

INTERNATIONAL A-LEVEL GEOGRAPHY GG05

Paper 5 Fieldwork and Geographical Skills

Mark scheme

June 2026

Version: 1.0 Final

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same, correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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International A-level Geography mark scheme

How to mark

Aims

When you are marking your allocation of scripts your main aims should be to:

- recognise and identify the achievements of students
- place students in the appropriate mark band and in the appropriate part of that mark band (high, low, middle) for **each** Assessment Objective
- record your judgements with brief notes, annotations and comments that are relevant to the mark scheme and make it clear to other examiners how you have arrived at the numerical mark awarded for each Assessment Objective
- ensure comparability of assessment for all students, regardless of question or examiner.

Approach

It is important to be **open-minded** and **positive** when marking scripts.

The specification recognises the variety of experiences and knowledge that students will have. It encourages them to study geography in a way that is relevant to them. The questions have been designed to give them opportunities to discuss what they have found out about geography. It is important to assess the quality of **what the student offers**.

Do not mark scripts based on the answer **you** would have written. The mark schemes have been composed to assess **quality of response** and not to identify expected items of knowledge.

Assessment Objectives

This component requires students to:

AO1	Demonstrate knowledge and understanding of places, environments, concepts, processes, interactions and change, at a variety of scales.
AO2	Apply knowledge and understanding in different contexts to interpret, analyse and evaluate geographical information and issues.
AO3	Use a variety of relevant quantitative, qualitative and fieldwork skills to: <ul style="list-style-type: none">• investigate geographical questions and issues• interpret, analyse and evaluate data and evidence• construct arguments and draw conclusions.

The marking grids

Do not think of levels equaling grade boundaries.

Depending on the part of the examination, the levels will have different mark ranges assigned to them. This will reflect the different weighting of Assessment Objectives in particular tasks and across the examination as a whole.

Using the grids

Having familiarised yourself with the descriptors and indicative content, read through the answer and annotate it (as instructed below) to identify the qualities that are being looked for and that it shows. You can now check the levels and award a mark.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptors for that level. The descriptors for the level indicate the different qualities that might be seen in the student's answer for that level. If it meets all the descriptors for the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptors and the answer. With practice and familiarity you will find that for better answers you will be able to skip through the lower levels of the mark scheme quickly.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best-fit approach for defining the level and then use the variability of the response to help decide the mark within the level.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark.

It is often best to start in the middle of the level's mark range and then check and adjust. If there is a lot of indicative content fully identifiable in the work you need to give the highest mark in the level. If only some is identifiable or it is only partially fulfilled, then give the lower mark.

The exemplar materials used during standardisation will also help. There will be an answer in the standardising materials that will correspond with each level of the mark scheme. This answer will have been awarded a mark by the lead examiner. You can compare the student's answer with the example to determine if it is of the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the lead examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

In addition to the levels descriptors, question specific indicative content is provided as a guide for examiners. This is not intended to be exhaustive and you must credit other valid points.

An answer that contains nothing of relevance to the question must be awarded no marks.

Annotating scripts

You should write a summative comment at the end for each Assessment Objective and indicate the marks for each Assessment Objective being tested at the end of the answer in the margin in sequence. It is vital that the way you arrive at a mark should be recorded on the script. This will help you with making accurate judgements and it will help any subsequent markers to identify how you are thinking. Please do not write negative comments about students' work or their alleged aptitudes.

Section A

Total for this section: 45 marks

Question	Part	Marking guidance	Total marks
01		<p>Outline reasons for using photographs in a geographical investigation.</p> <p>AO1 – Award up to 4 marks for knowledge and understanding of reasons for the use of photographs in a geographical investigation. Award one mark for each valid point (1) with additional credit for developed ideas (1d).</p>	<p>4</p> <p>AO1=4</p>

Indicative Content

- Photographs can be used at different stages of an investigation – they could be used to illustrate the location of the investigation and to supplement maps (1).
- They can be used to evidence or demonstrate data collection techniques (1).
- Photographs can be used in the presentation of information with labels or annotations (1).
- They can be used in the analysis of information as they can be compared/discussed in terms of evidence they show (1).
- Photographs provide visual evidence of geographical features/conditions at a specific time (1).
- Photographs can be used to show changes over different times (1). Contemporary images can be compared to older photographs/archive material (1d). The use of 're-photography' (taking the same photograph in a location and comparing directly with an older image) is a common approach (1).
- Photographs are considered a good record of a time/place and they can be referred to again after the fieldwork to help recall (1).
- Photographs can help to visualise locations/landscapes/environments (1) and make understanding of places/environments more accessible to somebody reading the work (1d).
- Photographs might make recording information easier if weather/other conditions are challenging (1).
- It could be argued that photographs are a more reliable method of recording information than a field sketch which may be limited by a student's ability to draw/annotate in the field (1).

Credit other valid points.

Question	Part	Marking guidance	Total marks
02	1	<p>Evaluate the use of systematic sampling in a geographical enquiry. Use FIGURE 1 and your own knowledge.</p> <p>AO1 – Knowledge and understanding of the use of systematic sampling in a geographical enquiry.</p> <p>AO2 – Application of knowledge and understanding to evaluate the use of systematic sampling in a geographical enquiry.</p>	<p>6</p> <p>AO1=2 AO2=4</p>

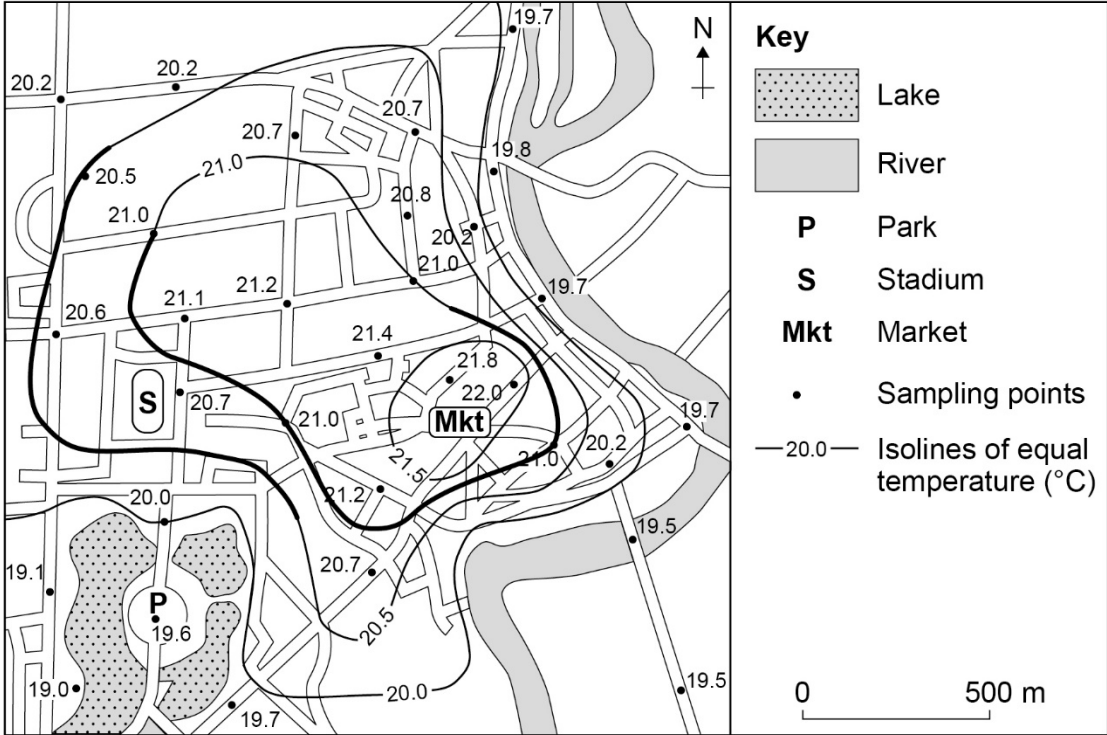
Level	Marks	Descriptor
2	4–6	<p>AO1 – Shows clear knowledge and understanding of the use of systematic sampling in a geographical enquiry.</p> <p>AO2 – Clear application of knowledge and understanding to evaluate the use of systematic sampling in a geographical enquiry with reference to Figure 1.</p>
1	1–3	<p>AO1 – Shows limited knowledge and understanding of the use of systematic sampling in a geographical enquiry.</p> <p>AO2 – Limited application of knowledge and understanding to evaluate the use of systematic sampling in a geographical enquiry.</p>
0	0	No creditable content.

Indicative Content

Responses should consider the use of systematic sampling in a geographical enquiry with reference to Figure 1 and the candidate's own knowledge.

- Systematic sampling is the approach involving data collection at regular, predetermined intervals, in the example provided, at 500 m intervals along a route.
- Systematic sampling has both advantages and disadvantages and these may be considered discretely or in comparison with other sampling strategies.
- Systematic sampling ensures there is even coverage across an area reducing the chances of clusters of data being recorded. This is quite significant when looking at temperature variations across an urban area. The reduced risk of clustering can therefore reduce bias ensuring there is data from all across the study transect. This will improve the chances of identifying any spatial pattern in the microclimate study.
- Systematic sampling is a more simple and straightforward approach – it is easier to plan and to implement than random sampling and it is usually quicker to organise. In a study such as this where there might be gradual changes across an area, systematic sampling is more likely to pick these up.
- However, there are limitations of systematic sampling as with data readings at regular intervals there is a chance of either missing key features or over-representing aspects of the area studied. This can be referred to as 'pattern bias'.
- Systematic sampling is a rather regimented approach and lacks flexibility.
- It could be combined with stratified sampling to ensure that different areas or land uses of an urban area were measured.

Credit other valid points.

Question	Part	Marking guidance	Total marks
02	2	<p>Complete the 20.5 °C and 21 °C isolines on FIGURE 2.</p> <p>AO3 – Award up to 2 marks for the correct completion of the 20.5 °C (1) and 21 °C (1) isolines.</p>	2 AO3=2
			

Question	Part	Marking guidance	Total marks
02	3	<p>Describe the pattern shown in the completed isoline map in FIGURE 2.</p> <p>AO3 – Award up to 3 marks for valid descriptive points relating to the pattern shown in Figure 2.</p>	3 AO3=3

Indicative Content

- The pattern of isolines (isotherms) is roughly concentric about the centre of the town (1).
- The isotherms are closer together around the town centre (1) indicating a steeper temperature gradient (1).
- There is a distance decay effect with temperatures falling further from the centre (1).
- The lower (20.0 °C) isotherm roughly follows the course of the river (1).
- Temperatures are also colder near the park/water (1).

Question	Part	Marking guidance	Total marks																																																																																																																
03	1	<p>Complete TABLE 2 and calculate the Spearman’s rank correlation coefficient to three decimal places.</p> <p>AO3 – Award one mark for each correctly completed row in the table (2 x1).</p>	<p>5</p> <p>AO3=5</p>																																																																																																																
<table><tr><th>Town</th><th>Approximate Population</th><th>Rank</th><th>Approximate number of service businesses</th><th>Rank</th><th>Difference between ranks (d)</th><th>d²</th></tr><tr><td>Chanthanimit</td><td>24 000</td><td>6</td><td>405</td><td>3</td><td>3</td><td>9</td></tr><tr><td>Kaeng Hang Maeo</td><td>37 700</td><td>4</td><td>285</td><td>6</td><td>-2</td><td>4</td></tr><tr><td>Khao Khitchakut</td><td>23 000</td><td>7</td><td>163</td><td>14</td><td>-7</td><td>49</td></tr><tr><td>Khlung</td><td>55 000</td><td>2</td><td>465</td><td>2</td><td>0</td><td>0</td></tr><tr><td>Laem Sing</td><td>20 000</td><td>10</td><td>215</td><td>11</td><td>-1</td><td>1</td></tr><tr><td>Makham</td><td>30 000</td><td>5</td><td>253</td><td>7</td><td>-2</td><td>4</td></tr><tr><td>Mueang Chanthaburi</td><td>120 000</td><td>1</td><td>1425</td><td>1</td><td>0</td><td>0</td></tr><tr><td>Na Yai Am</td><td>22 000</td><td>8.5</td><td>233</td><td>10</td><td>-1.5</td><td>2.25</td></tr><tr><td>Phlio</td><td>8 000</td><td>14</td><td>244</td><td>8</td><td>6</td><td>36</td></tr><tr><td>Pong Nam Ron</td><td>22 000</td><td>8.5</td><td>210</td><td>12</td><td>-3.5</td><td>12.25</td></tr><tr><td>Soi Dao</td><td>42 000</td><td>3</td><td>355</td><td>4</td><td>-1</td><td>1</td></tr><tr><td>Tha Chalaep’e</td><td>13 000</td><td>11</td><td>239</td><td>9</td><td>2</td><td>4</td></tr><tr><td>Tha Mai</td><td>10 000</td><td>13</td><td>350</td><td>5</td><td>8</td><td>64</td></tr><tr><td>Wang Tanot</td><td>12 000</td><td>12</td><td>189</td><td>13</td><td>-1</td><td>1</td></tr><tr><td colspan="6"></td><td>Σd² = 187.5</td></tr></table>				Town	Approximate Population	Rank	Approximate number of service businesses	Rank	Difference between ranks (d)	d ²	Chanthanimit	24 000	6	405	3	3	9	Kaeng Hang Maeo	37 700	4	285	6	-2	4	Khao Khitchakut	23 000	7	163	14	-7	49	Khlung	55 000	2	465	2	0	0	Laem Sing	20 000	10	215	11	-1	1	Makham	30 000	5	253	7	-2	4	Mueang Chanthaburi	120 000	1	1425	1	0	0	Na Yai Am	22 000	8.5	233	10	-1.5	2.25	Phlio	8 000	14	244	8	6	36	Pong Nam Ron	22 000	8.5	210	12	-3.5	12.25	Soi Dao	42 000	3	355	4	-1	1	Tha Chalaep’e	13 000	11	239	9	2	4	Tha Mai	10 000	13	350	5	8	64	Wang Tanot	12 000	12	189	13	-1	1							Σd ² = 187.5
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		<p>Award 1 mark for evidence of working/substitution (1).</p> <p>$1 - \frac{6 \times 187.5}{14^3 - 14}$</p> <p>$1 - \frac{1125}{2730}$</p> <p>$1 - 0.412$</p> <p>$= 0.588$ (3 dp)</p> <p>Award 2 marks for the correct calculation of the Spearman’s rank correlation value.</p> <p>1 mark for a calculation to 2 dp eg 0.59 or to more than 3 dp eg, 0.5879, 0.58791.</p>																																																																																																																	

Question	Part	Marking guidance	Total marks
03	2	<p>Using the information in TABLE 3, interpret the statistical significance of your Spearman's rank correlation result.</p> <p>AO3 – Award up to 3 marks for the correct interpretation of the Spearman's rank correlation result through an understanding of the significance levels.</p>	<p>3</p> <p>AO3=3</p>

Indicative Content

- The Spearman's rank correlation result of 0.588 can be accepted at the 0.05 significance level (1)/ there is 95% confidence in the result (1).
- The result can be accepted at the 0.05 significance level but not at the 0.01 (99% confidence) level (1).
- The alternative hypothesis (H_1) can be accepted (1) suggesting there is a positive correlation between population size and the number of service businesses in towns in Chanthaburi province (1).
- The null hypothesis (H_0) can be rejected (1).

Allow a correct interpretation of an incorrect result.

Question	Part	Marking guidance	Total marks
03	3	<p>Describe the method used to construct a map of located proportional symbols, such as proportional circles, to present this data.</p> <p>AO1 – Knowledge and understanding of the technique of located proportional symbols to show geospatial data.</p> <p>AO3 – Application of geographical skills to describe the method required to construct a map using proportional symbols, such as proportional circles, to present the data.</p>	<p>6</p> <p>AO1=3 AO3=3</p>

Level	Marks	Descriptor
2	4–6	<p>AO1 – Clear knowledge and understanding of a technique of located proportional symbols to show geospatial data.</p> <p>AO3 – Clear application of geographical skills to describe the method required to construct a map using proportional symbols – such as proportional circles, to present the data.</p>
1	1–3	<p>AO1 – Limited knowledge and understanding of the technique of located proportional symbols to show geospatial data.</p> <p>AO3 – Limited application of geographical skills to describe the method required to construct a map using proportional symbols – such as proportional circles, to present the data.</p>

0	0	No creditable content.
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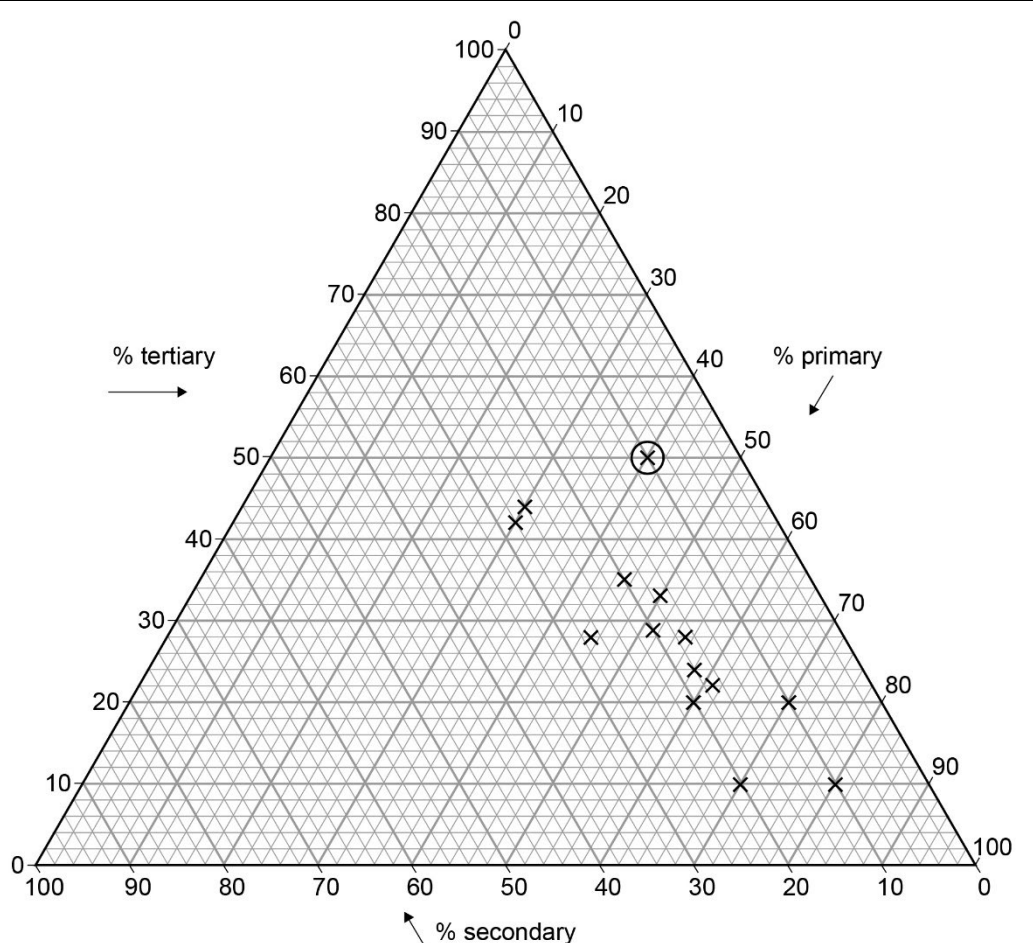
Indicative Content

Responses can describe any suitable proportional symbol technique. These could be shapes such as squares, circles, triangles, or symbols representing the number of service businesses.

- In each case it is the area of the symbol that needs to represent the number of service businesses.
- The proportional symbols need to be located on a base map and should be associated with the place they represent.
- The data (in this case number of service industries) needs to be scaled so that area of the symbol is proportional to the number of service businesses.
- This requires some mathematical calculation. In the case of the proportional circles, find the radius of the circle. As the area of a circle = $\pi \times \text{radius}^2$, the radius can be found by dividing the result by π , then finding the square root of the calculated value.
- The calculated figure might need to be divided by a common scaling value to produce a set of radius values that will produce circles that will fit on to the map and that do not overlap or obscure each other too much.
- The position of the circles may need some correction to ensure they do not overlap and can be seen clearly.
- A scale should be added to the map so that the area (size) of the circles can be correlated to the number of service businesses.
- The method for any other proportional symbol should be clearly described.
- The map should have a title and key, making sure the towns are labelled clearly.

The use of GIS or other mapping software would be an acceptable way to answer this question – expect the name of the GIS/software package and then some description of the data input and mapping procedure.

Sufficient level of detail so that the technique/method could be repeated is required for Level 2.

Question	Part	Marking guidance	Total marks
04	1	Complete Figure 4 by adding the data for Phlio.	1 AO3=1
			
		Award 1 mark for the correct plot of the data for Phlio (40,10,50).	

Question	Part	Marking guidance	Total marks
04	2	<p>Assess the advantages and disadvantages of using triangular graphs to present data.</p> <p>AO1 – Knowledge and understanding of the advantages and disadvantages of using triangular graphs to present data.</p> <p>AO2 – Application of knowledge and understanding to assess the advantages and disadvantages of using triangular graphs to present data.</p>	<p>6</p> <p>AO1=2 AO2=4</p>

Level	Marks	Descriptor
2	4–6	<p>AO1 – Clear knowledge and understanding of the advantages and disadvantages of using triangular graphs to present data.</p> <p>AO2 – Clear application of knowledge and understanding to assess the advantages and disadvantages of using triangular graphs to present data.</p>
1	1–3	<p>AO1 – Limited knowledge and understanding of the advantages and disadvantages of using triangular graphs to present data.</p> <p>AO2 – Limited application of knowledge and understanding to assess the advantages and disadvantages of using triangular graphs to present data.</p>
0	0	No creditable content.

Indicative Content

- The data for employment is divided into three sectors which is appropriate and suitable for presentation on a triangular graph.
- Triangular graphs are useful for data sets that have proportions summing up to 100% (eg soil composition, population structure, industrial sectors).
- Triangular graphs can give a clear visual representation of the proportions and how the different components contribute to the total.
- They provide an easy way to compare patterns when there are multiple data points such as the 14 locations in Chanthaburi shown in **Figure 4**.
- Clusters/similarities can easily be seen and anomalies can be clearly identified as standing away from the group/cluster.
- Interpretation of similarities and anomalies is straightforward compared with looking at a numeric list of data.
- Triangular graphs are useful for specific geographical themes (eg, soil classification, employment structures).
- However, triangular graphs can be complex to read as the three axes can be confusing.
- Triangular graphs are only valid for data that can be divided into three groups and so many forms of geographical data would be unsuitable to this form of data presentation.
- They can be fiddly/difficult to plot manually.

- Triangular graphs do not work well with large data sets – too many points on a graph can look cluttered/points seem to merge and so they can be hard to read and interpret.
- Students may be unfamiliar with this type of graph as they are used less frequently than bar charts, pie charts etc.

Responses should have reference to both advantages and disadvantages to access Level 2.

Credit other valid points.

Question	Part	Marking guidance	Total marks
05		<p>Evaluate the use of primary and secondary data within geographical investigations.</p> <p>AO1 – Knowledge and understanding of the use of primary and secondary data within geographical investigations.</p> <p>AO2 – Application of knowledge and understanding to evaluate the use of primary and secondary data within geographical investigations with an evaluative conclusion.</p>	<p>9</p> <p>AO1=4 AO2=5</p>

Level	Marks	Descriptor
3	7–9	<p>AO1 – Detailed knowledge and understanding of the use of primary and secondary data within geographical investigations.</p> <p>AO2 – Detailed application of knowledge and understanding to evaluate the use of primary and secondary data within geographical investigations with an effective evaluative conclusion.</p>
2	4–6	<p>AO1 – Clear knowledge and understanding of the use of primary and secondary data within geographical investigations.</p> <p>AO2 – Clear application of knowledge and understanding to evaluate the use of primary and secondary data within geographical investigations with evidence of an evaluative conclusion.</p>
1	1–3	<p>AO1 – Limited knowledge and understanding of the use of primary and secondary data within geographical investigations.</p> <p>AO2 – Limited application of knowledge and understanding to evaluate the use of primary and secondary data within geographical investigations with a basic or absent evaluative conclusion.</p>
0	0	No creditable content.

Indicative Content

Responses should evaluate the use of both primary and secondary data types within geographical investigations.

Both data types require consideration for Level 2.

Both data types require effective evaluation for Level 3.

- Definitions and exemplification of primary and secondary may form part of the response.
- There should be some form of conclusion about their use/importance/worth in geographical investigations.

- Primary data is the data that is collected 'first hand' by a student/researcher for an investigation. This can include physical fieldwork measurements, surveys, questionnaires, interviews and observation studies.
- The advantages of using primary data are numerous and include the idea that the data collected is up to date/in the moment whereas secondary data may be historical/dated.
- The student/researcher has control over the ways the data has been collected and are directly responsible for the reliability, volume and accuracy of the data gathered.
- By collecting primary data 'in the field' it allows the student to directly engage with the environment or subjects, helping to develop an understanding of the geography being investigated.
- By collecting and using their own data, the data should be specific and tailored to the investigation. Secondary data may have been collected for a different purpose and require some sifting/reorganisation in order to be useful.
- However, there are downsides to the use of primary data; collecting data can be time consuming and expensive – fieldwork requires planning and may have travel and transport costs. Fieldwork can be affected by the weather conditions or unforeseen events such as the pandemic.
- There is potential for human error when data has been collected by people. Surveys, questionnaires and interviews may be biased.
- Timing can present a problem – there may be limited time for fieldwork and consequently the volume of data collected may be limited.
- Secondary data is information that has been gathered from other sources/publications and collected by another person or organisation. This could include sources such as government reports/the census, the electoral roll, satellite images, map, research publications or internet based (including AI) sources.
- Data collected in this way might save time and effort compared with the collection of primary data.
- Secondary data sources can open up larger amounts of data – both historical records and from a wider spatial area. The use of remote technologies such as 'Big Data' and 'Crowd sourcing' can help.
- Secondary sources from organisations such as governments, NGOs or academic publications might be more reliable than data collected by individuals/student groups.
- Secondary data does have its problems though – it may be out-dated, it may have been collected for a different purpose and there may be bias depending on who collected the data/their original intention.
- Students working with secondary data are dependent on the original researchers for its reliability.
- All in all, both primary and secondary data are useful in geographical investigations and it is usually a combination of both that works well. Students can understand how data is collected and have the benefit of originally sourced data from primary sources, but can cross-check with secondary data and have access to a much larger data set when using secondary data.

Section B

Total for this section: 15 marks

Question	Part	Marking guidance	Total marks
06	1	<p>Explain the ethical considerations of your enquiry.</p> <p>AO2 – Application of knowledge and understanding to explain the ethical considerations involved in the student's enquiry.</p> <p>AO3 – Application of fieldwork and enquiry skills relating to the ethical considerations involved in the enquiry.</p>	<p>6</p> <p>AO2=2 AO3=4</p>

Level	Marks	Descriptor
2	4–6	<p>AO2 – Clear application of knowledge and understanding to explain the ethical considerations involved in the student's enquiry</p> <p>AO3 – Clear application of fieldwork and enquiry skills relating to the ethical considerations involved in the enquiry. For Level 2 there should be a real sense this connects to the enquiry undertaken and that it links to the student's experience.</p>
1	1–3	<p>AO2 – Basic application of knowledge and understanding to explain the ethical considerations involved in the student's enquiry.</p> <p>AO3 – Basic application of fieldwork and enquiry skills relating to the ethical considerations involved in the enquiry.</p>
0	0	No creditable content.

Indicative Content

- The precise answer will depend upon the student's own experience but it should have integrity and clearly link to the fieldwork outlined in the aim for Level 2.
- The ethical consideration is an important component of the fieldwork process and can relate to aspects of data collection, representation, use and storage of geographical data.
- The consideration of fieldwork ethics can be applied to both physical and human based enquiries.

Examples of ethical considerations include:

- In the data collection stage, the response may consider protection of the environment and treating people with respect at all times.
- Consideration and awareness of cultural differences should be a part of fieldwork.
- Permission should be sought when collecting data on private property.
- With regard to data itself, findings should be reported accurately. Any secondary data or supporting research should respect the original authors and their intellectual property.
- Information should be treated in confidence and the anonymity of respondents/subjects should be preserved unless otherwise agreed.
- In data presentation, faces/identities/personally attributable information should be obscured and in any use of photographs or individual properties, these should not be identifiable.

- Any research/findings should not be exaggerated, nor material left out if it does not fit the trend. Anomalies and outliers should be treated as authentic.
- Data protection and storage rules should be adhered to (eg European GDPR regulations).

Allow any other valid considerations with an ethical dimension that relate to the students' enquiry.

Question	Part	Marking guidance	Total marks
06	2	<p>To what extent did your data analysis method(s) help you reach a reliable conclusion to the aim of your enquiry?</p> <p>AO2 – Application of knowledge and understanding to link the method(s) of data analysis to the student's conclusion linked to the aim.</p> <p>AO3 – Application of fieldwork and enquiry skills relating to the analysis of geographical data and links to the enquiry conclusion.</p>	<p>9</p> <p>AO2=5 AO3=4</p>

Level	Marks	Descriptor
3	7–9	<p>AO2 – Detailed application of knowledge and understanding regarding the extent to which the method(s) of data analysis link to the student's conclusion stemming from the aim.</p> <p>AO3 – Detailed use of fieldwork and enquiry skills relating to the analysis of geographical data and links to the enquiry conclusion.</p> <p>For Level 3 there should be a focused sense the analysis has had some bearing on the conclusion. The method(s) of analysis could be cartographic, graphical, statistical and/or make use of ICT skills.</p>
2	4–6	<p>AO2 – Clear application of knowledge and understanding regarding the extent to which the method(s) of data analysis link to the student's conclusion stemming from the aim.</p> <p>AO3 – Clear use of fieldwork and enquiry skills relating to the analysis of geographical data and links to the enquiry conclusion.</p> <p>For Level 2 there should be a clear sense the analysis has had a bearing on the conclusion. The method(s) of analysis could be cartographic, graphical, statistical and/or make use of ICT skills.</p>
1	1–3	<p>AO2 – Basic application of knowledge and understanding regarding the extent to which the method(s) of data analysis link to the student's conclusion stemming from the aim.</p> <p>AO3 – Basic use of fieldwork and enquiry skills relating to the analysis of geographical data and links to the enquiry conclusion.</p> <p>At this level, there will be some basic description of an analytical approach that may link to a conclusion. The response may lack authenticity and could be considered somewhat generic.</p>
0	0	No creditable content.

Indicative Content

- Precise responses will depend upon the nature of the candidate's enquiry, the analysis carried out and the conclusions drawn. The specification requires students to analyse data using statistical techniques where appropriate or other techniques where it is not. They are required to draw conclusions with reference to the aims of the enquiry.
- For example, in an enquiry investigating the link between infiltration rates and distance down a vegetated slope, data was analysed using a scattergraph. The points were plotted and it was possible to see a pattern that with distance downslope there was a decrease in infiltration rate. The trend was not perfect but I was able to draw a line of best fit that showed the loose negative correlation. This allowed me to come to a conclusion that infiltration rates did fall the further down the slope, possible because the soil was becoming more saturated further down slope. However, there were a number of anomalies at 50 m, 230 m and 270 m down the slope where the infiltration rate was significantly higher than I expected. My conclusion at this stage was not totally clear. So, in order to analyse the data further I used the Spearman rank correlation coefficient. This produced a statistic of -0.45. This showed there was a weak negative correlation but not a statistically significant one. My final conclusion was that distance downslope is not the only factor that determines infiltration rates and this linked to my aim of investigating factors affecting hydrological processes on hillslopes in southern China.

Credit other valid responses.

Assessment Objective grid

	AO1	AO2	AO3	Total
Section A				
01	4			4
02.1	2	4		6
02.2			2	2
02.3			3	3
03.1			5	5
03.2			3	3
03.3	3		3	6
04.1			1	1
04.2	2	4		6
05	4	5		9
Section B				
06.1		2	4	6
06.2		5	4	9
Unit total	15	20	25	60