

Paper 2
Section D

Question 1

Marks

- (a) (i) - Rock type X: sedimentary rock/ shale/ siltstone 1
 - Rock type Y: igneous rock/ plutonic rock/ granite 1 (2)

	Rock type X	Rock type Y	
<i>Materials of rock</i>	- sediments	- magma	1
<i>Rock structure</i>	- less compact/ softer	- more compact/ harder	1
	- stratified/ in layers	- non-stratified	1
	- presence of bedding planes	- presence of joints	1
	- non-crystalline	- crystalline	1
	- may have fossils	- contains no fossils	1
<i>Resistance to weathering</i>	- less	- more	1 (4)

- (iii) - mainly in northeastern New Territories 1
 • e.g. Pat Sin Range, Port Island and Ping Chau (Any one) 1
 - a small portion scattered around the New Territories 1
 • e.g. Ma On Shan, Yuen Long and some areas in Tai O (Any one) 1 (2)

- (iv) - annotated diagram 1 (1)
 - correct labels/ explanations: (Max. two)
 • magma passes through lines of weakness 1
 • swelling up to the crust 1
 • magma cools and solidifies deep underground/ in the crust 1
 • slow cooling of magma in the crust 1
 • forming larger crystals/ coarser particles 1 (2)

- (b) (i) - chemical weathering/ spheroidal weathering 1
 - physical weathering/ block disintegration 1
 - mass wasting/ erosion 1 (2)

- (ii) - hot and wet climate 1
 - heavy rain in summer 1
 - well-jointed rock 1
 - minerals, e.g. feldspar, mica are easily weathered 1
 - rainwater infiltrates into the joints, causing chemical weathering 1
 - heavy rain after intense heating of rock surface in summer widens the joints, causing physical weathering 1
 - loose weathered materials washed/ carried away by rainwater/ mass wasting 1
 - tors remain on hillslopes 1 (5)

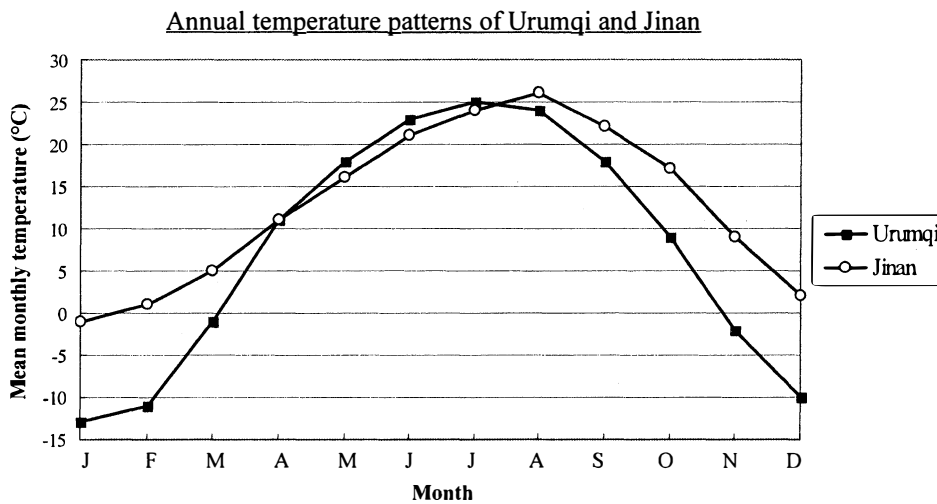
 Max. 18

Question 2

Marks

- (a) (i) - accuracy
 - title/ labelling of axes

3
 1 (4)



- (ii) - mean annual temperature of Jinan is higher than Urumqi/ Jinan: 12.8°C; Urumqi: 7.6°C 1
 - annual range of temperature of Jinan is smaller than Urumqi/ Jinan: 27°C; Urumqi: 38°C 1
 - Urumqi is warmer than Jinan in summer/ colder than Jinan in winter 1 (2)

(iii) Location: (Max. two)

Jinan:

- coastal location/ moderated by sea 1
- cooling effect of onshore monsoon winds in summer 1

Urumqi:

- located at continental interior/ continental effect 1
- rapid heating and loss of heat of continent 1

Altitude:

- Urumqi is located at higher altitude, slightly lower mean annual temperature 1
- lower air temperature due to thinner air at Urumqi 1

Latitude:

- lower mean annual temperature in Urumqi as it is located at higher latitude 1
- less insolation is received due to lower angle of sun's rays 1 (4)

(Max. two for altitude and latitude)

- (b) (i) - the annual rainfall increases from Urumqi to Jinan 1
 - from inland to coastal area/ the annual rainfall increases from below 400 mm to 800 mm 1 (1)
- because there is much moisture supply by onshore monsoon winds at coastal area 1
 - typhoons occur in summer in Jinan 1
 - the amount of moisture reduces when winds blow inland 1
 - topographic effect/ blocked by mountain ranges in inland area 1 (3)

Question 2 (cont.)	Marks
(b) (ii) drought/ sand storms	1 (1)
(iii) <u>Drought:</u>	
- Effective: (Max. two)	
• to a certain extent, increase relative humidity by evapotranspiration	1
• can relieve the problem when the amount of groundwater storage increases	1
- Not effective: (Max. two)	
• not very effective in the short-term	1
• density of trees is low due to dry environment	1
• effectiveness depends on forest management	1 (3)
OR	
<u>Sand storms:</u>	
- Effective: (Max. two)	
• trees act as windbreak to slow down wind velocity	1
• roots of trees hold the soil	1
• effectiveness improve when trees grow taller	1
- Not effective: (Max. two)	
• short trees limits the degree of effectiveness	1
• effectiveness depends on forest management	1 (3)
	Max. 18

Question 3	Marks
(a) (i) X: 30 745	1 (1)
(ii) - uneven distribution of traffic	1
- less traffic flow on western side (B)/ more traffic flow on eastern side (E/F)/ traffic flow on western side (A/B) only approximately one-fourth of that of D	1
- more traffic flow from C to D	1
- F with the highest traffic density/ B with the least	1 (3)
(iii) - congestion/ increase in transport costs/ traffic time from C to D	1
- bottle neck/ confluence of N-S and E-W main roads at D	1
- heavy traffic to central business district at C	1
- only one E-W main road	1 (3)
(b) (i) - increase in road space	1
- diverting E-W traffic flow	1
- reducing traffic density at C & D	1
- increase in traffic speed	1
- reducing driving distance between Central and Causeway Bay	1 (4)
(ii) - reclamation of harbour	1
- reducing size of harbour	1
- destroying the scenery of harbour view	1
- water pollution	1
- air pollution becomes more serious with heavy traffic flow	1 (3)
(iii) - different roles played by MTR link and Bypass: MTR link for passenger transport only, Bypass for both passenger and goods transport	1
- Bypass alone may not be able to cope with the increase in traffic flow in the commercial area of Central and Causeway Bay	1
- MTR is a mass transit system	1
- MTR is a more efficient means of using road space	1
- MTR could not replace role of Bypass: Bypass is essential for improving logistics and emergency services	1
- Bypass can cope with the growing volume of private cars and goods transport	1 (4)
	----- Max. 18

Question 4	Marks
(a) (i) - the value of industrial production in Foshan is higher	1
- proportion of industry in total local economic production of Foshan is higher	1
- rate of industrial growth in Zhaoqing is faster than Foshan	1 (2)
(ii) - Foshan is close to Guangzhou	1
- better infrastructure and facilities	1
- higher population density in Foshan, adequate supply of labour	1
- affected by industrial agglomeration	1
- lower base value of industrial production in Zhaoqing, therefore higher growth rate	1
- abundant land supply in Zhaoqing, cheaper land rent	1
- lower wages in Zhaoqing	1 (4)
(b) (i) - best water quality in Zhaoqing; worse in Foshan; worst in Zhuhai	1 (1)
- less industrial sewage is disposed at Zhaoqing due to limited industrial development	1
- greatest amount of industrial sewage discharge in Foshan/ smallest amount of industrial sewage discharge in Zhuhai	1
- as living standard is higher, large amount of domestic sewage is produced	1
- better industrial development in Foshan produces large amount of industrial sewage	1
- Zhuhai located at lower course of Xijiang	1
- sewage from tributaries in the upper course flows to the lower course, resulting in poor water quality in Zhuhai	1 (3)
(ii) <u>Social cost:</u> (Max. three)	
- contamination of agricultural and aquatic products	1
- lack of clean water supply	1
- hazardous to the health of citizens	1
- lower labour productivity	1
- lower quality of living of citizens	1
- reduce value of recreational resources	1
<u>Economic loss:</u> (Max. three)	
- withdrawal of foreign capital	1
- large expenses in the projects of managing water quality/ sewage treatment	1
- less income for fishermen	1
- greater medical expenditure	1 (4)
(iii) - legislation	1
- prevention	1
- monitoring	1
- cleaning up	1
- education (alternative living styles)	1
- cooperation among local governments	1 (4)
	----- Max. 18

Section E

Question 5

Illustrate how water affects the external processes on the slopes of Hong Kong. Explain how these external processes shape the slope landscape in Hong Kong.

Illustration	6
Explanation	6

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
<p>Illustrate how water affects the external processes on the slopes of Hong Kong</p> <ul style="list-style-type: none"> - external processes: weathering, erosion and mass wasting - definition of weathering, erosion and mass wasting - water is vital to the external process - <u>Weathering</u>: <ul style="list-style-type: none"> • water accelerates the chemical reaction and physical breakdown of rocks • water facilitates chemical weathering, the processes include solution, oxidation • deep weathering profile causes loose weathered materials - <u>Erosion</u>: <ul style="list-style-type: none"> • rainfall as an agent - <u>Mass wasting</u>: <ul style="list-style-type: none"> • adding weight • enhancing the shear stress • reducing shearing strength 	<ul style="list-style-type: none"> • Demonstrate sound and comprehensive knowledge of how water affects the external processes on the slopes of Hong Kong • Extensive and accurate use of geographical terminology 	5 – 6
	<ul style="list-style-type: none"> • Demonstrate adequate knowledge of how water affects the external processes on the slopes of Hong Kong • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Demonstrate brief understanding of how water affects the external processes on the slopes of Hong Kong • Using everyday language 	1 – 2
<p>Explain how external processes shape the slope landscape in Hong Kong</p> <p><u>Weathering</u>:</p> <ul style="list-style-type: none"> - various types of weathered features, e.g. corestones, honeycomb rock surface - formation of deep weathered profile <p><u>Erosion</u>:</p> <ul style="list-style-type: none"> - heavy rainfall enhances rill erosion and sheet erosion <p><u>Mass wasting</u>:</p> <ul style="list-style-type: none"> - loose material slide downslope/ fall down - landslide/ mudflow produces bare scars on hillslopes - formation of scree slope <p><u>Landscape</u>:</p> <ul style="list-style-type: none"> - formation of tors - formation of gullies and badlands 	<ul style="list-style-type: none"> • Coherent and logical explanation of how external processes shape the slope landscape in Hong Kong • Extensive and accurate use of geographical terminology 	5 – 6
	<ul style="list-style-type: none"> • Appropriate explanation of how external processes shape the slope landscape in Hong Kong • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Brief and general explanation of how external processes shape the slope landscape in Hong Kong • Using everyday language 	1 – 2
		Max. 12

N.B. Markers are reminded to award appropriate marks to relevant and reasonable answers not included in this marking scheme.

Question 6

Describe the formation of the monsoon wind system. Explain the impact of monsoons and other weather systems on the precipitation characteristics in Hong Kong.

Description	6
Explanation	6

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
Describe the formation of monsoon wind system Major concepts: - different heating properties of land and sea - different pressure cells on land and sea - wind blows from high pressure area to low pressure area - seasonal reversal of air pressure and wind patterns	<ul style="list-style-type: none"> • Demonstrate sound and comprehensive knowledge of the formation of the monsoon wind system • Extensive and accurate use of geographical terminology 	5 – 6
	<ul style="list-style-type: none"> • Demonstrate adequate knowledge of the formation of the monsoon wind system • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Demonstrate brief understanding of the formation of the monsoon wind system • Using everyday language 	1 – 2
Explain the impact of monsoons and other weather systems on the precipitation characteristics in Hong Kong <u>Monsoons:</u> - causing a distinctive seasonal distribution of precipitation - summer monsoon blows from sea to land/ onshore wind/ brings abundant moisture/ more rain - winter monsoon blows from land to sea/ offshore wind/ reduces chances of precipitation/ less rain <u>Other weather systems:</u> - emphasise on occasional occurrence, but may affect amount of annual and seasonal rainfall - typhoons → bring abundant amount of rain water, frequency of typhoons arriving at Hong Kong directly affects the annual amount of precipitation - low pressure troughs → bring abundant rain water in the short-term/ causing rainstorms - cold fronts → bring showers in winter and autumn/ dry season	<ul style="list-style-type: none"> • Coherent and logical explanation on the impact of monsoons and other weather systems on the precipitation characteristics in Hong Kong • Extensive and accurate use of geographical terminology 	5 – 6
	<ul style="list-style-type: none"> • Appropriate explanation on the impact of monsoons and other weather systems on the precipitation characteristics in Hong Kong • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Brief and general explanation on the impact of monsoons and other weather systems on the precipitation characteristics in Hong Kong • Using everyday language 	1 – 2
		Max. 12

N.B. Markers are reminded to award appropriate marks to relevant and reasonable answers not included in this marking scheme.

Question 7

Explain the favourable conditions for Hong Kong to develop into a regional logistic hub. Comment on the impact of the Hong Kong-Zhuhai-Macao Bridge with reference to the long-term logistic development in Hong Kong.

Explanation	7
Comment	5

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
<p>Explain the favourable conditions for Hong Kong to develop into a regional logistic hub</p> <p><u>Internal conditions:</u> (4 marks)</p> <ul style="list-style-type: none"> - well developed and efficient intracity transport system - well developed IT and communication system: monitoring of goods movement - existing storage space: industrial buildings - government policy: e.g. free port - well developed infrastructure: e.g. container port and airport - well trained labour force and management staff <p><u>External conditions:</u> (3 marks)</p> <ul style="list-style-type: none"> - good connectivity with overseas - proximity to major export processing industrial regions: Zhujiang Delta - various transport network linkages with Zhujiang Delta: waterways, railways and roads 	<ul style="list-style-type: none"> • Demonstrate sound to comprehensive knowledge of the favourable conditions for logistic development in Hong Kong • Able to differentiate the internal and external favourable conditions • Able to explain how these conditions favour logistic development • Extensive and accurate use of <u>geographical terminology</u> 	5 – 7
	<ul style="list-style-type: none"> • Demonstrate adequate knowledge of the favourable conditions for logistics development in Hong Kong • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Demonstrate elementary to basic knowledge of the favourable conditions for logistic development in Hong Kong • Using everyday language 	1 – 2
<p>Comment on the impact of HK-Zhuhai-Macao Bridge with reference to the long-term logistic development in Hong Kong</p> <ul style="list-style-type: none"> - brief description of location of Hong Kong-Zhuhai-Macao Bridge - closer linkage & cooperation with industrial regions in western Zhujiang Delta/ Pan Zhujiang Delta - reducing time and transport cost - linking with Hong Kong airport: air transport of goods increases - greater competition between the logistic development of HK and the Zhujiang Delta region 	<ul style="list-style-type: none"> • Coherent, creative and logical comment on the impact of HK-Zhuhai-Macao Bridge with reference to the long-term logistic development in Hong Kong • Extensive and accurate use of <u>geographical terminology</u> 	5
	<ul style="list-style-type: none"> • Appropriate comment on the impact of HK-Zhuhai-Macao Bridge with reference to the long-term logistic development in Hong Kong • Accurate use of <u>geographical terminology</u> 	3 – 4
	<ul style="list-style-type: none"> • Brief and general comment on the impact of HK-Zhuhai-Macao Bridge with reference to the long-term logistic development in Hong Kong • Using everyday language 	1 – 2
		Max. 12

N.B. Markers are reminded to award appropriate marks to relevant and reasonable answers not included in this marking scheme.

Question 8

Describe the changes in farming characteristics of the Zhujiang Delta region in the past 30 years. Comment on the impact of technological development on the local farming production pattern.

Description	5
Comment	7

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
<p>Describe the changes in farming characteristics of the Zhujiang Delta region</p> <p><u>Farming land use:</u></p> <ul style="list-style-type: none"> - reduction in farmland - reduction in land use for traditional crops, e.g. wet paddy, sugar cane - increase in land use for market gardening, e.g. vegetables, fruit, flowers - change from staple crops to cash crops <p><u>Farming production pattern:</u></p> <ul style="list-style-type: none"> - commercialisation, specialisation, modernisation, intensification - some farms are run by joint Hong Kong-mainland China enterprises 	<ul style="list-style-type: none"> • Demonstrate sound to comprehensive knowledge of the changes in farming characteristics of the Zhujiang Delta region • Extensive and accurate use of geographical terminology 	5
	<ul style="list-style-type: none"> • Demonstrate adequate knowledge of the changes in farming characteristics of the Zhujiang Delta region • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Demonstrate elementary to basic knowledge of the changes in farming characteristics of the Zhujiang Delta region • Using everyday language 	1 – 2
	<p>Comment on the impact of technological development on local farming production pattern</p> <p><u>Farming production technology:</u></p> <ul style="list-style-type: none"> - improvement in species - farming chemistry, e.g. chemical fertilisers, pesticides - irrigation system - mechanisation - others: e.g. greenhouse, hydroponics, etc. <p><u>Transportation technology:</u></p> <ul style="list-style-type: none"> - transportation networks - export facilities, e.g. airports, container terminals - refrigerating facilities <p><u>Impact on farming production pattern:</u></p> <ul style="list-style-type: none"> - commercialisation - specialisation - modernisation - intensification 	<ul style="list-style-type: none"> • Able to explain how technological development influences the farming production pattern of the Zhujiang Delta region • Coherent, creative and logical comment on the importance of technological development to the farming production pattern of the Zhujiang Delta region • Extensive and accurate use of geographical terminology
	<ul style="list-style-type: none"> • Appropriate comment on the impact of technological development on the farming production pattern of the Zhujiang Delta region • Accurate use of geographical terminology 	3 – 5
	<ul style="list-style-type: none"> • Brief and general comment on the impact of technological development on farming production pattern • Using everyday language 	1 – 2
		Max. 12

N.B. Markers are reminded to award appropriate marks to relevant and reasonable answers not included in this marking scheme.