

Marking Schemes

Paper 1 Section A

Question No.	Key	Question No.	Key
1.	B (64%)	21.	D (74%)
2.	A (82%)	22.	A (66%)
3.	B (39%)	23.	B (73%)
4.	C (35%)	24.	A (92%)
5.	C (61%)	25.	B (98%)
6.	D (54%)	26.	D (78%)
7.	C (71%)	27.	D (77%)
8.	A (72%)	28.	B (77%)
9.	B (35%)	29.	D (78%)
10.	D (84%)	30.	C (86%)
11.	B (73%)	31.	C (58%)
12.	D (33%)	32.	A (67%)
13.	D (64%)	33.	A (70%)
14.	C (74%)	34.	B (89%)
15.	C (44%)	35.	D (83%)
16.	B (81%)	36.	A (77%)
17.	A (74%)	37.	D (46%)
18.	A (77%)	38.	C (86%)
19.	C (39%)	39.	C (36%)
20.	B (79%)	40.	A (46%)

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 are not involved in the marking process are advised to interpret its content with care.

Section B

Question 1

Marks

- (a) (i) delta/ mud-flat 1 (1)
- (ii) - gentle gradient 1
 - in sheltered region/ bay/ shallow 1
 - the river carries large amount of/ sufficient load 1
 - weak tides/ waves/ currents 1
 - the velocity of the river slows down (when it enters the sea)/ flocculation 1
 - presence/ growth of vegetation/ mangrove 1
 - the rate of deposition is faster than the rate of erosion/ removal 1 (4)

(iii)

	B	Map evidence		C	Map evidence	
<i>Location</i>	- lower course	- widely-spaced contour lines - near river mouth - less than 20 m	OR	- upper course	- closely-spaced contour lines - near river source - above 300 m	1+1
<i>Altitude</i>	- lower	- less than 20 m		- higher	- above 300 m	1+1
<i>Gradient</i>	- gentler	- widely-spaced contour lines		- steeper	- closely-spaced contour lines	1+1
<i>Discharge/ Volume</i>	- larger	- more tributaries joining the stream		- smaller	- no tributaries	1+1
<i>Order of stream</i>	- higher/ 3rd order	- more tributaries joining the stream		- lower/ 1st order	- no tributaries	1+1 (5)

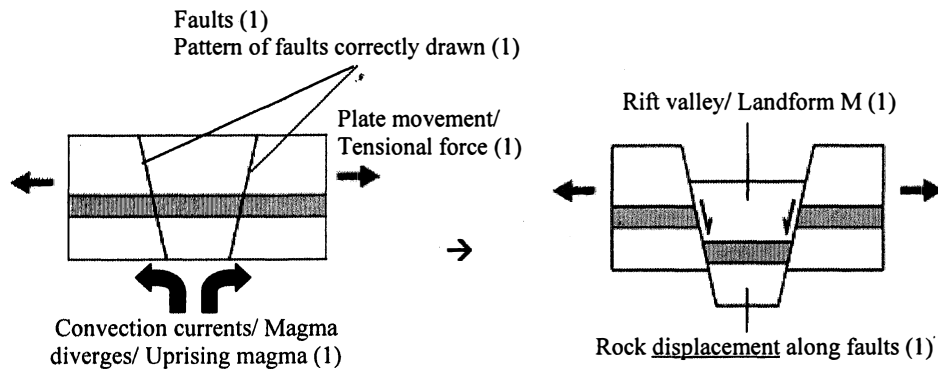
- (b) (i)
- | Favourable factors | Map evidence | |
|--|---|---------|
| - lowland/ gentle relief | - less than 20 m/ widely-spaced contour lines | 1+1 |
| - <u>water</u> for irrigation/ fertile soil | - <u>rivers</u> nearby | 1+1 |
| - easy transport to market/ high accessibility | - near <u>Nim Wan Road</u> | 1+1 |
| - with electricity supply | - <u>power line</u> found | 1+1 (4) |
- (ii) - leakage from landfill 1
 - may pollute river/ coastal environment/ air pollution/ visual pollution 1
 - reclaimed land from sea 1
 - straightening of the coastline 1
 - channelisation of river/ artificial channel 1
 - may change channel morphology/ channel straightened/ widened 1
 - area of mud-flat/ vegetation reduced/ destroy habitat/ lower biodiversity 1 (4)

Max. 18

Question 2

Marks

- (a) (i) rift valley/ graben 1 (1)
- (ii) - annotations 3
 - correctly drawn diagrams 1 (4)



- (iii) - plates move apart/ constructive plate margin 1
 - fault/ cracks/ lines of weakness formed 1
 - extended into magma chamber/ release of pressure 1
 - magma rises along the cracks 1
 - lava is ejected to the earth surface/ repeated eruptions 1
 - lava cools and solidifies 1 (4)

- (b) (i) Opportunities: (At least 2, max. 3)
- development of tourism industry/ attract tourists 1
 - spectacular scenes of volcanic features (any one example, e.g. crater/ hot spring) 1
 - development of geothermal power 1
 - fertile soil 1
 - mineral reserves 1

- Risks: (At least 2, max. 3)
- destruction of the airport/ city P/ city/ settlements where lava flows along 1
 - casualties/ hinder economic development 1
 - emission of volcanic ash/ poisonous gas 1
 - visibility lowered/ disruption to traffic/ air pollution/ acid rain 1
 - lava/ ash washed into the lake polluting the drinking water 1 (5)

- (ii) Effective: (At least 1, max. 2)
- can direct lava flow away from densely populated areas 1
 - can reduce the number of deaths/ damages 1

- Ineffective: (At least 2, max. 3)
- exact location of volcanic eruptions unknown 1
 - lava flow may not follow the channel 1
 - volume of lava flow exceeds channel capacity 1
 - limited coverage of diversion channels 1
 - lack of maintenance 1 (4)

Max. 18

Question 3**Marks**

- (a) Nature of product:
- high-tech/ high value-added/ small/ light/ many components/ short life cycle 1 (1)
- Production mode:
- multi-point location/ transnational/ multi-national corporation 1
 - assembling/ standardised production processes in LDCs 1
 - labour-intensive/ low labour cost/ land price/ production cost 1
 - R & D/ production of hi-tech components in MDCs/ capital-intensive 1
 - concentration of research institutes/ availability of skilled labour 1 (3)
- (b)
- inland shift 1
 - lower labour cost/ electricity tariff/ land price 1
 - more tax incentive/ government support 1
 - lower production cost 1 (2)
- (c) (i) Positive impact: (At least 2, max. 3)
- more land released 1
 - favours economic restructuring/ development of high-tech industries 1
 - favours development of local enterprises 1
 - lowers pollution level/ improves quality of life/ better land use planning 1
- Negative impact: (At least 2, max. 3)
- decrease in GDP/ reduction in value-added industrial output/ economic recession 1
 - loss of foreign direct investment/ decrease in export value 1
 - less tax revenue for government/ unfavours development of infrastructure 1
 - closing down of factories/ unemployment 1
 - may lead to social problems/ social unrest 1 (5)
- (ii)
- avoids over-reliance on Asia 1
 - easier to control intellectual property right/ reduces the loss of skills 1
 - more local investment 1
 - creates job opportunities/ lowers unemployment rate 1
 - fosters economic development/ increases government tax revenue/ improves infrastructure/ increases GDP 1
 - improves social stability 1 (4)
- (iii) Feasible:
- labour with high productivity 1
 - high automation level 1
 - political stability in the US 1
 - favourable government policies 1
 - e.g. tax incentive/ technical/ financial support 1
- Not feasible:
- high relocation cost 1
 - increase in production cost/ expenses on environmental conservation 1
 - stronger trade/ labour unions in the US 1
 - less flexible in manpower management/ stricter labour regulations 1
 - lower competitiveness in overseas market/ unfavourable for the expansion in the overseas market 1 (3)

Max. 18

Question 4	Marks
(a) (i) - decreased by	1
- 9.62%	1 (2)
(ii) - rainforest was cleared/ deforestation	1
- number of cattle/ soybean production/ sugar cane production <u>increased</u>	1
- commercial farming/ biofuel/ plantation/ cash crops/ cattle ranching	1
- construction of roads	1
- <u>more</u> land demand	1 (3)
(b) (i) - deforestation led to the reduction in <u>vegetation cover</u> / area	1
- (storage of nutrient in) biomass decreased	1
- less nutrient transferred from fallen leaves to litter/ (nutrient storage in) litter decreased	1
- nutrient transferred from litter to soil decreased/ nutrient (storage) in soil decreased/ soil fertility decreased/ lower decomposition rate	1
- <u>more loss</u> of nutrient by <u>surface runoff</u>	1
- <u>less</u> vegetation took the nutrient <u>from soil</u>	1
- <u>more loss</u> of nutrient from soil through <u>leaching</u>	1 (5)
(ii) - lowers species diversity/ replaced by cash crops/ smaller gene pool	1
- simplifies the food web/ trophic levels reduced/ destroys food chain/ reduces food supply	1
- loss of habitat/ lower ecosystem stability/ loses ecological balance	1
- change in microclimate/ e.g. larger diurnal range of temperature	1
- change in water cycle/ e.g. decrease in interception	1
- energy flows out from the rainforest ecosystem	1
- adding of (artificial) fertilisers/ artificial energy	1 (5)
(c) <u>Effective:</u>	
- provides financial resources to manage the rainforest	1
- expansion of protected areas/ lowers deforestation rate	1
- controls the scale of commercial farming/ mining/ commercial logging	1
- attracts the involvement of corporations in rainforest conservation	1
<u>Ineffective:</u>	
- <u>size of the rainforest adopted is too small</u>	1
- participation of corporation is affected by economic environment	1
- difficult to monitor illegal logging	1
- other measures should also be implemented to conserve the rainforest	1 (3)
	Max. 18

Section C

Question 5

Explain how suburbanisation causes land use conflicts in the New Territories. Evaluate whether new town development can keep a balance between environmental conservation and urban development.

Explanation	6
Evaluation	6

Generic Marking Guidelines	
Performance of Candidates	Marks
Explain how suburbanisation causes land use conflicts in the New Territories	
<ul style="list-style-type: none"> • Demonstrate comprehensive knowledge on how suburbanisation causes land use conflicts in the New Territories <ul style="list-style-type: none"> - definition of suburbanisation, land use conflicts - population increases, demand on private and public housing increases, improved transport linkages, rise of secondary commercial centre, increase in abandoned farmland, more industrial land use • Extensive examples, e.g. concrete examples of suburban development, transport linkages, etc. • Extensive and accurate use of geographical terminology, e.g. suburbanisation, land use conflicts 	6
<ul style="list-style-type: none"> • Demonstrate adequate knowledge on how suburbanisation causes land use conflicts in the New Territories • Adequate examples • Accurate use of geographical terminology 	3 – 5
<ul style="list-style-type: none"> • Demonstrate preliminary knowledge on how suburbanisation causes land use conflicts in the New Territories • Few or no examples • Using everyday language 	1 – 2
Evaluate whether new town development can keep a balance between environmental conservation and urban development	
<ul style="list-style-type: none"> • Coherent, logical and in-depth evaluation on whether new town development can keep a balance between environmental conservation and urban development • <u>Able to keep a balance between environmental conservation and urban development:</u> <ul style="list-style-type: none"> - dispersal of population, economic activities - environment: well-planned community, eco-friendly building design and transport network to avoid pollution, land use zoning, increase in green belt, improvement in living environment - development: provides adequate housing, job opportunities, etc. to meet the demand from the rising population • <u>Unable to keep a balance between environmental conservation and urban development:</u> <ul style="list-style-type: none"> - environment: changing rural/ suburbs/ abandoned land into urban areas, more environmental problems in the New Territories → urban encroachment - development: more money spent on compensation to the affected residents • Other measures: urban renewal • Extensive and accurate use of geographical terminology 	6
<ul style="list-style-type: none"> • General evaluation on whether new town development can keep a balance between environmental conservation and urban development • Accurate use of geographical terminology 	3 – 5
<ul style="list-style-type: none"> • Superficial evaluation on whether urban planning can keep a balance between environmental conservation and urban development • Using everyday language 	1 – 2
N.B. Markers are reminded to award appropriate marks to relevant and reasonable answers not included in this marking scheme.	Max. 12

Question 6

Describe the climatic constraints of farming in Southern California. Evaluate the effectiveness of irrigation in solving the climatic constraints of farming in Southern California.

Description	6
Evaluation	6

Generic Marking Guidelines	
Performance of Candidates	Marks
Describe the climatic constraints of farming in Southern California	
<ul style="list-style-type: none"> • Demonstrate comprehensive knowledge of the climatic constraints of farming in Southern California <ul style="list-style-type: none"> - temperature - rainfall - evaporation rate - frost • Extensive and accurate use of geographical terminology 	6
<ul style="list-style-type: none"> • Demonstrate adequate knowledge of the climatic constraints of farming in Southern California • Accurate use of geographical terminology 	3 – 5
<ul style="list-style-type: none"> • Demonstrate elementary knowledge of the climatic constraints of farming in Southern California • Using everyday language 	1 – 2
Evaluate the effectiveness of irrigation in solving the climatic constraints of farming in Southern California	
<ul style="list-style-type: none"> • Coherent and logical evaluation of the effectiveness of irrigation in solving the climatic constraints of farming in Southern California <ul style="list-style-type: none"> - examples of irrigation - <u>effective</u>: <ul style="list-style-type: none"> • stable water supply • increase in soil water • tackle insufficient rainfall - <u>not effective/ could not solve the following climatic constraints</u>: <ul style="list-style-type: none"> • temperature • frost • evaporation rate - <u>other measures</u>: <ul style="list-style-type: none"> • precision farming/ genetic modification/ artificial rain • Extensive and accurate use of geographical terminology 	6
<ul style="list-style-type: none"> • Appropriate evaluation of the effectiveness of irrigation in solving the climatic constraints of farming in Southern California • Accurate use of geographical terminology 	3 – 5
<ul style="list-style-type: none"> • Brief and general evaluation of the effectiveness of irrigation in solving the climatic constraints of farming in Southern California • Using everyday language 	1 – 2
N.B. Markers are reminded to award appropriate marks to relevant and reasonable answers not included in this marking scheme.	Max. 12

Question 7

Explain how the overuse of fossil fuels leads to a rise in global temperature. Evaluate whether the use of renewable energy resources can effectively combat the adverse impact of global temperature change.

Explanation	6
Evaluation	6

Generic Marking Guidelines	
Performance of Candidates	Marks
Explain how the overuse of fossil fuels leads to a rise in global temperature	
<ul style="list-style-type: none"> • Comprehensive and logical explanation on how the overuse of fossil fuels leads to a rise in global temperature • Reasons for and results from the overuse of fossil fuels: <ul style="list-style-type: none"> - rapid economic development in the LDCs (such as China, India) demands more energy - rise in living standard, vehicles and electrical appliances increase demand on energy - burning of fossil fuels releases large amount of greenhouse gases - enhancing greenhouse effect, leading to rise in global temperature • Extensive and accurate use of geographical terminology, e.g. long wave radiation 	6
<ul style="list-style-type: none"> • Appropriate explanation on how the overuse of fossil fuels leads to a rise in global temperature • Accurate use of geographical terminology 	3 – 5
<ul style="list-style-type: none"> • Brief and general explanation on how the overuse of fossil fuels leads to a rise in global temperature • Using everyday language 	1 – 2
Evaluate whether the use of renewable energy resources can effectively combat the adverse impact of global temperature change	
<ul style="list-style-type: none"> • Coherent and logical evaluation on the effectiveness of the use of renewable energy resources in combating the adverse impact of global temperature change <ul style="list-style-type: none"> - description of adverse impact, e.g. rise in sea-level, changes in biodiversity • Can combat the adverse impact of global temperature change because: <ul style="list-style-type: none"> - reduces the reliance on using and burning fossil fuels and cuts the emissions of greenhouse gases - renewable energy resources are pollution-free • The use of renewable energy resources may be affected by the following factors: <ul style="list-style-type: none"> - scale of using renewable energy resources - availability of capital - level of technology - cost of the renewable energy - renewable energy resources are confined by locations • Other measures to tackle global warming <ul style="list-style-type: none"> - global warming may be the result of increase in methane, felling of tropical rainforest, etc. • Discussion of other measures in combating the adverse impact of global temperature change • Extensive and accurate use of geographical terminology 	6
<ul style="list-style-type: none"> • Appropriate evaluation on the effectiveness of the use of renewable energy resources in combating the adverse impact of global temperature change • Fail to discuss other measures in combating the adverse impact of global temperature change • Accurate use of geographical terminology 	3 – 5
<ul style="list-style-type: none"> • Brief and general evaluation on the effectiveness of the use of renewable energy resources in combating the adverse effect of global temperature change • Fail to discuss other measures in combating the adverse impact of global temperature change • Using everyday language 	1 – 2
N.B. Markers are reminded to award appropriate marks to relevant and reasonable answers not included in this marking scheme.	Max. 12