

Paper 2
Section D

Question 1

Marks

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|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| (a) (i) | <ul style="list-style-type: none"> - concentrated at two sides of the Victoria Harbour - scattered along the coast of the New Territories/ outlying islands - mostly at new towns - e.g. at northern part of Lantau Island/ at Chek Lap Kok Airport/ around Tolo Harbour/ other relevant examples | <p>1</p> <p>1</p> <p>1</p> <p>1 (2)</p> |
| (ii) | <p><u>Modification of natural coastal area:</u> (Max. 3)</p> <ul style="list-style-type: none"> - coastlines have been straightened/ shortened - harbour/ coastal inlets narrower - bays buried - islands disappear/ linked - increases coastal land area/ lengthens coastlines <p><u>Relevant examples:</u> (At least 1, max. 2)</p> <ul style="list-style-type: none"> - northern coast of Hong Kong Island/ southern side of Kowloon Peninsula - former Kai Tak Airport/ Tsing Yi - Victoria Harbour - Tolo Harbour - Stonecutters Island/ other relevant examples | <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1 (4)</p> |
| (b) (i) | <ul style="list-style-type: none"> - A: public fill/ construction waste - B: marine fill/ marine sand | <p>1</p> <p>1 (2)</p> |
| (ii) | <ul style="list-style-type: none"> - <u>marine fill</u> from dredging of marine sand from seabed - increasing suspended sediment content/ lowering the visibility of seawater - reducing the ability of sea animals to find food - removing contaminated mud deposits - increasing seawater pollution - e.g. heavy metals - brings hazard to marine ecosystem/ habitat/ food web - <u>public fill</u> comes from construction/ demolition waste - reused for reclamation - helps conserve natural resources | <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1 (5)</p> |
| (Max. 2 marks for public fill only) | | |
| (c) | <ul style="list-style-type: none"> - granite - harder/ stronger rock - well-jointed rock - easy to excavate - pervious/ permeable rock - less resistant to denudation/ weathering - near major fault line - risk of rock displacement/ movement - supporting structure/ strengthening structure needed | <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1 (5)</p> |

Max. 18

Question 2

Marks

(a)	Comparison of data		Description	
	Qingdao	Hong Kong		
Temperature	- 6°C	- 22°C	- Qingdao has lower temperature/ Hong Kong has higher temperature	1,1
Pressure	- 1 025 hPa	- 1 016 hPa	- Qingdao has higher pressure/ Hong Kong has lower pressure	1,1
Wind direction	- NNE/ N	- ENE/ NE	- northerly wind at Qingdao/ easterly wind at Hong Kong	1,1
Wind speed	- 10 m/s (36 km/h)	- 2.5 m/s (9 km/h)	- Qingdao has higher wind speed/ Hong Kong has lower wind speed	1,1 (4)

- (b) (i)
- winter 1
 - Qingdao located at higher latitude/ Hong Kong located at lower latitude 1
 - Qingdao has a smaller angle of insolation (larger angle of incidence)/ Hong Kong has a larger angle of insolation (smaller angle of incidence) 1
 - sun's ray travels through a thicker layer of atmosphere at Qingdao/ sun's ray travels through a thinner layer of atmosphere at Hong Kong 1
 - insolation spreads over a larger area at Qingdao/ insolation concentrates on a smaller area at Hong Kong 1
 - weaker insolation at Qingdao/ stronger insolation at Hong Kong 1
 - shorter sunshine duration at Qingdao/ longer sunshine duration at Hong Kong 1
 - cold front has passed Qingdao/ cold front has not arrived at Hong Kong 1
 - Qingdao affected by cold air mass/ Hong Kong affected by warm air mass 1 (5)
- (ii)
- isobars around Qingdao are closer/ isobars around Hong Kong are wider apart 1
 - great pressure difference in a small area around Qingdao/ small pressure difference in a small area around Hong Kong 1
 - steep pressure gradient at Qingdao/ gentle pressure gradient at Hong Kong 1 (2)
- (c) (i)
- duration of sunshine decreases and then increases 1 (1)
 - warm air meets cold air 1
 - uplifting of warm air 1
 - air saturated/ condensation 1
 - towering clouds/ overcast sky/ frontal rain 1
 - cold air prevails 1
 - clear sky 1 (3)
- (ii)
- water holding capacity reduces with decreasing air temperature 1
 - wind comes from the interior 1
 - high pressure/ anticyclone 1
 - sinking air 1
 - lower evapotranspiration from land 1
 - low actual amount of water vapour/ lack of moisture/ dry air 1 (3)

Max. 18

Question 3	Marks
(a) (i) traffic congestion	1 (1)
(ii) <u>Causes of transport problem:</u>	
- traffic bottleneck/ inappropriate transport planning	1
- inadequate roads	1
- frequent commuting journey/ large amount of commuters	1
- high concentration of traffic flow in the peak hours	1
- over-reliance of road transport/ no rail service	1
- private cars causing congestion	1 (4)
<u>Map and photograph evidence:</u>	
- meeting of Route 1 with Cross Harbour Tunnel/ with major E-W road	1
- Route 1 is the major road linking southern part of Hong Kong Island with the northern part/ few alternate routes	1
- large amount of residential areas in Southern District	1
- traffic congestion occurs in the peak hours	1
- no MTR service in the southern part of Hong Kong Island	1
- middle income private housing	1 (2)
(b) (i) - provide alternate transport mode	1
- more efficient/ large capacity transport system/ mass transit	1
- linking existing MTR lines	1
- linking CBD	1
- reducing the use of private cars/ buses	1
- reducing the traffic flow	1
- mitigating the bottleneck problem	1 (4)
(ii) - construction of two MTR lines	1
- more land acquired	1
- temporary traffic diversion	1
- reducing the width of road	1
- more construction vehicles	1
- increasing the occurrence of traffic accident	1
- reduction of parking space	1 (3)
(c) - suburban location of site X	1
- interchange station at site X	1
- can encourage more commuters to use the MTR	1
- location of site Y in CBD	1
- keen land use competition at site Y/ less keen land use competition at site X	1
- higher land rent at site Y/ lower land rent at site X	1
- limited area at site Y for park and ride facilities/ more spacious area at site X for park and ride facilities	1
- park and ride facilities at site Y bring extra traffic flow to the city centre	1 (4)

Max. 18

Question 4**Marks**

- (a) (i) Locational advantages:
- highly accessible location 1
 - convenient for import/ export activities 1
 - neighbouring with major cities 1
 - served as local markets 1
 - labour sources 1
 - can obtain financial/ professional services easily 1
- Map evidence:
- well-connected transportation networks 1
 - served by railways/ ports/ airports 1
 - examples of major cities: Foshan/ Dongguan etc. 1
 - near to Hong Kong/ Macau 1 (4)
- (Max. 3 marks if **no map evidence** are given)
- (ii) - labour shortage/ rising labour cost 1
- minimum wages 1
 - discouraging low value-added industries/ encouraging high value-added industries 1
 - severe environmental problems 1
 - government wants to improve the environmental conditions 1
 - polluting industries relocated/ encouraging green industries 1
 - keen land use competition/ rising land rent 1
 - discouraging space-demanding industries 1 (5)
- (b) - well-planned land use pattern 1
- wide roads 1
 - spacious/ pleasant environment/ green areas 1
 - nice-designed buildings 1
 - attracting skilled/ technical personnel 1
 - favourable for research and development 1 (4)
- (c) (i) - draining away of capital 1
- job loses 1
 - unemployment of the unskilled labour 1
 - social unrest 1
- (ii) - higher productivity/ higher value-added production 1
- higher income/ higher living standard 1
 - pleasant living environment 1
 - better city image/ prestige 1
 - attracting investment 1
 - attracting well-educated personnel 1
 - diversified society 1 (5)
- (Max. 4 marks for (c) (ii))

Max. 18

Section E

Question 5

Explain how igneous and sedimentary rocks may change from one to another in the rock cycle. Discuss the relative importance of these two types of rocks in shaping the landforms of Hong Kong.

Explanation	6
Discussion	6

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
<p>Explain how igneous and sedimentary rocks may change from one to another in the rock cycle</p> <ul style="list-style-type: none"> - exposure of igneous rocks in atmosphere - weathering and erosion break down the igneous rocks that are <u>transported</u> and deposited as sediments - sediments are buried, compacted and cemented to form sedimentary rocks - sinking of rocks at subduction zone - intense pressure and heat underground melt the rocks into magma - magma rises, <u>cools off</u> and becomes solid, igneous rocks 	<ul style="list-style-type: none"> • Demonstrate comprehensive knowledge of the processes which may change igneous and sedimentary rocks from one to another • Extensive and accurate use of geographical terminology 	6
	<ul style="list-style-type: none"> • Demonstrate adequate knowledge of the processes which may change igneous and sedimentary rocks from one to another • Accurate use of geographical terminology 	3 – 5
	<ul style="list-style-type: none"> • Demonstrate elementary knowledge of the processes which may change igneous and sedimentary rocks from one to another • Using everyday language 	1 – 2
<p>Discuss the relative importance of igneous and sedimentary rocks in shaping the landforms of HK</p> <ul style="list-style-type: none"> - igneous rock is the most important rock type in Hong Kong <ul style="list-style-type: none"> • volcanic rocks are more resistant, they form the highest summits; rugged, angular topography • intrusive igneous rocks (mainly granite) are less resistant, form lower hills; they give rise to a lower, more rounded topography with weathering profile and tors - sedimentary rocks are important in shaping the landforms of northeastern part of the New Territories <ul style="list-style-type: none"> • more resistant one forms higher ground, e.g. Pat Sin Leng • less resistant one forms low-lying layered structure, e.g. Ping Chau 	<ul style="list-style-type: none"> • Coherent and logical discussion of the relative importance of igneous and sedimentary rocks in shaping the landforms of Hong Kong • Extensive and accurate use of geographical terminology 	6
	<ul style="list-style-type: none"> • Appropriate discussion of the relative importance of igneous and sedimentary rocks in shaping the landforms of Hong Kong • Accurate use of geographical terminology 	3 – 5
	<ul style="list-style-type: none"> • Brief and general discussion of the relative importance of igneous and sedimentary rocks in shaping the landforms of 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

Explain how climatic factors lead to the formation of sandstorms in North China. Discuss the role of human activities in influencing the intensity of sandstorms in North China.

Explanation	6
Discussion	6

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
<p>Explain how climatic factors lead to the formation of sandstorms in North China</p> <ul style="list-style-type: none"> - semi-arid climate in North China: <ul style="list-style-type: none"> • low annual precipitation • seasonal rainfall • high temperature in summer • high evaporation rate in summer • low relative humidity • strong wind in spring - dry climate results in low density of vegetation - loose soil 	<ul style="list-style-type: none"> • Demonstrate comprehensive knowledge of the climatic factors leading to the formation of sandstorms in North China • Extensive and accurate use of geographical terminology 	6
	<ul style="list-style-type: none"> • Demonstrate adequate knowledge of the climatic factors leading to the formation of sandstorms in North China • Accurate use of geographical terminology 	3 – 5
	<ul style="list-style-type: none"> • Demonstrate elementary knowledge of the climatic factors leading to the formation of sandstorms in North China • Using everyday language 	1 – 2
<p>Discuss the role of human activities in influencing the intensity of sandstorms</p> <p><u>Activities reducing the intensity of sandstorms:</u></p> <ul style="list-style-type: none"> - afforestation - sand dune fixation - water conservation measures <p><u>Activities increasing the intensity of sandstorms:</u></p> <ul style="list-style-type: none"> - over-cultivation - overgrazing - firewood collection - deforestation - excessive use of water resources 	<ul style="list-style-type: none"> • Extensive discussion on the role of various human activities in influencing the intensity of sandstorms in North China • Extensive and accurate use of geographical terminology 	6
	<ul style="list-style-type: none"> • General discussion on the role of a number of human activities in influencing the intensity of sandstorms in North China • Accurate use of geographical terminology 	3 – 5
	<ul style="list-style-type: none"> • Brief discussion on the role of few human activities in influencing the intensity of sandstorms in North China • 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

Describe the recent problems faced by Hong Kong’s logistics industry. Discuss the effectiveness of developing high value-added logistics services in overcoming these problems.

Description	7
Discussion	5

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
Describe the recent problems faced by Hong Kong’s logistics industry - rising cost (e.g. wages, rent, transport cost, etc.) - lack of land resources - keen competition from ZDR ports - improvement of infrastructure and efficiency of ZDR ports - relocation of industries in ZDR - global economic recession	<ul style="list-style-type: none"> Coherent and logical description on the recent problems faced by Hong Kong’s logistics industry Extensive and accurate use of geographical terminology 	7
	<ul style="list-style-type: none"> Appropriate description on the recent problems faced by Hong Kong’s logistics industry Accurate use of geographical terminology 	4 – 6
	<ul style="list-style-type: none"> Brief and general description on the recent problems faced by Hong Kong’s logistics industry Using everyday language 	1 – 3
Discuss the effectiveness of developing high value-added logistics services in overcoming the problems - high value-added logistics services include: <ul style="list-style-type: none"> advanced information and communication technology in the management of logistics flow, air transport service, etc. <u>Effective in overcoming the problems:</u> - Hong Kong possesses favourable conditions in developing high value-added logistics services (e.g. capital, technological level and skilled labour, international airport, etc.) - helps to reduce direct competition between ZDR and Hong Kong <u>Ineffective in overcoming the problems:</u> - rapid development of relevant services in ZDR - high production cost in Hong Kong reduces its competitiveness of relevant services - unable to overcome the physical constraints of Hong Kong to expand port facilities, economic recession, etc.	<ul style="list-style-type: none"> Coherent and logical discussion on the effectiveness of developing high value-added logistics services in overcoming the problems Extensive and accurate use of geographical terminology 	5
	<ul style="list-style-type: none"> Appropriate discussion on the effectiveness of developing high value-added logistics services in overcoming the problems Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> Brief and general discussion on the effectiveness of developing high value-added logistics services in overcoming the problems 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

Account for the cross-border air pollution problem in the Zhujiang Delta Region. Explain how the Guangdong Province and the Hong Kong Special Administrative Region can cooperate to alleviate the problem.

Description & explanation	7
Explanation	5

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
Describe and explain the cross-border air pollution problem in the Zhujiang Delta Region - major source of air pollutants from the burning of fossil fuel: power generation, industries and vehicles - low quality fuel used in Guangdong - rising living standard increases demand on energy consumption in Guangdong - higher consumption of energy per capita in Hong Kong - suspended particulates, SO ₂ and NO ₂ form smog and acid rain - seasonal change of wind direction causes pollutants to spread across the border	<ul style="list-style-type: none"> • Demonstrate comprehensive knowledge of the cross-border air pollution problem in ZDR • Extensive and accurate use of geographical terminology 	7
	<ul style="list-style-type: none"> • Demonstrate adequate knowledge of the cross-border air pollution problem in ZDR • Accurate use of geographical terminology 	4 – 6
	<ul style="list-style-type: none"> • Demonstrate elementary knowledge of the cross-border air pollution problem in ZDR • Using everyday language 	1 – 3
Explain how Guangdong Province and HKSAR can cooperate to alleviate the problem - a cross-border issue that needs cooperation between the two places - through the promotion of <u>local measures</u> , such as: <ul style="list-style-type: none"> • tightening of emission standards • introduction of cleaner fuel • promoting green production technologies • saving energy, etc. - regional <u>cooperation measures</u> , such as: <ul style="list-style-type: none"> • Regional Air Quality Monitoring Network • Emission Trading • setting targets for emission, etc. 	<ul style="list-style-type: none"> • Coherent and logical explanation of the importance of cooperation between Guangdong Province and HKSAR • Appropriate explanation of the measures that can alleviate the environmental impact • Extensive and accurate use of geographical terminology 	5
	<ul style="list-style-type: none"> • Appropriate explanation of the importance of cooperation between Guangdong Province and HKSAR • General explanation of the measures that can alleviate the environmental impact • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Brief and general explanation of the importance of cooperation between Guangdong Province and HKSAR • Brief explanation of the measures that can alleviate the environmental impact • 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.