

State	Give a specific name, value or other brief answer without explanation or calculation.
Summarize	Abstract a general theme or major point(s).
Synthesize	Combine different ideas in order to create new understanding.
To what extent	Consider the merits or otherwise of an argument or concept. Opinions and conclusions should be presented clearly and supported with appropriate evidence and sound argument.

Note to all examiners: The approach used in assessment in the application of assessment criteria is a “best fit” model. The examiner applying an assessment criterion must choose the achievement level that overall best matches the piece of work being marked. It is not necessary for every detailed aspect of an achievement level to be satisfied for that level to be awarded but it must reflect the balance of student achievement against the markband. For example, if student work matches two of the three requirements within a markband but one is seriously lacking, the student should be awarded for the strands that have been met well, but the mark awarded should be at the lower end of the markband to compensate for what is lacking in one strand. If the level of student work spans multiple markbands, compensation depends on the performance in the higher order skills. It is worth noting that the highest level of any given criterion does not represent perfection.

Note regarding all questions: Examiners should mark positively rewarding what is correct and not take marks away for what is incorrect.

Question 1

Select four appropriate images. Drag and drop to complete the diagram below.

(2 marks)

Possible responses include:

Renewable resources: Wind, geo-thermal, solar

Non-renewable resources: coal; oil

- **One** correctly positioned image should be awarded (0 marks)
- **Two/three** correctly positioned images should be awarded (1 mark)
- **Four** correctly positioned images should be awarded (2 marks).

Question 2

Natural resources can become scarce. Using an example from your MYP studies, explain one factor that can cause scarcity of natural resources.

(4 marks)

Note: if the student does not refer to an example, the maximum mark that can be awarded is (3 marks) depending on the quality of the response. For example, an explanation of one factor that does not include an example would receive (3 marks); a description that does not include an example would likely receive (2 marks) and so on.

Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student states one factor that can cause natural resources scarcity.	The following is an example of the type of response that would be awarded 1 mark . Population growth. <i>A (1 mark) response is likely to be one sentence that hints at a single factor.</i>

<p>2</p>	<p>The student outlines one factor that can cause natural resources scarcity, using an example.</p>	<p>The following is an example of the type of response that would be awarded 2 marks. Population growth is causing greater demand for food and this puts pressure on land.</p> <p><i>A (2 mark) response is likely to be a single sentence with two clauses or two/three short sentences; the detail provided will be brief.</i></p>
<p>3</p>	<p>The student describes one factor that can cause natural resources scarcity, using an example.</p>	<p>The following is an example of the type of response that would be awarded 3 marks. Population growth is causing greater demand for food. As the greatest growth of population is in the least developed countries, there is pressure on land. This leads to deforestation and over-grazing which increases desertification.</p> <p><i>One factor should be considered in detail without any comprehensive reasoning. An example may be used to support the description.</i></p> <p><i>To provide the required level of detail for (3 marks), a short paragraph is likely to be required.</i></p> <p><i>More important than the length of the response is the quality and depth provided.</i></p>
<p>3-4</p>	<p>The student explains one factor that can cause natural resources scarcity, using an example.</p>	<p>The following is an example of the type of response that would be awarded 4 marks. Population growth is causing greater demand for food. As the greatest growth of population is in Sub-Saharan Africa, there is pressure on land. This leads to deforestation and over-grazing which increases desertification, reducing the productivity of the land.</p> <p><i>One factor should be considered in detail, along with reasoning why human activities could cause the trend shown in source A. An example may be given to support the explanation.</i></p> <p><i>To provide the required level of detail for (4 marks), a short to mid-length paragraph is likely to be required.</i></p> <p><i>More important than the length of the response is the quality and depth provided.</i></p>

Question 3

Evaluate the consultant’s action plan.

(8 marks)

Note: Students do not need to discuss both strengths and limitations of every part of the investigation to access full marks. Marks are awarded based on the quality of the response, not the number of strengths or limitations referred to.

Strengths		
Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student states the strength(s) of the action plan	<p>The following is an example of the type of response that would be awarded 1 mark. The interview questions are mainly relevant to the investigation.</p> <p><i>Only one strength needs to be mentioned to warrant (1 mark). The quality of the response is what is rewarded, not the number of strengths referred to.</i></p> <p><i>A (1 mark) response can be one sentence that refers to a single strength.</i></p>
2	The student outlines the strength(s) of the action plan	<p>The following is an example of the type of response that would be awarded 2 marks. The interviewee is a good choice. The interview questions are mainly relevant to the investigation. The answers will give specific and accurate information to help reach conclusions to aid the investigation.</p> <p><i>Only one strength needs to be mentioned and elaborated on to warrant (2 marks). The quality of the response is what is rewarded, not the number of strengths referred to. However, If a student outlines 3 or more strengths, they can be awarded 3 marks.</i></p> <p><i>A (2 mark) response is likely to be a single sentence with two clauses or two/three short sentences; the detail provided will be brief.</i></p>
3	The student explains the strength(s) of the action plan	<p>The following is an example of the type of response that would be awarded 3 marks. The interviewee is a good choice as she would have access to government data and so should be able to answer the questions fully. The interview questions are mainly relevant to the investigation</p>

		<p>because they relate to the impacts of the Renaissance Dam on all three countries. The answers will give specific and accurate information to help reach conclusions to aid the investigation.</p> <p><i>Only one strength needs to be mentioned and elaborated on in additional detail with reasoning to warrant (3 marks). The quality of the response is what is rewarded, not the number of strengths referred to.</i></p> <p><i>If a student outlines 3 or more strengths, they can be awarded 3 marks.</i></p>
--	--	--

Limitations		
Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student states the limitation(s) of the action plan	<p>The following is an example of the type of response that would be awarded 1 mark.</p> <p>The research question is too general.</p> <p><i>Only one limitation needs to be mentioned to warrant (1 mark). The quality of the response is what is rewarded, not the number of limitations referred to.</i></p> <p><i>A (1 mark) response can be one sentence that refers to a single limitation.</i></p>
2	The student outlines the limitation(s) of the action plan	<p>The following is an example of the type of response that would be awarded 2 marks.</p> <p>The research question is too general with no reference to any specific countries or type of cooperation.</p> <p><i>Only one limitation needs to be mentioned and elaborated on to warrant (2 marks). The quality of the response is what is rewarded, not the number of limitations referred to. However, if a student outlines 3 or more limitations, they can be awarded 3 marks.</i></p> <p><i>A (2 mark) response can be a single sentence with two clauses or two/three short sentences; the detail provided will be brief.</i></p>

3	The student explains the limitation(s) of the action plan	<p>The following is an example of the type of response that would be awarded 3 marks.</p> <p>The process of the investigation will be limited because the research question is too general. It does not refer to any specific country or group of countries or even to the Nile specifically. Furthermore, it does not mention a type of cooperation – if it had, the investigation could have been more focused.</p> <p><i>Only one limitation needs to be mentioned and elaborated on in some detail with reasoning to warrant (3 marks). The quality of the response is what is rewarded, not the number of limitations referred to.</i></p> <p><i>If a student outlines 3 or more limitations, they can be awarded 3 marks.</i></p>
---	--	--

Appraisal		
Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student provides an overall appraisal of the action plan	<p>The following is an example of the type of response that would be awarded 1 mark.</p> <p>Useful information was collected by the team but the investigation could have had more focus.</p> <p><i>Responses will give an overall appraisal without referencing aspects of the investigation to support it. It may be a general or vague comment that could apply to any investigation.</i></p>
2	The student provides a detailed overall appraisal of the action plan	<p>The following is an example of the type of response that would be awarded 2 marks.</p> <p>The investigation would allow valuable information about the dam to be collected from primary and secondary sources that would help the governments to cooperate. However, interviewing only one official from one country could lead to biased results.</p> <p><i>Responses must refer to at least one aspect of the investigation to support the overall appraisal. The appraisal can appear anywhere in the response; it does not have to be a concluding statement.</i></p>

Question 4

Now that you have evaluated the consultant’s action plan in question 3, you will take on the role of a researcher who has been asked to plan an investigation into issues relating to natural resource management.

The following is the statement of inquiry you need to base your investigation on:

“The extraction of natural resources can have a great impact on human and natural environments.”

Question 4a

With reference to the statement of inquiry, **formulate** a clear and focused research question.

(2 marks)

Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student formulates a research question that is clear and/or focused, with a limited connection to the statement of inquiry	<p>The following is an example of the type of response that would be awarded 1 mark.</p> <p>To what extent is the extraction of fossil fuels from the sea impacting marine life?</p> <p><i>In the example above, the RQ is clear (you can easily understand the intention of the investigation) and is connected to the statement of inquiry. However, the question lacks focus as it doesn't, for example, specify a location or time period.</i></p>
2	The student formulates a research question that is clear and focused with a clear connection to the statement of inquiry.	<p>The following is an example of the type of response that would be awarded 2 marks.</p> <p>To what extent is the drilling for natural gas in the Caspian Sea impacting the production of caviar?</p> <p><i>In the examples above, the RQ is clear (you can easily understand the intention of the investigation) and is connected to the statement of inquiry. The RQ focuses on a place so both merits 2 marks.</i></p>

Question 4b

Justify the relevance of your research question to the statement of inquiry.

(4 marks)

Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student states the relevance of the research question to the statement of inquiry.	<p>The following is an example of the type of response that would be awarded 1 mark.</p> <p>My research question refers to the extraction of a natural gas in the Caspian Sea.</p> <p><i>No detail is required. This is likely to be a single sentence response that makes a simple connection between the Sol and the RQ.</i></p>
2	The student outlines the relevance of the research question to the statement of inquiry.	<p>The following is an example of the type of response that would be awarded 2 marks.</p> <p>My research question refers to the extraction of a natural gas in the Caspian Sea. This causes pollution, which affects communities living on and around the Caspian Sea.</p> <p><i>Likely to be a single sentence with two clauses or two/three short sentences that provides brief detail (or a single factor) on why the RQ is relevant to the Sol.</i></p>
3	The student describes the relevance of the research question to the statement of inquiry.	<p>The following is an example of the type of response that would be awarded 3 marks.</p> <p>My research question refers to the extraction of a natural resource, gas, in a particular location (the Caspian Sea). This type of economic activity causes pollution, which threatens the production of caviar and affects communities living on and around the Caspian Sea.</p> <p><i>At least one argument/factor should be considered in detail without providing reasoning why the RQ is relevant to the Sol</i></p> <p><i>To provide the required level of detail for (3 marks), a short paragraph is likely to be required.</i></p> <p><i>More important than the length of the response, is the quality and depth provided.</i></p>

4	The student justifies the relevance of the research question to the statement of inquiry.	<p>The following is an example of the type of response that would be awarded 4 marks.</p> <p>My research question refers to the extraction of a natural resource, gas, in a particular location (the Caspian Sea). This type of economic activity causes pollution, which threatens the production of caviar and affects communities living on and around the Caspian Sea. It could also lead to the extinction of species, affecting the marine ecosystem.</p> <p><i>At least one argument/factor should be considered in detail, along with reasoning why the RQ is relevant to the Sol.</i></p> <p><i>To provide the required level of detail for (4 marks), a short to mid-length paragraph is likely to be required.</i></p> <p><i>More important than the length of the response, is the quality and depth provided.</i></p>
---	--	--

Question 4c

List two relevant methods for collecting information/data for your investigation.

(2 marks)

Responses **may** include:

- Interviews
- Questionnaire/survey
- Library/internet research

Award (1 mark) per relevant method up to a maximum of (2 marks). Accept any valid response.

Question 4d

Outline how **one** of the methods listed in part (c) could be useful to your investigation.

(2 marks)

Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	

1	The student states how the chosen method would be useful to their investigation	<p>The following is an example of the type of response that would be awarded 1 mark.</p> <p>The skype interview will provide me with primary data from an expert.</p> <p><i>For 1 mark, students would provide a statement/fact about usefulness of the method.</i></p>
2	The student outlines how the chosen method would be useful to their investigation	<p>The following is an example of the type of response that would be awarded 2 marks.</p> <p>The skype interview will provide me with primary data from an expert who would know about the impacts of extraction on human and natural environments.</p> <p><i>For 2 marks, students would elaborate on the usefulness of the method with some brief detail.</i></p>

Question 4e

Outline one challenge you might face while collecting information/data for your investigation.

(2 marks)

Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student states one challenge that would be faced while collecting the data	<p>The following is an example of the type of response that would be awarded 1 mark.</p> <p>I might not be able to find reliable data.</p> <p><i>For 1 mark, students would provide basic information about a possible challenge.</i></p>
2	The student outlines one challenge they may face while collecting information/data	<p>The following is an example of the type of response that would be awarded 2 marks.</p> <p>I might not be able to find reliable data on the impact of gas drilling on marine life in the Caspian Sea because companies and governments may not always publish it.</p> <p><i>For 2 marks, students would elaborate on the possible challenge with some brief detail.</i></p>

Communicating

Question 5

The video report has inspired you to start a petition to convince world leaders to take action and protect natural environments.

A local TV channel has asked to interview you.

Your interview should persuade people to sign your petition by **explaining** how natural environments are threatened by tourism and how they could be managed more sustainably.

In your response, you should refer to examples from your MYP studies.

Criterion A		
Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student demonstrates limited knowledge and understanding by outlining how natural environments threatened by overtourism can be managed sustainably, using limited examples and limited relevant terminology.	<p>The following is an extract from the type of response that would be awarded (1 mark).</p> <p>Some argue that all mass tourism is unsustainable and therefore should be controlled by the governments of tourist hotspots like the Galapagos Islands.</p> <p><i>Responses are likely to be brief, with little detail.</i></p> <p><i>There is requirement to include an example (this does not need to be a named location but could be an example of an issue or solution) but the lack of one does not mean the student cannot be awarded (1 mark).</i></p> <p><i>Terminology may be limited in terms of accuracy and/or frequency.</i></p>
2-3	The student demonstrates adequate knowledge and understanding by describing how natural environments threatened by overtourism can be managed sustainably,	The following is an extract from the type of response that would be awarded (3 marks) .

	<p>using satisfactory examples and appropriate relevant terminology.</p>	<p>There needs to be more control over the number of tourists to ensure that the beauty of delicate natural environments is preserved.</p> <p>For example, in the Galapagos Islands, a marine reserve was created. Those who do visit, are limited to certain areas.</p> <p>Some argue that all mass tourism is unsustainable.</p> <p>In Spain, there have been efforts to involve local communities more in managing tourism and rebranding less well-known areas to reduce the pressure on hotspots.</p> <p><i>It should be evident that the student has knowledge of the particular issue/topic and they should be able to call on relevant example(s) to support their point(s) but these examples might be lacking in detail or not be the most appropriate.</i></p> <p><i>There is likely to be little or no reasoning provided in the response i.e. there may be some reasoning provided but the examples/terminology/detail in the response is not sufficient enough to warrant a mark in the higher band then a mark in this band should be awarded (see best-fit guidance at the start of the document).</i></p> <p><i>Terminology used should be accurately used in the correct context.</i></p>
<p>4-5</p>	<p>The student demonstrates substantial knowledge and understanding by explaining how natural environments threatened by overtourism can be managed sustainably, using accurate examples and appropriate relevant terminology.</p>	<p>The following is an extract from the type of response that would be awarded (4 marks).</p> <p>As international tourism numbers continue to grow there is an increasing need to ensure that it is sustainable.</p> <p>People won't stop traveling, they're only traveling more, as they have more money and time on their hands. For that reason, there needs to be more control over the number of tourists to ensure that the beauty of delicate natural environments is preserved.</p> <p>For example, in the Galapagos Islands, a marine reserve was created. Whilst it does not stop tourists, it does limit the numbers allowed to visit. Those who do visit, are limited to certain areas.</p>

		<p>Some argue that all mass tourism is unsustainable.</p> <p>In Spain, there have been efforts to involve local communities more in managing tourism and rebranding less well-known areas to reduce the pressure on hotspots. Involving locals will encourage them to support the efforts.</p> <p><i>At this level, students need to demonstrate a very good understanding of the issue/topic by providing a detailed and logical response to the question. The student should call on appropriate example(s) that support their point(s).</i></p> <p><i>There may be some reasoning provided but if the examples/terminology/detail in the response are not sufficient to warrant a mark in the higher band then a mark in this band should be awarded (see best-fit guidance at the start of the document).</i></p> <p><i>Terminology used should be accurately and effectively used in the correct context.</i></p>
<p>6</p>	<p>The student demonstrates detailed knowledge and understanding by thoroughly explaining how natural environments threatened by overtourism can be managed sustainably, using accurate and effective examples and appropriate relevant terminology.</p>	<p>The following is an extract from the type of response that would be awarded (6 marks).</p> <p>As international tourism numbers continue to grow there is an increasing need to ensure that it is sustainable.</p> <p>People won't stop traveling, they're only traveling more, as they have more money and time on their hands. For that reason, there needs to be more control over the number of tourists to ensure that the beauty of delicate natural environments is preserved.</p> <p>For example, in the Galapagos Islands, a marine reserve was created in 1998 to protect its biodiversity. Whilst it does not stop tourists, it does limit the numbers allowed to visit. Those who do visit, are limited to certain areas.</p> <p>Some argue that all mass tourism is unsustainable. In Thailand, for example, Maya beach has been closed since June 2018 to allow the ecosystem to recover.</p> <p>In Spain, there have been efforts to involve local communities more in managing tourism and rebranding less well-known areas to reduce the pressure on hotspots. This has</p>

		<p>been done by offering free public transport to alternative attractions. Involving locals will ensure that their needs are included and encourage them to support the efforts in the long-term.</p> <p><i>The response should be very detailed and provide clear reasoning, making use of example(s) that work to demonstrate a comprehensive understanding of the issue/topic.</i></p> <p><i>The student may have demonstrated an excellent understanding, however this does not mean that the response must be perfect or the best example of a response you have seen; there are multiple ways of demonstrating ability and quite different responses may be awarded the same mark.</i></p> <p><i>Terminology used should be accurately and effectively used in the correct context.</i></p>
--	--	--

Crit C1 – Format	
Marks	Descriptor
0	The student does not achieve a standard described by any of the descriptors given below.
1	<p>One of the following is included:</p> <ul style="list-style-type: none"> • An appropriate title for the petition – for example, “Stop tourists trashing the environment!”. • An appropriate caption for the chosen image.
2	<p>Two of the following are included:</p> <ul style="list-style-type: none"> • An appropriate title for the petition – for example, “Stop tourists trashing the environment!”. • An appropriate caption for the chosen image.

Crit C2 - Communicating information and ideas		
Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1-2	The style and language used are rarely appropriate to the format of a petition (a formal written request using persuasive language).	The style of writing is rarely consistent with what would be expected in a persuasive response - for example, the text rarely engages the reader Language may be unclear. Persuasive language is rarely used.
3-4	The style and language used are occasionally appropriate to the format of a petition (a formal written request using persuasive language).	The style of writing is mainly consistent with what would be expected in a persuasive response – for example, the text occasionally engages the reader. Language is mainly clear and appropriate. Persuasive language is mainly used.
5-6	The style and language used are consistently appropriate to the format of a petition (a formal written request using persuasive language).	The style of writing is completely consistent with what would be expected in a persuasive response – for example, the text engages the reader. Language is clear and concise, communicating ideas effectively. Persuasive language is used throughout.

Crit C3 – Organizational structure		
Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student structures information and ideas in a way that is rarely effective and appropriate to the audience of the general public.	Ideas/paragraphs rarely build on each other in a logical manner. Rarely uses effective transitions within sentences and/or between sentences and/or paragraphs to show relationships between ideas.
2	The student structures information and ideas in a way that is occasionally effective and appropriate to the audience of the general public.	Ideas/paragraphs occasionally build on each other in a logical manner. Sometimes uses effective transitions within sentences and/or between sentences and/or paragraphs to show relationships between ideas.
3	The student structures information and ideas in a way that is mainly effective and appropriate to the audience of the general public.	Ideas/paragraphs frequently build on each other in a logical manner. Often uses effective transitions within sentences and/or between sentences and/or paragraphs to show relationships between ideas.
4	The student structures information and ideas in a way that is consistently effective and appropriate to the audience of the general public.	Ideas/paragraphs build on each other in a consistently clear and logical manner. Always uses effective transitions within sentences and/or between sentences and/or paragraphs to show relationships between ideas.

Question 6

Using data from **Source A**, **outline** the trend in global deaths from natural disasters between 1900 and 2015.

(2 marks)

Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student states the trend.	The following is an example of a response that would be awarded (1 mark) : It has decreased. <i>For 1 mark, students would provide a statement about the number of deaths decreasing.</i>
2	The student outlines the trend with reference to data in the graph.	The following is an example of a response that would be awarded (2 marks) : It has decreased from 153, 678 to 68, 748. <i>For 2 marks, students would provide a statement about the number of deaths increasing, referencing data from the graph</i>

Question 7

With reference to Source B below, **describe** the relationship between natural disaster factors and vulnerability.

(4 marks)

Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors given below.	
1	The student states the relationship between natural disaster factors and vulnerability.	<p>The following is an example of a response that would be awarded (1 mark).</p> <p>The magnitude of a disaster would increase the risk but only if the area is densely populated.</p> <p><i>A (1 mark) response is likely to be one sentence that hints at a single factor.</i></p>
2	The student outlines the relationship between natural disaster factors and vulnerability.	<p>The following is an example of a response that would be awarded (2 marks).</p> <p>Risk is calculated from both natural disaster factors and vulnerability. The magnitude of a disaster would increase the risk but only if the area is densely populated.</p> <p><i>A (2 mark) response is likely to be a single sentence with two clauses or two/three short sentences; the detail provided will be brief.</i></p>
3	The student describes the relationship between natural disaster factors and vulnerability.	<p>The following is an example of a response that would be awarded (3 marks).</p> <p>Risk is calculated from both natural disaster factors and vulnerability.</p> <p>The magnitude of a disaster would normally increase the risk but only if the area is densely populated.</p> <p>Despite a great magnitude, the risk can be reduced with effective management.</p> <p><i>The relationship should be considered without any reasons provided. An example may be</i></p>

		<p><i>used to support the description.</i></p> <p><i>To provide the required level of detail for (3 marks), a short paragraph is likely to be required.</i></p> <p><i>More important than the length of the response is the quality and depth provided.</i></p>
<p>4</p>	<p>The student describes in detail the relationship between natural disaster factors and vulnerability.</p>	<p>The following is an example of a response that would be awarded (4 marks).</p> <p>Risk is calculated from both natural disaster factors and vulnerability.</p> <p>The magnitude of a disaster would normally increase the risk, if the area is densely populated. Even with a great magnitude, the risk can be reduced with effective management.</p> <p>When events happen frequently, the population may be better prepared except when it is an event of extremely high magnitude.</p> <p><i>The relationship should be considered in detail. Reasons are not required. An example may be given to support the explanation.</i></p> <p><i>To provide the required level of detail for (4 marks), a short to mid-length paragraph is likely to be required.</i></p> <p><i>More important than the length of the response is the quality and depth provided.</i></p>

Question 8

The mobile phone app shown in **Source C** provides users with information on wildfires across Portugal. It gives access to satellite images, maps and photos taken by other app users.

Question 8a

Describe one value of the Wildfire Alert app for local residents.

(3 marks)

Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors below.	
1	The student states one value of the wildfire alert app for local residents.	The following is an example of a response that would be awarded 1 mark . The information given in the app is easy to read and understand. <i>Only one benefit needs to be mentioned to warrant (1 mark). The quality of the response is what is rewarded, not the number of strengths referred to.</i>
2	The student outlines one value of the wildfire alert app for local residents.	The following is an example of a response that would be awarded 2 marks . The information given in the app is easy to read and understand as it provides satellite information, maps and photographs <i>Only one benefit needs to be mentioned and elaborated on to warrant (2 marks). The quality of the response is what is rewarded, not the number of benefits referred to.</i> <i>A (2 mark) response is likely to be a single sentence with two clauses or two/three short sentences; the detail provided will be brief.</i>
3	The student describes one value of the wildfire alert app for local residents.	The following is an example of a response that would be awarded 3 marks . The information given in the app provides satellite images, maps and photographs , so it is easy for users to assess the danger and decide what to do. The satellite image will help firefighters to assess where the fire might spread to next. The app will allow local residents to see where the wildfires are located by looking at the map feature so they can decide if they should evacuate their home and local area to move to safer

		<p>ground. They will be able to make a judgement as to how at risk they are and decide on the appropriate action.</p> <p><i>Only one benefit needs to be considered in detail to warrant (3 marks). The quality of the response is what is rewarded, not the number of benefits referred to.</i></p> <p><i>A (3 mark) response is likely to take the form of a short paragraph.</i></p>
--	--	--

Question 8b

Describe one limitation of the Wildfire Alert app for local residents.

(3 marks)

Marks	Descriptor	Notes
0	The student does not achieve a standard described by any of the descriptors below.	
1	The student states one limitation of the Wildfire alert app for local residents.	<p>The following is an example of a response that would be awarded 1 mark.</p> <p>It does not tell local residents whether or not they are at risk.</p> <p><i>Only one limitation needs to be mentioned to warrant (1 mark). The quality of the response is what is rewarded, not the number of strengths referred to.</i></p>
2	The student outlines one limitation of the Wildfire alert app for local residents.	<p>The following is an example of a response that would be awarded 2 marks.</p> <p>The app is limited in terms of the information it provides. It does not tell the user direction that the fire is moving in so local residents will not know if they are at risk.</p> <p><i>Only one limitation needs to be mentioned and elaborated on to warrant (2 marks). The quality of the response is what is rewarded, not the number of benefits referred to.</i></p> <p><i>A (2 mark) response is likely to be a single sentence with two clauses or two/three short sentences; the detail provided will be brief.</i></p>

3	The student describes one limitation of the Wildfire alert app for local residents.	<p>The following is an example of a response that would be awarded 3 marks.</p> <p>The app is limited in terms of the information it provides. It does not tell the user about wind direction or speed and therefore the direction that the fire is moving in or the speed of spread so local residents will not know if they are at risk.</p> <p><i>Only one limitation needs to be considered in detail to warrant (3 marks). The quality of the response is what is rewarded, not the number of benefits referred to.</i></p> <p><i>A (3 mark) response is likely to take the form of a short paragraph.</i></p>
---	--	---

Question 9

Write a well-structured essay to answer the following question. **To what extent** has technology reduced the impacts of natural disasters in HICs?

In your essay, you must:

- Use examples from your MYP studies
- Consider different perspectives/factors

Note: *Italics* are used to indicate parts of the response that are rewarded under criterion A. Underlining is used to indicate parts of the response that are rewarded under criterion D. **Bold** is used to indicate the difference in depth/detail between markbands

Note: Note: when marking, best fit should be applied to each criterion separately. Therefore, a candidate can achieve different marks for each criterion.

Marks	Descriptor for Criterion A	Notes	Descriptor for Criterion D
0	The student does not achieve a standard described by any of the descriptors given below.		The student does not achieve a standard described by any of the descriptors given below.
1–2	The student demonstrates limited contextual and	The following is an extract from the type of response that would be awarded 2 marks.	The student provides one perspective in a basic analysis that summarizes

	<p>conceptual understanding in an outline, using limited examples and limited relevant terminology</p>	<p><u>HICs have access to technology, which can reduce the impacts of natural disasters.</u></p> <p><i>Tectonic events can be predicted. In Japan, text alerts enable people to move to areas of safety.</i> Additionally, the improvements in technology in <i>infrastructure</i> prevents the collapse of buildings.</p> <p><u>Therefore, technology can reduce the impacts of natural disasters.</u></p>	<p>information to a limited extent in response to the question.</p>
<p>3-4</p>	<p>The student demonstrates adequate contextual and conceptual understanding in a description, using satisfactory examples and appropriate relevant terminology</p>	<p>The following is an extract from the type of response that would be awarded 4 marks.</p> <p><u>HICs have access to technology, which can reduce the impacts of natural disasters.</u></p> <p><i>Tectonic events can be predicted. In Japan, text alerts enable people to move to areas of safety.</i> Additionally, the improvements in technology in <i>infrastructure</i>, such as shock absorbers, prevents the collapse of buildings.</p> <p><i>Robots and drones are able to deliver aid to inaccessible areas and are used for search and rescue operations.</i></p> <p><i>However, although the USA is a HIC, Hurricane Katrina in 2005 had devastating impacts despite early warning systems. This proves that even within HICs, not everyone has the same access to the technology.</i></p> <p><u>Some would argue education is more important than technology. For example, in California they are told to ‘duck, cover and hold’.</u></p> <p><u>Therefore, technology can reduce the impacts but it is not the only method.</u></p>	<p>The student provides different perspectives in an analysis and summarizes information to make clear arguments in response to the question.</p>

<p>5-6</p>	<p>The student demonstrates substantial contextual and conceptual understanding in an explanation, using accurate examples and appropriate relevant terminology</p>	<p>The following is an extract from the type of response that would be awarded 5 marks.</p> <p><u>HICs have access to technology, which can reduce the impacts of natural disasters.</u></p> <p><i>Seismometers can be used to predict tectonic events. In Japan, this information is used to send text alerts to enable people to move to areas of safety. Additionally, the improvements in technology in infrastructure, such as shock absorbers, prevents the collapse of buildings.</i></p> <p><i>Robots and drones are able to deliver aid to inaccessible areas and are used for search and rescue operations to find missing people.</i></p> <p><i>However, although the USA is a HIC, Hurricane Katrina in 2005 had devastating impacts despite early warning systems. <u>They did not have the socio-economic power to respond or evacuate.</u> This proves that even within HICs, not everyone has the same access to the technology or infrastructure that can reduce the impacts of natural disasters.</i></p> <p><u>Some would argue education is more important than technology because without it people are not prepared to take the appropriate action. In California, they are told to 'duck, cover and hold'.</u></p> <p><u>Therefore, technology can reduce the impacts but it is not the only method. It is most effective when used with other techniques.</u></p>	<p>The student provides different perspectives in a discussion and synthesizes information to make clear arguments in response to the question.</p>
<p>7-8</p>	<p>The student demonstrates detailed contextual and conceptual understanding in a thorough explanation, using accurate and effective examples and appropriate relevant terminology</p>	<p>The following is an extract from the type of response that would be awarded 7 marks.</p> <p><u>HICs have access to technology, which can reduce the impacts of natural disasters. However, other factors also have an effect on the outcome.</u></p> <p><i>Seismometers can be used to predict tectonic events. In Japan, this information is used to send text alerts to enable people to move to areas</i></p>	<p>The student provides different perspectives in a detailed discussion that synthesizes information to make clear arguments in response to the question.</p>

		<p><i>of safety. Additionally, the improvements in technology in infrastructure, such as shock absorbers, prevents the collapse of buildings and helps reduce casualties and economic costs.</i></p> <p><i>Robots and drones are able to deliver aid to inaccessible areas and are used for search and rescue operations to find missing people. This can speed up response time and save lives.</i></p> <p><i>However, although the USA is a HIC, Hurricane Katrina in 2005 had devastating impacts despite early warning systems. <u>New Orleans did not have the socio-economic power to respond or evacuate. Therefore, over 25,000 people were forced to seek shelter in the Superdome stadium.</u> This proves that even within HICs, not everyone has the same access to the technology or infrastructure that can reduce the impacts of natural disasters.</i></p> <p><i>Some would argue education is more important than technology because without it people are not prepared to take the appropriate action. While seismometers can predict an earthquake, if people have not been told how to respond, such as in California where they are told to 'duck, cover and hold', there will still be unnecessary casualties.</i></p> <p><i>Therefore, technology can reduce the impacts but it is not the only method. It is most effective when used with other techniques.</i></p>	
--	--	---	--

Criterion C1: Format	
Marks	Descriptor
0	The student does not achieve a standard described by any of the descriptors given below.
1	Two of the following elements are included: introduction, a main body of argument or a conclusion <i>The elements must appear as separate paragraphs</i>
2	Three of the following elements are included: introduction, a main body of argument or a conclusion <i>The elements must appear as separate paragraphs</i>

Criterion C2: Language and style		
Marks	Descriptor	Notes
0		
1	The style and language used are rarely appropriate to the audience and purpose of informing	The style of writing is rarely consistent with what would be expected in an essay.
2	The style and language used are occasionally appropriate to the audience and purpose of informing	The style of writing is not always consistent with what would be expected in an essay. It may appear to be more informal, for example using colloquialisms or first person.
3	The style and language used are consistently appropriate to the audience and purpose of informing	The style of writing is consistent with what would be expected in an essay, for example using third-person; language is formal and clear throughout.

Criterion C3: Organizational structure		
Marks	Descriptor	Notes
0		
1	The organization structure is rarely effective	Paragraphs/ideas sometimes build on each other in a logical manner. Rarely uses effective transitions within sentences or between sentences and/or paragraphs to show relationships between ideas.
2	The organizational structure is occasionally effective .	Paragraphs/ideas build on each other in a mainly logical manner. Sometimes uses effective transitions within sentences and between sentences and/or paragraphs to show relationships between ideas.
3	The organizational structure is consistently effective	Paragraphs and ideas build on each other in consistently clear and logical manner. Uses effective transitions within sentences and between sentences and/or paragraphs to show relationships between ideas.