## Assessment Objectives Grid for G1

| | Knowledge and Understanding | Application | Skills | Total | Key Question |
|---|---|---|---|---|---|
| **Question 1** | | | | | |
| **(a)** | | **2** | **3** | **5** | **1.3** |
| **(b)** | **8** | **2** | | **10** | **1.3** |
| **(c)** | **7** | **3** | | **10** | **1.4** |
| | **15** | **7** | **3** | **25** | |
| **Question 2** | | | | | |
| **(a)** | | **2** | **3** | **5** | **2.1** |
| **(b)** | **8** | **2** | | **10** | **2.1** |
| **(c)** | **7** | **3** | | **10** | **2.2 / 2.5** |
| | **15** | **7** | **3** | **25** | |
| **Question 3** | | | | | |
| **(a)** | | | **7** | **7** | |
| **(b)** | **4** | **4** | | **8** | |
| **(c)** | **2** | | **8** | **10** | |
| | **6** | **4** | **15** | **25** | |
| | **36**<br>**(48%)** | **18**<br>**(24%)** | **21**<br>**(28%)** | | |

**GEOGRAPHY - G1**
**CHANGING PHYSICAL ENVIRONMENTS**

**Q.1 (a) Use *Figures 1a* and *1b* to describe the global pattern of greenhouse gas emissions. [5]**

The question is looking for statements that describe patterns shown by the resource.

- This may be reference to the high amounts produced by MEDCs such as the USA, Western Europe and Japan. For naming one country or a region/group, e.g. Western Europe, award one mark; award the further mark either for comparisons e.g. comparing it with USA or for noting exceptions, e.g. Norway.
- The high amounts produced by India and China may also be commented upon. This may be contrasted with the small amounts produced by LEDCs with reference to Africa, South America and South East Asia.
- Some answers may look at the smaller amounts produced by Scandinavia, Canada and Russia.
- Allow one mark per comment with extra marks for development. The USA has large proportion of emissions at about two times the size shown in figure 1b.
- If they are trying to compare maps on 1a and 1b, give credit for comment about size of emissions relating to figure 1a.

Accept any valid comment.

**(b) Examine the role of environmental factors in recent climatic change. [10]**

Answers could approach this question in a number of ways. Some may take the view that recent climate change is the result of environmental factors and illustrate this with reference to processes such as El Nino/La Nina, volcanic eruptions, sunspot activity and changes in albedo or ocean currents. Do not expect all of these - some answers may only deal with two in detail. Some may also introduce the processes that are the result of human activity - the enhanced greenhouse effect - and are likely to be credited at Level 3. The examination of the role of environmental factors may be integrated into the answer as comments throughout the response or it could be a concluding paragraph. Award a maximum of Level 2 if only human factors are covered.

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| **Level 3<br>8-10 marks** | Detailed and developed knowledge of environmental / human factors influencing recent climate change.<br>Developed examination of the role i.e. process or comparison.<br>Good developments of examples of the climate change. |
| **Level 2<br>4-7 marks** | Some knowledge of the environmental / human factors influencing recent climate change; some examination of the role i.e. process or comparison.<br>Examples are evident of the climate change and enhance the explanation. |
| **Level 1<br>0-3 marks** | Superficial knowledge of environmental / human factors influencing recent climate change.<br>Superficial examination of the role i.e. process or comparison.<br>Little use of examples of the climate change. |

**(c) Outline the success of strategies that have been used to tackle climate change. [10]**

Answers should address both elements of the question – (i) knowledge of the strategies and (ii) comment on the level of success of the strategies. The content of the answers will vary.

There will be approaches that focus on the scale of strategies:
- international, national and local government
- pressure groups
- individuals.

There will be approaches that focus on the type of strategy, for example:
- preparation
- protection
- alleviation
- raising awareness.

Candidates should be able to describe the strategy and explain how it attempts to tackle climate change.

For the discussion of success there will also be a variety of comments that can be made. Some candidates may look at the strategy selected and comment on the absolute success of the measure, however others may be more circumspect. Comment here may address success in the form of comparison with other strategies, comparison of success in different areas of the world, comment on the lack of evidence for success/failure or comment on the scale of the problem. Be prepared to be flexible in this section of the question.

Exemplar material may be at any scale.

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| **Level 3**<br>**8-10 marks** | Detailed and developed knowledge of the strategies to overcome climate change.<br>Sound analysis of success of strategies developed.<br>Good development of examples. |
| **Level 2**<br>**4-7 marks** | Some knowledge of the strategies to overcome climate change.<br>Some analysis of success of strategies.<br>Lacks balance.<br>Examples are evident and enhance the explanation. |
| **Level 1**<br>**0-3 marks** | Superficial knowledge of the strategies to overcome climate change.<br>Superficial analysis of success of strategies.<br>Little use of examples. |

**Q.2 (a) Use *Figure 2* to describe the changes in insurance costs after the introduction of flood insurance rate maps. [5]**

The question is looking for comments that point out the changes in insurance costs at different heights before the introduction of flood insurance.

- Decrease in costs at 0.5m above HWM.
- Increase 0.5m below HWM.
- Large increase 3m below HWM.
- Largest increase 3m below.
- Before were the same costs; after - 0.5m above HWM has gone down, whilst below HWM has increased.

Allow one mark per correct statement with extra mark for use of information from resource.

**(b) Examine the causes of *one* named river flood. [10]**

Answers should display knowledge of human and/or physical causes of the selected river flood.

Human causes may include:
- urbanisation
- intensification of agriculture
- deforestation
- changes to channel morphology
- industrial development etc.

Physical causes may include:
- amount and intensity of rainfall
- type of precipitation
- geology
- slope
- shape of basin
- seasonal characteristics of vegetation etc.

The development of these causes will vary according to the exemplar material chosen and the assessment of this will require a flexible approach.

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| **Level 3<br>8-10 marks** | Detailed and developed knowledge of the physical and/or human causes (not in equal detail).<br>Developed and linked understanding of link to flooding.<br>Good development of example. |
| **Level 2<br>4-7 marks** | Some knowledge of the physical and/or human causes (not in equal detail).<br>Detailed and developed knowledge of either the physical or the human factors.<br>Some understanding of the link to flooding.<br>Example evident and enhance the explanation. |
| **Level 1<br>0-3 marks** | Superficial knowledge of the causes.<br>Superficial understanding of link to flooding.<br>Little use of example. |

**(c) Describe and explain how *two* strategies have been used to manage the flood hazard within drainage basins. [10]**

Answers should display both knowledge of the strategies and an explanation of how they can manage the flood hazard. The strategies used in answers will vary. Accept either generic or detailed strategies for full marks.

Generic approaches may address preparation, planning, protection, prevention, aid, etc.

Specific strategies may include the use of dykes, washlands, arrangements of rooms in housing next to rivers, evacuation, afforestation, specific aid projects etc. There should be reference to specific examples in both approaches. The responses will normally take the form of a development of the workings of the selected strategies in the management of river floods.

An example may be an example of a process within a strategy e.g. afforestation as part of soft engineering or a located example.

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| **Level 3<br>8-10 marks** | Detailed and developed knowledge of the strategies.<br>Developed and linked understanding of how strategies manage flooding.<br>Good development of examples. |
| **Level 2<br>4-7 marks** | Some knowledge of the strategies.<br>Detailed and developed knowledge of one strategy.<br>Some understanding of how strategies manage flooding.<br>Examples are evident and enhance the explanation. |
| **Level 1<br>0-3 marks** | Superficial knowledge of the strategies.<br>Superficial understanding of how strategies manage flooding.<br>Little use of examples. |

**Q.3 (a) Describe the patterns shown in *Figure 3*. [7]**

Patterns can identify hazard/or country.

- Most common hazards are flood, extreme temperatures and windstorm.
- Least common hazard is landslide.
- Some countries suffer from large variety of hazards - Albania, Bulgaria, Croatia, Romania and Turkey.
- Some countries have few hazards - Slovenia.
- Reference to the annual number of deaths show that by far the highest is Turkey with Romania a distant second.
- Comment may also refer to the lower annual average by all other countries.

Credit should be given for description of these patterns with development in the form of relative strength of patterns or detail of range / type of hazards.

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| **Level 3<br>6-7 marks** | Shows clear and detailed identification / justification and description of patterns. Extensive use of data. |
| **Level 2<br>3-5 marks** | Shows some ability to identify / justify and describe patterns.<br>Uses some information from table in form of data and locations.<br>Location by location account. |
| **Level 1<br>0-2 marks** | Limited ability to identify / justify and describe patterns. |

**(b) Outline what other information you would need for a fuller understanding of hazards in south east Europe shown in *Figure 3*. [8]**

Responses could identify a number of other pieces of information that may be useful. The question requires the answers to outline so there should be some development of how the information may be useful in the understanding of hazards and deaths shown in the table. These may be focused on economic factors such as wealth of the country which could be linked to ability to plan for and cope with the hazard. It may also be related to the type of dwelling. Environmental factors may look at the relief of the country to explain access to affected areas or how prone an area is to floods. Atmospheric information may be mentioned to aid the understanding of drought, floods and wind storms. Actual data such as the total population of each country / the number of deaths per 100 000 people may be more relevant than annual average deaths. Deaths may be related to social information such as communication networks, health statistics and medical facilities. Number of deaths per hazard could also be included.

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| **Level 3<br>6-8 marks** | Good and realistic knowledge of information.<br>Developed ability to outline link to information in table. |
| **Level 2<br>3-5 marks** | Some realistic knowledge of information.<br>Some ability to outline link to information in table. |
| **Level 1<br>0-2 marks** | Limited knowledge of information.<br>Limited ability to outline link to information in table. |

**(c) Describe and explain how you planned your investigation into a changing physical environment. [10]**

***You should state clearly the question that you have investigated.***

Marking will depend on the quality of response and must be adjusted to suit individual studies presented.

Candidates could address:

- a discussion of the need to devise a question, a hypothesis (positive or negative) or investigate an issue
- a discussion of where, when and how which might include the construction of recording sheets and a discussion on sampling (the discussion should be about planning, not describing what actually happened)
- a risk assessment which may involve identifying specific risks, judging the outcome if the risk factor actually materialised and assessing the probability of the risk factor occurring.

Top quality answers should address more than one aspect of planning but do not expect all of the above. For any generic planning of a human investigation award maximum of level 1.

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| **Level 3: 8-10 marks** | Fully appreciates the need to plan and discusses the issue of question setting, as well as a detailed review of locational planning and/or risk assessment for a specific study. |
| **Level 2: 4-7 marks** | A good account, but incomplete detail. |
| **Level 1: 0-3 marks** | Accounts are sketchy and perhaps confused, maybe only addressing one aspect of planning related to the question. |