainfall; increasing evapotranspiration unreliable rainfall caused by summer monsoons come later or winter monsoons come earlier than normal little moisture brought by onshore summer monsoon; long distance from sea Other human factors: <ul style="list-style-type: none"> e.g. excess demand on fresh water, poor management of water resources and water pollution, etc. intensify drought 	<ul style="list-style-type: none"> Role of wind: <ul style="list-style-type: none"> offshore wind in winter blows dust to city X from inland bringing little moisture, leading to dry and loose soil scarce water unfavourable for plant growth, soil not protected by vegetation Other human factors: <ul style="list-style-type: none"> e.g. over-cultivation, overgrazing and deforestation, etc. intensify sandstorm
OR	
<ul style="list-style-type: none"> 2 marks for any discussion with description and elaboration <ul style="list-style-type: none"> <u>Example:</u> Offshore wind in winter brings dry air from inland, so rainfall is scanty. 1 mark for any discussion with description only <ul style="list-style-type: none"> <u>Example:</u> Offshore wind in winter, so rainfall is scanty. 	

Max. 18

Question 3

- (a) (i)
- Changing percentage of average daily passengers (2001 – 2013)**
-
- | Year | Railways (%) | Franchised buses (%) |
|------|--------------|----------------------|
| 2001 | 38 | 30 |
| 2003 | 35 | 33 |
| 2005 | 36 | 33 |
| 2007 | 37 | 31 |
| 2009 | 38 | 31 |
| 2011 | 39 | 30 |
| 2013 | 41 | 32 |
- labelling of axes & curves
- accuracy
- (ii)
- railways have become increasingly important/ franchised buses have become less important
 - railways: increased by 10.1% / franchised buses: decreased by 7.6%
- (b) (i)
- reliable
 - not affected by road congestion
 - speedy/ saving time
 - affordable fares
 - carrying large amount of passengers
 - safe
- (ii)
- railway network has further extended
 - to new towns/ suburbs
 - e.g. Tseung Kwan O/ Ma On Shan/ Tuen Mun/ Yuen Long (Relevant examples as elaboration of previous point)
 - serving larger area
 - interchange points increased
 - bus passengers switched to take railways after 2001
 - Lok Ma Chau Spur Line attracts cross-border passengers
- (c) Marking criteria:
Notes:
1. Award appropriate marks according to the **QUALITY** and **DEPTH** of evaluation; do not count the number of points **only**.
 2. Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
 3. Max. marks **should not** be given if the candidate did not **make a judgement on the effectiveness**.
- **Understanding of strengthening the cooperation** between railways & franchised buses through description or relevant example(s), e.g. feeder buses, interchange discount, parallel routes
 - Evaluation on 'strengthening of cooperation' can be **either effective or ineffective, or both**
 - cost-effectiveness of service providers, passengers' convenience, passengers' expense
 - carrying capacity of railways/ franchised buses
 - competition/ complementary roles of railways and buses
 - **2 marks for any argument with description and elaboration**
 - Example: More passengers can get access to railways by feeder buses, reducing the marginal cost of railway, etc.
 - **1 mark for any argument with description only**
 - Example: More passengers can use railways by feeder buses.

Marks

1
2 (3)

1
1
1
1
1
1 (3)

1
1
1
1
1
1 (5)

1
4
(Max. 5)

Max. 18

Question 4

- (a) (i)
- highest: Foshan
 - lowest: Jiangmen
 - the difference: $60 \mu\text{g}/\text{m}^3 - 31 \mu\text{g}/\text{m}^3 = 29 \mu\text{g}/\text{m}^3$ ($27 \mu\text{g}/\text{m}^3 \sim 31 \mu\text{g}/\text{m}^3$)
- (ii)
- significant spatial variation
 - higher concentrations of NO_2 at the centre/ northwest of ZDR
 - lower concentrations of NO_2 at the northeast/ southwest of ZDR
 - lower concentrations of NO_2 along coast of ZDR/ higher concentrations of NO_2 at inland of ZDR
- (iii)
- burning of fossil fuels
 - thermal power stations/ vehicles as major sources of NO_2
 - higher population density at centre of ZDR/ in Dongguan
 - higher GDP per capita at centre/ in northwest of ZDR/ in Guangzhou
 - higher living standard
 - higher household electricity demand
 - concentration of economic activities
 - higher transportation flow
 - dispersion of pollution from adjacent districts
- (b) (i)
- Gross industrial output value: (At least 1)
- increased
 - sharply/ by 62.2%
- Concentrations of nitrogen dioxide: (At least 1)
- decreased
 - slightly/ by 29.3%
- (ii) Marking criteria:
Notes:
1. Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; do not count the number of points **only**.
 2. Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
- Discussion should include **BOTH** government policy and non-governmental factors (**MAX. 3 marks** for discussion on government policy **only**)
 - Examples of government policies causing difference in trends: relocation of polluting industries/ improvement in electricity supply by developing green power/ development of hi-tech industries/ R & D
 - Examples of non-governmental factors causing difference in trend(s): the rise of local enterprises, living standard, education level
 - **2 marks** for any discussion with **description and elaboration**
 - Example: The government of ZDR has promoted the development of high-tech industries. As the high-tech industries are low-polluting and high value-added, rising gross industrial output value and lowering NO_2 concentration will be resulted.
 - **1 mark** for any discussion with **description only**
 - Example: The government of ZDR has promoted the development of high-tech industries.

Marks

1
1
1 (3)

1
1
1
1 (2)

1
1
1
1
1
1
1
1 (5)

1
1

1
1 (3)

(Max. 5)

Max. 18

Section E

Question 5

Explain the occurrence of intensive weathering in granite areas in Hong Kong. Discuss the relative importance of weathering in shaping the landforms in Hong Kong.

Explanation	6
Discussion	6

Notes:

1. Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; **do not count the number of points only.**
 2. Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
 3. Award appropriate marks to relevant and reasonable answers not included in this marking scheme.

5. Award appropriate marks to relevant and reasonable answers not included in this marking scheme.

Generic Marking Guidelines		Marks
Performance of Candidates		
Explain the occurrence of intensive weathering in granite areas in Hong Kong		
<ul style="list-style-type: none"> Appropriate description of granite areas in Hong Kong Able to explain in details the occurrence of intensive weathering in granite areas in Hong Kong in relation to: <ul style="list-style-type: none"> - hot and humid climatic characteristics in Hong Kong - joints in granite - structure, composition of granite Extensive and accurate use of geographical terminology 	6	
<ul style="list-style-type: none"> Demonstrate knowledge and understanding of weathering in granite areas in Hong Kong Accurate use of geographical terminology 	3 – 5	
<ul style="list-style-type: none"> Brief and general explanation of weathering in granite areas in Hong Kong <i>OR</i> description of weathering processes only Absence or inaccurate use of geographical terminology 	1 – 2	
Discuss the relative importance of weathering in shaping the landforms in Hong Kong		
<ul style="list-style-type: none"> Coherent and logical discussion Accurate explanation on the relationship between weathering processes and other denudation processes State accurately the importance of weathering processes, erosion and mass wasting in shaping the landforms in Hong Kong State accurately the major controlling factors of landforms in Hong Kong: <ul style="list-style-type: none"> - rock types - faults - human factors (reclamation) Extensive and accurate use of geographical terminology 	6	
<ul style="list-style-type: none"> Appropriate explanation on the relation between weathering processes and other denudation processes Appropriate explanation of other factors/ processes in shaping the landforms in Hong Kong Accurate use of geographical terminology 	3 – 5	
<ul style="list-style-type: none"> Brief and general explanation on the influence of weathering processes on landforms in Hong Kong Absence or inaccurate use of geographical terminology 	1 – 2	
		Max. 12

Question 6

Describe and explain the formation of the planetary wind systems. Discuss the relative importance of the planetary wind systems in affecting the distribution of major global climatic zones.

Description & explanation	6
Discussion	6

Notes:

- Notes:**

 1. Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; **do not count the number of points only.**
 2. Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
 3. Award appropriate marks to **relevant and reasonable answers** not included in this marking scheme.

Generic Marking Guidelines		Marks
Performance of Candidates		
Describe and explain the formation of the planetary wind systems		
<ul style="list-style-type: none"> Demonstrate comprehensive knowledge of the planetary wind systems (trade winds, westerlies, polar easterlies) Accurate description and explanation of the spatial distribution of insolation and pressure belts Accurate explanation of wind deflection caused by Coriolis force Extensive and accurate use of geographical terminology 		6
<ul style="list-style-type: none"> Demonstrate adequate knowledge of the planetary wind systems Appropriate description and explanation of the spatial distribution of pressure belts Accurate use of geographical terminology 		3 – 5
<ul style="list-style-type: none"> Demonstrate elementary knowledge of the planetary wind systems Brief description of wind systems General explanation of the formation of wind systems Absence or inaccurate use of geographical terminology 		1 – 2
Discuss the relative importance of the planetary wind systems in affecting the distribution of major global climatic zones		
<ul style="list-style-type: none"> Coherent and logical discussion Clear description of the distribution of major global climatic zones: equatorial climate, temperate climate and polar climate Accurate explanations of the major controlling factor in affecting global climate: solar energy Logical explanation of the influence of planetary wind systems on the distribution of major global climatic zones Extensive and accurate use of geographical terminology 		6
<ul style="list-style-type: none"> Appropriate description of global climate Appropriate explanations of the influence of planetary wind systems on global climate Accurate use of geographical terminology 		3 – 5
<ul style="list-style-type: none"> Brief or limited discussion on the factors affecting global climate Inadequate knowledge of global climate Absence or inaccurate use of geographical terminology 		1 – 2

Question 7

Describe the favourable factors for the development of the logistics industry in Hong Kong. Discuss the impact of the rapid development of transport infrastructure in the Zhujiang Delta Region on the future of Hong Kong's logistics industry.

Description	6
Discussion	6

Notes:

1. Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; **do not count the number of points only**.
2. Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
3. Award appropriate marks to **relevant and reasonable answers** not included in this marking scheme.

Generic Marking Guidelines		
Performance of Candidates	Marks	
Describe the favourable factors for the development of the logistics industry in Hong Kong		
<ul style="list-style-type: none"> • Demonstrate comprehensive knowledge of the favourable factors for the development of the logistics industry in Hong Kong: <ul style="list-style-type: none"> - location - transport infrastructure - development of export trade - linkages: transport system, communication system (internal/ external) - technology and management - efficiency, etc. • Extensive and accurate use of geographical terminology 	<ul style="list-style-type: none"> (Not necessary to include all factors) 	6
<ul style="list-style-type: none"> • Appropriate description of the favourable factors for the development of the logistics industry in Hong Kong • Accurate use of geographical terminology 	3 – 5	
<ul style="list-style-type: none"> • Brief and general description of the favourable factors for the development of the logistics industry in Hong Kong • Absence or inaccurate use of geographical terminology 	1 – 2	
Discuss the impact of the rapid development of transport infrastructure in the Zhujiang Delta Region on the future of Hong Kong's logistics industry		
<ul style="list-style-type: none"> • Coherent and logical discussion • Accurate examples used to illustrate the rapid development of transport infrastructures, such as Shenzhen Baoan Airport, Guangzhou Baiyun Airport, Shenzhen Yantian International Container Terminals, HK-Zhuhai-Macau Bridge, etc. (Not necessary to include all examples) • <u>Positive impact</u>: <ul style="list-style-type: none"> - opportunity for regional cooperation - expansion of links with domestic cities, e.g. closer link with Zhuhai after completion of HK-Zhuhai-Macau Bridge - lower costs • <u>Negative impact</u>: <ul style="list-style-type: none"> - keen competition, e.g. lower charges of Yantian International Container Terminals - lower demand of service from Mainland, e.g. manufactured goods in Mainland export directly from local ports/ airports • Extensive and accurate use of geographical terminology 	6	
<ul style="list-style-type: none"> • Appropriate discussion • Discussing only the positive or negative impact • Accurate use of geographical terminology 	3 – 5	
<ul style="list-style-type: none"> • Brief and general discussion • Absence or inaccurate use of geographical terminology 	1 – 2	
Max. 12		

Question 8

'Branding' refers to manufacturing enterprises designing, producing and selling products in their own brand.

Explain the challenges that manufacturing industries in the Zhujiang Delta Region have faced since 1990. Evaluate the effectiveness of using branding strategy by manufacturing enterprises in the Zhujiang Delta Region to tackle these challenges.

Explanation	6
Evaluation	6

Notes:

1. Award appropriate marks according to the **QUALITY** and **DEPTH** of discussion; **do not count the number of points only**.
2. Max. marks should be given to good quality answers with **well-elaborated arguments** and demonstrating good knowledge on relevant geographical concepts.
3. Award appropriate marks to **relevant and reasonable answers** not included in this marking scheme.

Generic Marking Guidelines	
Performance of Candidates	Marks
Explain the challenges that manufacturing industries in the Zhujiang Delta Region have faced since 1990	
<ul style="list-style-type: none"> • Demonstrate comprehensive knowledge on the manufacturing industries in the Zhujiang Delta Region <ul style="list-style-type: none"> - accurate description of the types of manufacturing industries developed in the ZDR - accurate explanation of the challenges: labour, land, environment, worldwide economy, government policy (Not necessary to include all challenges) • Accurate use of examples • Extensive and accurate use of geographical terminology, e.g. low value-added 	6
<ul style="list-style-type: none"> • Demonstrate adequate knowledge on the manufacturing industries in the Zhujiang Delta Region • Appropriate description of the types of manufacturing industries • Appropriate explanation of challenges • Appropriate examples • Accurate use of geographical terminology 	3 – 5
<ul style="list-style-type: none"> • Demonstrate preliminary knowledge on the manufacturing industries in the Zhujiang Delta Region • Brief and general description of the types of manufacturing industries • Brief and general explanation of challenges • Absence or inaccurate use of geographical terminology 	1 – 2
Evaluate the effectiveness of using branding strategy by manufacturing enterprises in the Zhujiang Delta Region to tackle these challenges	
<ul style="list-style-type: none"> • Coherent, logical and in-depth evaluation on the effectiveness of using branding strategy by manufacturing enterprises in the Zhujiang Delta Region to tackle these challenges • <u>Effective</u>: <ul style="list-style-type: none"> - the rise of local enterprises/ higher value-added/ R & D/ more capital-intensive and automation/ marketing of own brand • <u>Not effective/ Could not tackle the challenges</u>: <ul style="list-style-type: none"> - human constraints/ competition for production factors • Other measures to tackle the challenges, such as government incentives, improving infrastructure, etc. • Extensive and accurate use of geographical terminology 	6
<ul style="list-style-type: none"> • General evaluation on the effectiveness of using branding strategy by manufacturing enterprises in the Zhujiang Delta Region to tackle these challenges • Accurate use of geographical terminology 	3 – 5
<ul style="list-style-type: none"> • Superficial evaluation on the effectiveness of using branding strategy by manufacturing enterprises in the Zhujiang Delta Region to tackle these challenges • Absence or inaccurate use of geographical terminology 	1 – 2
Max. 12	