

Marking Scheme

Paper 1 Section A

Question No.	Key	Question No.	Key
1.	D (38%)	21.	C (46%)
2.	B (32%)	22.	A (67%)
3.	B (43%)	23.	B (89%)
4.	A (54%)	24.	B (58%)
5.	C (31%)	25.	A (89%)
6.	B (74%)	26.	A (65%)
7.	D (67%)	27.	B (92%)
8.	D (43%)	28.	D (62%)
9.	C (56%)	29.	A (19%)
10.	B (51%)	30.	A (73%)
11.	C (60%)	31.	B (45%)
12.	B (55%)	32.	C (51%)
13.	D (65%)	33.	D (83%)
14.	D (70%)	34.	C (73%)
15.	A (68%)	35.	C (85%)
16.	D (76%)	36.	A (87%)
17.	C (64%)	37.	A (35%)
18.	D (41%)	38.	C (74%)
19.	D (77%)	39.	B (52%)
20.	A (70%)	40.	C (40%)

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

This document was prepared for markers' reference. It should not be regarded as a set of model answers. Candidates and teachers who were not involved in the marking process are advised to interpret its contents with care.

Section B

Question 1	Marks
(a) (i) earthquake	1 (1)
(ii)	
- at conservative plate boundary	1
- plates moved by convection currents	1
- North American plate and Caribbean plate <u>slide laterally</u>	1
- large friction/ great pressure exerts on the rock	1
- stress accumulates within the rock	1
- when stress exceeds the limit of the rock/ rock fractures	1
- to release energy	1
- seismic waves/ shock waves are released	1 (5)
(b) (i)	
- high magnitude of earthquake	1
- shallow-focus earthquake/ earthquake is closer to the surface	1
- epicentre closed to city/ Port-au-Prince	1
- building materials are weak/ lack of earthquake-proof design	1
- lack of effective warning system	1
- low GDP/ poverty/ lack of capital/ lack of rescue measures	1
- low literacy rate/ low education level/ lack of earthquake drill	1 (4)
(ii)	
- stronger building materials/ buildings with earthquake-proof design	1
- effective warning system	1
- earthquake monitoring system	1
- effective communication system	1
- establish well-equipped rescue teams	1 (4)
(c)	
- unstable political environment/ inefficient reconstruction work by government	1
- large number of casualties/ lack of manpower to reconstruct the city	1
- buildings damaged seriously	1
- low GDP/ lack of capital	1
- lack of technology	1
- destruction of infrastructure	1 (4)

Max. 18

Question 2

Marks

- (a) (i) - Site A: vacant land 1
 - Site B: temporary structures/ cottages 1 (2)

- (ii) urban sprawl/ urban encroachment 1 (1)

(iii)

Explanation	Map evidence	
- next to/ proximity to new town/ close to industrial area	- Tin Shui Wai/ Yuen Long/ Yuen Long Industrial Estate	1+1
- high accessibility/ convenient transport	- roads linking with Tin Shui Wai/ Yuen Long	1+1
- cross boundary linkage with Shenzhen	- Kong Sham Western Highway/ Shenzhen Bay Bridge	1+1
- ample space for development	- vacant land next to the roads	1+1
- lower land rent of farmland	- scattered farmland next to some villages	1+1

(6)

- (iv) Land use problems:
 - unplanned housing development/ scattered container yards blended with rural villages/ land use conflict/ loss of original rural culture 1
 - visual pollution/ loss of natural scenery/ damaging ecology 1
 - drainage problems/ increasing risk of flooding during heavy rain 1

- Transport problems:
 - increase in road traffic flow/ congestion/ noise/ air pollution 1
 - heavy vehicles using narrow roads/ concerns of road safety 1

- Economic problems:
 - increasing land rent 1
 - farming land use replaced by industrial/ storage uses 1
 - abandoned farmland increases/ reducing farm outputs (Any four) 1 (4)

- (b) (i) Location:
 - proximity to Zhujiang Delta/ Shenzhen 1
 - favourable to develop port back up services/ logistics/ industrial areas 1
 - proximity to new towns/ Tin Shui Wai/ Yuen Long 1
 - job opportunities for residents 1
 - need rezoning/ relocating container storage yards or industrial areas 1

- Site:
 - flat land favours logistic development 1
 - preservation of declared monuments/ Yeung Hau Temple/ Tang Ancestral Hall 1
 - housing for the rural residents/ preservation of some rural settlements 1
 - conserving hills at grid squares 0685 and 0686 as green area/ park 1 (3)
 (Max. 2 marks for either “location” or “site” only)

- (ii) Existing infrastructure:
 - more use of West Rail/ commuting by West Rail to reduce use of vehicles/ increase accessibility 1
 - planting trees/ buffer zones/ noise shields along Kong Sham Western Highway, Castle Peak Road, Yuen Long Highway and West Rail 1
 - reduce traffic noise/ air pollution 1
 - sewage treatment plant at grid reference 069855 to treat urban sewage/ prevent river/ coastal water pollution 1
 - cross-border transport network favours economic development 1 (2)

Max. 18

Question 3

Marks

- (a) (i) - X : 9.0 1
 - Y : -41.7 1 (2)

- (ii) Description:
 - decrease in cereal production in both countries 1
 - greater decrease of cereal production in Somalia 1 (1)

- Explanation:
 - drought/ decrease in rainfall 1
 - Somalia faces a more severe drought problem/ more areas with rainfall amount $\geq 30\%$ below average 1 (1)

- (iii) - Somalia 1 (1)

Explanation	Evidence	
- more severe crop failure/ greater percentage decrease in cereal production	- production in 2011 was 41.7% less than that in 2010	1+1
- greater percentage of population in need of food relief	- one-third of the total population in need of food relief	1+1

(2)

- (b) - Somalia is poorer/ lower GDP per capita 1
 - primary production is the main source of income/ lower level in industrialisation 1
 - low farming income/ income from primary production 1
 - less able to afford modern farming technology 1
 - lacks money to buy imported food 1
 - people are poorly-educated/ lower literacy rate 1
 - lacks the knowledge to apply modern farming technology/ adopts traditional farming methods 1 (5)

- (c) (i) - increase short-term water supply 1
 - irrigation scheme might not function well because of inadequate annual rainfall/ inadequate water supply 1
 - less developed country lacks capital to afford such farming technique 1
 - local farmers lack adequate knowledge to apply the technique 1
 - misuse of technique might reduce the long-term agricultural productivity/ soil salinization 1 (3)

- (ii) - water and soil conservation 1
 - ensure sustainable agricultural development 1
 - cause less disturbance to the fragile environment 1
 - could not solve climatic constraints/ insufficient water for irrigation 1 (3)

Max. 18

Question 4

Marks

- (a) (i) Increase in CO₂:
- increase in land exploitation/ lumbering 1
 - increase in amount of electricity consumption for industrial/ domestic use 1
 - increase in use of fossil fuels for transport/ industrial activities 1 (2)
- Increase in N₂O:
- increase in transportation/ increase in use of fossil fuels 1
 - increase in use of chemical fertilisers 1
 - increase in industrial production/ e.g. production of nylon/ synthetic fibres/ polyfoam 1 (2)
- (ii)
- positive relationship 1
 - concentrations of CO₂/ N₂O/ greenhouse gases increase, surface temperature increases 1
 - intensify the greenhouse effect 1
 - the earth radiation/ long-wave radiation 1
 - absorbed by greenhouse gases/ reflected to the ground 1
 - accumulation of heat energy 1 (4)
- (b) (i) Emission scenario X:
- higher temperature increase/ rate of global warming increases 1
 - abundant use of fossil fuels/ high emission amount of greenhouse gases 1 (2)
- OR**
- Emission scenario Y:
- lower temperature increase/ rate of global warming slows down 1
 - use of alternate energy/ lower emission amount of greenhouse gases 1 (2)
- (ii)
- inter-governmental agreement on standard of emission amount 1
 - establishment of monitoring network among governments 1
 - provision of technological platform 1
 - international cooperation/ e.g. carbon emission trading/ renewable energy 1
 - improving citizens' awareness on global warming in different countries/ environmental education 1
 - more developed countries help less developed countries to conserve rainforests 1 (4)
- (iii)
- level of economic development: description + appropriate explanation 1+1
 - political consideration: description + appropriate explanation 1+1
 - economic interest: description + appropriate explanation 1+1
 - technological level: description + appropriate explanation 1+1
- (4)

Max. 18

Section C

Question 5

Account for the physical factors leading to the occurrence of floods in the lower course of a river. Discuss the effectiveness of dam construction in preventing floods.

Description & explanation	6
Discussion	6

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
Describe and explain the physical factors leading to occurrence of floods - characteristics of lower course of river - massive load - sudden increase in the volume of flow <ul style="list-style-type: none"> • early summer monsoon, El Nino • volume of flow exceeds river capacity → flood occurs 	<ul style="list-style-type: none"> • Demonstrate comprehensive knowledge of the physical factors leading to the occurrence of floods • Extensive and accurate use of geographical terminology 	5 – 6
	<ul style="list-style-type: none"> • Demonstrate adequate knowledge of the physical factors leading to the occurrence of floods • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Demonstrate elementary or inaccurate knowledge of the physical factors leading to the occurrence of floods • Using everyday language 	1 – 2
Discuss the effectiveness of dam construction in preventing floods - storage of flood water - regulate the flow of water - silt storage - conditions reducing the effectiveness: <ul style="list-style-type: none"> • extreme heavy rainfall • deforestation causes silting • lowers the storage capacity • earthquakes cause collapsing of dam • lack of maintenance - other effective methods: soil conservation, etc.	<ul style="list-style-type: none"> • Coherent and logical discussion of the effectiveness of dam construction in preventing floods • Appropriate discussion of other effective methods in preventing floods • Extensive and accurate use of geographical terminology 	6
	<ul style="list-style-type: none"> • Appropriate discussion of the effectiveness of dam construction in preventing floods • Accurate use of geographical terminology 	3 – 5
	<ul style="list-style-type: none"> • Brief and general discussion of the effectiveness of dam construction in preventing floods • 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 mode of production and locational distribution of the IT industry. How does globalisation lead to the occurrence of this mode of production?

Description	6
Explanation	6

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
<p>Describe the mode of production and locational distribution of IT industry</p> <p><u>Mode of production:</u></p> <ul style="list-style-type: none"> - multi-point production - transnational production <p><u>Locational distribution:</u></p> <ul style="list-style-type: none"> - executive, management, design and R & D departments mostly located in large cities or suburban areas of MDCs - production, assembling and packaging departments mostly located in LDCs 	<ul style="list-style-type: none"> • Demonstrate sound and comprehensive knowledge of the mode of production and locational distribution of IT industry • Extensive and accurate use of geographical terminology 	5 – 6
	<ul style="list-style-type: none"> • Demonstrate adequate knowledge of the mode of production and locational distribution of IT industry • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Demonstrate brief understanding of the mode of production and locational distribution of IT industry • Using everyday language 	1 – 2
<p>Explain how globalisation lead to the occurrence of this mode of production</p> <ul style="list-style-type: none"> - development in transportation and communication technologies - IT industry – footloose industry <p><u>Comparative advantages:</u></p> <ul style="list-style-type: none"> - location of headquarters and R & D department: MDCs - reasons: <ul style="list-style-type: none"> • concentration of experts • good infrastructure • high technological level • pleasant environment attracts experts of technology - production plants: LDCs - reasons: <ul style="list-style-type: none"> • favourable government policy • cheap labour • low land rent • other incentives: e.g. low tax rates, more lenient environmental regulations, etc. 	<ul style="list-style-type: none"> • Capable of explaining how globalisation influences the multi-point and transnational production of IT industry • Coherent, creative and logical discussion on the importance of globalisation to the change of location of IT industry • Extensive and accurate use of geographical terminology 	5 – 6
	<ul style="list-style-type: none"> • Appropriate explanation on how globalisation influences the multi-point and transnational production of IT industry • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Brief and general explanation on how globalisation influences the mode of production of IT industry • 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

Why are tropical rainforests in the world vanishing at an increasing rate in recent years? Discuss the effectiveness of the establishment of national parks in conserving the tropical rainforests.

Explanation	5
Discussion	7

Suggested Answers	Generic Marking Guidelines	
	Performance of Candidates	Marks
Explain the causes for the vanishing of tropical rainforests - economic development - agricultural development - population increase - urban development - technological development	<ul style="list-style-type: none"> • Coherent and logical explanation on the causes for the tropical rainforests in the world to vanish at an increasing rate in recent years • Extensive and accurate use of geographical terminology 	5
	<ul style="list-style-type: none"> • Appropriate explanation on the causes for the tropical rainforests in the world to vanish at an increasing rate in recent years • Accurate use of geographical terminology 	3 – 4
	<ul style="list-style-type: none"> • Brief and general explanation on the causes for the tropical rainforests in the world to vanish at an increasing rate in recent years • Using everyday language 	1 – 2
Discuss the effectiveness of the establishment of national parks in conserving the tropical rainforests - <u>Supporting points</u> : <ul style="list-style-type: none"> • align with the principles of sustainable development • protected by laws and regulations • easier to manage/ monitor • may have the assistance in management by professional organisations from overseas • local people may help to conserve the forest, e.g. act as tourist guides - <u>Limitations</u> : <ul style="list-style-type: none"> • insufficient capital for tropical rainforest countries to maintain the management of national parks • may have corruption • extensive area/ inconvenient transport, difficulty in law enforcement/ smuggling activities of local residents • hill fires due to careless burning - Discussion of other effective measures	<ul style="list-style-type: none"> • Coherent and logical discussion of the effectiveness of the establishment of national parks in conserving the tropical rainforests with sufficient supporting points and its limitations • Appropriate discussion of other effective measures • Extensive and accurate use of geographical terminology 	6 – 7
	<ul style="list-style-type: none"> • Appropriate discussion of the effectiveness of the establishment of national parks in conserving the tropical rainforests with reasonable supporting points • Accurate use of geographical terminology 	3 – 5
	<ul style="list-style-type: none"> • Brief and general discussion of the effectiveness of the establishment of national parks in conserving the tropical rainforests • 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.