

GCSE

Geography B

Unit **B561/01**: Sustainable Decision Making Exercise (Foundation Tier)

General Certificate of Secondary Education

Mark Scheme for June 2014

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.










All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.






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These are the annotations, (including abbreviations), including those used in scoris, which are used when marking

Annotation	Meaning of annotation
	Tick
dev	Development
	Blank Page – this annotation must be used on all blank pages within an answer booklet (structured or unstructured) and on each page of an additional object where there is no candidate response.
	Benefit of doubt
	Level 1
	Level 2
	Level 3
	Omission
IRRL	Irrelevant
	Used to show links or highlight a section of the response
	Highlight – can be used to highlight sections of script




Subject-specific marking instructions

Question			Answer	Mark	Guidance
1	(a)	✓	Hurricanes	1	
	(b)	✓	Between the Tropic of Capricorn and Tropic of Cancer	1	
	(c)	✓	Asia, Africa or Oceania	1	Can accept (South) Asia, (East) Africa, (North) Oceania, Australasia
2	(a)	✓	South west to north east	1	
	(b)	✓	209-251 (km per hour)	1	Accept any value between
	(c)	✓ ✓	Homes/roof/walls damaged Trees fall/snapped/uprooted Fallen power lines Blocked roads Power cuts Water unavailable Area will be uninhabitable	2	Point marking 1 mark per type of damage identified from Resource 3. 2x1

Question			Answer	Mark	Guidance
3	(a)		79700	1	
	(b)	 	<p>Indicative ✓ content</p> <p>High winds</p> <p>High population density</p> <p>Area is in the track of the cyclone</p> <p>People were not evacuated / not warned</p> <p>Low-lying land</p> <p>Close to sea</p> <p>Not want to move away from livelihood</p> <p>Drowned / Flooding</p> <p>Killed by falling trees / power poles</p> <p>Falling buildings / Poor quality houses / houses destroyed</p> <p>Lack of monitoring</p> <p>Lack of preparation</p> <p>Water supply issues</p> <p>Food supply issues</p> <p>Poor quality of emergency services / healthcare</p> <p>Lack of physical protection</p>	5	<p>Point marking</p> <p>At least 2 ✓ points needed – up to max 5</p> <p>Development marks up to max of 3 can be given from these</p> <p>Combination of ✓ and dev is flexible</p> <p>A development point cannot be credited twice from 2✓ points</p> <p>Dev marks can be given for correct use of appropriate use of these figures from the resources:</p> <p>Wind speed 209-251km/h</p> <p>Category 4 Cyclone</p> <p>Over 800 people per km²</p> <p>Chittagong population – 4.8 million</p> <p>Major City</p>
4		 	<p>Transport</p> <p>Few people have any motorised transport /most people walk / travel by cycle rickshaw / Roads are narrow/of poor quality / River Crossings are slow ✓</p> <p>So they cannot easily / quickly escape from the cyclone / trapped (dev)</p> <p>Peoples' livelihood</p> <p>Villagers do not want to move / abandon livestock / possessions ✓</p> <p>So that they do not lose everything they have got / No insurance (dev)</p>	2 + 2	<p>1 mark for basic, valid idea identified from the resource, second mark for explanation of why this might make evacuation difficult</p> <p>1✓ + 1dev x2</p>

Question		Answer	Mark	Guidance
5	(a) ✓	<p>Indicative content</p> <p>Factors about the shelter which protect people during the cyclone: (Built from strong reinforced concrete) Strong so doesn't fall down/get destroyed (On stilts 3m above ground level/on raised platform) Above level of flooding/storm surge/so they don't drown (Windows with steel shutters) Safe from flying debris / glass / so windows don't break /</p>	3	<p>Point marking 1 mark per appropriate way, relating to the features of the shelter shown in the resource, explain why it will protect people</p> <p>3x1</p>
	(b) ✓ dev	<p>Indicative Content:</p> <p>A: Shelters should be within 1.5 km of all houses: People can get to shelters easily / quickly ✓ Can get there before the cyclone dev</p> <p>B: Public buildings such as schools or clinics should be used as a shelter: Public buildings are large/well known/in every village/already there/children safe ✓ In every village/don't have to build extra buildings dev</p> <p>C: Shelters should contain a 'killa' for livestock: People don't have to leave livestock behind/livestock safe ✓ Maintains livelihood/animals don't get stolen dev</p> <p>D: Access roads to shelter should have a proper tarmac surface: Roads would be easier to use ✓ Can get to shelter quickly dev</p> <p>E: Shelters should contain separate facilities for males and females: Don't have to share facilities ✓ People feel more comfortable dev</p>	4	<p>✓1 - mark for simple explanation of how the option chosen will increase use of shelter Dev - second mark for development of this explanation</p> <p>2 x 2</p> <p>Note: This question is about Reasons to use the shelter Do not credit save money</p> <p>For B – do not credit “medical aid” or “continued education” ideas</p>

Question	Answer	Mark	Guidance
<p>6 (a)</p> <p>L3</p> <p>L2</p> <p>L1</p>	<p>Level 3 (5-6 marks) Developed reasons and explanations given as to why it is the best way to protect people showing good understanding, analysis and evaluation. Written work is legible and spelling, punctuation and grammar are accurate. Meaning is communicated very clearly.</p> <p>Level 2 (3-4 marks) Simplistic reason(s) given as to why it is the best way to protect people showing some understanding, analysis and evaluation. Written work is legible and spelling, punctuation and grammar are mostly accurate. Meaning is communicated clearly.</p> <p>Level 1 (1-2 marks) Limited reason(s) given as to why it is the best way to protect people showing little or no understanding, analysis and evaluation. Written work contains mistakes in spelling, punctuation and grammar, which sometimes hinder communication.</p> <p>0 marks No evidence submitted or response does not address the question.</p>	6	<p>Examiners are reminded Quality of Written Communication is integrated with the level descriptors. QWC will reflect how clearly ideas and concepts are expressed, but should not restrict candidates from reaching L2 & L3.</p> <p>Candidates do not need to refer to each bullet point in the resource to access level 3.</p> <p>There are no wrong options – any option with appropriate explanation is acceptable.</p> <p>See Table on Page 11 for indicative content for 6a,b & c</p> <p>This list is not exhaustive – always credit relevant geography</p>

Question	Answer	Mark	Guidance						
(b)  dev	Disadvantages of chosen option	3	Points marking Credit up to 3 disadvantages Minimum of 2 disadvantages for full marks (with 1 developed point) Max 1 mark for development <table border="1" data-bbox="1283 411 1657 483"> <tr> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>dev</td> </tr> </table>	✓	✓	✓	✓	✓	dev
✓	✓	✓							
✓	✓	dev							
(c)  dev	Reasons for rejecting the other 2 options If doesn't stake option – the advantage given must be applicable to both the rejected options	4	Points marking. Maximum two marks per method. 1 ✓ mark + 1 (dev) mark 2 x 2						
(d)  dev	Indicative content If methods used together: ✓ More effective / Saves more lives dev e.g. if people get early warnings, they can put their training into practice (any linked combination of reasons from the different methods)	3	Points marking 1 ✓ mark for suggestion of why the methods work better together + 2 (dev) marks If no ✓ - Can give a link as a ✓ ✓ If only describe a valid advantage from each method Development marks can only be given for linked point						

Method	Advantages	Disadvantages
1. Prediction and Warning <ul style="list-style-type: none"> • Use Satellite images to track the cyclone • Broadcast radio and television warnings of the likely strength of the storm and when people should move to the cyclone shelter • Give warnings to local people using short-wave radios, hand held megaphones and mobile phones 	<ul style="list-style-type: none"> ☺ People have time to prepare/evacuate ☺ Uses existing/common/everyday technology ☺ Reaches most people ☺ Know where storm will hit/track/strength ☺ Cheap – no major construction costs 	<ul style="list-style-type: none"> ☹ Property/livelihoods not protected ☹ Not everyone has access to the technology ☹ People may not understand/believe the warnings ☹ Technology not always accurate, storms can change course ☹ Some technology expensive
2. Physical defences <ul style="list-style-type: none"> • Build embankments up to seven metres high along the coast • Plant mangrove forests along the coastline • Construct earth platforms and build houses on top of these platforms 	<ul style="list-style-type: none"> ☺ Prevents flooding of properties ☺ People/Livelihood safe ☺ Saves money on after storm repairs ☺ No need to evacuate ☺ Mangroves create a natural barrier 	<ul style="list-style-type: none"> ☹ High cost (of construction / upkeep/maintenance) ☹ Mangrove forests take a long time to grow ☹ Cyclone risk not just about flooding ☹ If barriers breached – takes longer for flood waters to recede ☹ Possibility of creating a higher density of population in these protected areas
3. Increase awareness <ul style="list-style-type: none"> • Have classes to teach people how they can survive future cyclones • Store items such as food, medical items, blankets and supplies of water in flood proof buildings • Organise an exercise for people to practise using cyclone shelters 	<ul style="list-style-type: none"> ☺ Cheap – no hard engineering ☺ People are prepared with emergency supplies ☺ People will know what to do during a cyclone ☺ People will know what to do after a cyclone ☺ Communities work together 	<ul style="list-style-type: none"> ☹ People don't listen ☹ People don't practice ☹ People don't understand ☹ No strategy to protect property/livelihoods ☹ No strategy to warn people of a pending cyclone

Cost – must be specific or comparative except for Option 2

Pollution / Infrastructure / Sustainability – must be specified. Sustainability needs to be explained more than just stating economic sustainability etc.

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