



**2015 Geography**

**Advanced Higher**

**Finalised Marking Instructions**

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## **Part One: General Marking Principles for: Geography Advanced Higher**

This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this Paper. These principles must be read in conjunction with the specific Marking Instructions for each question.

- (a)** Marks for each candidate response must always be assigned in line with these general marking principles and the specific Marking Instructions for the relevant question. If a specific candidate response does not seem to be covered by either the principles or detailed Marking Instructions, and you are uncertain how to assess it, you must seek guidance from your Team Leader/Principal Assessor.
- (b)** Marking should always be positive ie, marks should be awarded for what is correct and not deducted for errors or omissions.

### **GENERAL MARKING ADVICE: Geography Advanced Higher**

The marking schemes are written to assist in determining the “minimal acceptable answer” rather than listing every possible correct and incorrect answer. The following notes are offered to support Markers in making judgements on candidates’ evidence, and apply to marking both end of unit assessments and course assessments.

## Part Two: Marking Instructions for each Question

### Section A

Question		Expected Answer(s)	Max Mark	Additional Guidance
1.	(a)	<p>The question asks for the use of an existing building, not a new build, and grazing fields. Candidates must therefore have chosen an existing building/set of buildings have included them and some fields/parts of fields in the 500 x 500 m area. There are many possibilities, but if we look at Shiningford Farm in square 2452, or Sycamore Farm in 2653 they could easily address the requirements of the development. Two marks for suitability of chosen site and two for drawing to scale.</p>	4	
1.	(b)	<p>By choosing an existing building, access should be easy. This is not a huge development so should not require major road works in any case – but transport links from the development to main roads and rail links should be mentioned and named. Comments could relate to slope or flatness of the fields and their use for the horses.</p> <p>Opportunities for riding in the lower land near Carsington Water as well as more adventurous trails into the National Park. There are examples throughout of routes which can be used including marked bridleways, cycle routes which can be used as bridleways and quiet local roads.</p> <p>It is likely the development will attract locals from nearby, named villages/towns as well as visitors, who may well have visited the National Park, the Derwent Valley or Carsington Water. There are obvious links for visitors between this development and existing attractions. The use of the buildings themselves for the proposed B&amp;B accommodation and stables and the development of office space – if this is successful, it could be further developed and the other fields/buildings may be identified for this purpose or for the addition of self-catering &amp; c.</p> <p>Depending on choice of site, candidates could include reference to areas of woodland for scenic value, shade for horses: views over Carsington Water: ability to use facilities of local villages for pubs, restaurants or for hotel accommodation for those on mixed purpose holidays.</p> <p>Opportunities for full and part time jobs for locals.</p>	10	

Question		Expected Answer(s)	Max Mark	Additional Guidance
1.	(c)	<p>Any suitably, accurately drawn route should be accepted. Starting and finishing at the edge of the chosen site should avoid confusion when marking part (a).</p> <p>One choice might be round Carsington Water which is about 8 miles/12 kms but there are many other options. The question asks for use of existing routes so cross-country routes should be penalised.</p>	6	
1.	(d)	<p>Depending on the choice of route, it may be on a mix of gentle/flat slopes or mix gentle with more demanding.</p> <p>Round Carsington Water ideas may include: views of the Water, wooded landscapes, interesting route skirting Water but need to complete it in the northern section so may choose to go through the villages of Carsington and Hopton. Opportunities for picnic sites, visitor centre information &amp; c. may provide ideas for future activities when in the area eg sailing, fishing, cycling, walking.</p> <p>If the choice of route is more demanding eg north towards the National Park, the slopes are steeper and more challenging for horses and riders and the scenery higher and a bit more rugged. Old mines, farms: different uphill and downhill views for the return journey.</p>	10	

**(30)**

Question		Expected Answer(s)	Max Mark	Additional Guidance
	(a)	<p>In the north the valley is broad (up to 1km), flat bottomed at about 95m; river meanders: in a flood plain: depending on point of choice in this section, height and steepness of valley sides should be described.</p> <p>Valley narrows quite quickly NW of Matlock and becomes more gorge-like with narrow valley bottom and steep to very steep sides: bluffs: again this will vary with actual point sampled. May mention incised meander eg 2958. May refer to possible change in rock type to help explain the change from broad to narrow valley. In square 3057 the valley opens out again but not to the same degree as in the north. Opportunities to mention changes in width and varying amount of flat land/flood plain in the valley bottom and in steepness of valley sides.</p>	14	
2.	(b)	<p>In the north there is space for farming in the valley bottom; examples of farms; use of valley for rail line; ability to have straight section of line, Peak Railway. Wide variety of road development often at the edge of the valley to avoid danger of flooding.</p> <p>Range of urban/semi-urban and industrial buildings. As valley narrows at Matlock more bridging points; steeper land and links to town building: restrictions on building, transport.</p> <p>Along the gorge section – woodland distribution; caves/caverns (link to possibly rock type in (a) now as tourist attractions: note use of rail tunnel where there is lack of space in the valley: opportunities for development of playing fields and picnic places as valley widens out again (flood danger acceptable for these types of land use)</p> <p>Some evidence of works and mills at various points to link to World Heritage site status</p> <p>Visitor Centre could be for World Heritage site displays</p> <p>Derwent Valley Heritage Way.</p>	16	

(30)

**Section B**

Question		Expected Answer(s)				Max Mark	Additional Guidance																																																															
3.	(a)	There is no relationship between the distance people travelled to the National Park and how long they stayed.				1																																																																
3.	(b)	<table border="1"> <thead> <tr> <th>Group</th> <th>Length of visit</th> <th>O</th> <th>E</th> <th>(O-E)</th> <th>(O-E)<sup>2</sup></th> <th><math>\frac{(O-E)^2}{E}</math></th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Up to 4 hours</td> <td>32</td> <td>24.02</td> <td>7.98</td> <td>63.69</td> <td>2.65</td> </tr> <tr> <td>A</td> <td>4-24 hours</td> <td>53</td> <td>40.22</td> <td>12.78</td> <td>163.33</td> <td>4.06</td> </tr> <tr> <td>A</td> <td>More than 24 hours</td> <td>15</td> <td>35.75</td> <td>-20.75</td> <td>430.56</td> <td>12.04</td> </tr> <tr> <td>B</td> <td>Up to 4 hours</td> <td>11</td> <td>18.98</td> <td>-7.98</td> <td>63.68</td> <td>3.36</td> </tr> <tr> <td>B</td> <td>4-24 hours</td> <td>19</td> <td>31.77</td> <td>-12.77</td> <td>163.07</td> <td>5.13</td> </tr> <tr> <td>B</td> <td>More than 24 hours</td> <td>49</td> <td>28.25</td> <td>20.75</td> <td>430.56</td> <td>15.24</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Grand total</td> <td>179</td> <td></td> <td></td> <td><math>\Sigma =</math></td> <td>42.48</td> </tr> </tbody> </table>				Group	Length of visit	O	E	(O-E)	(O-E) <sup>2</sup>	$\frac{(O-E)^2}{E}$	A	Up to 4 hours	32	24.02	7.98	63.69	2.65	A	4-24 hours	53	40.22	12.78	163.33	4.06	A	More than 24 hours	15	35.75	-20.75	430.56	12.04	B	Up to 4 hours	11	18.98	-7.98	63.68	3.36	B	4-24 hours	19	31.77	-12.77	163.07	5.13	B	More than 24 hours	49	28.25	20.75	430.56	15.24									Grand total	179			$\Sigma =$	42.48		
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		$X^2 = \Sigma \frac{(O-E)^2}{E}$ $X^2 = 42.48$ <p>Degrees of freedom = (2-1) × (3-1) = 1 × 2 = 2</p> <p>The significance value at 0.05 significance level is 5.99 The calculated value is much larger than the table value so we, therefore, must reject the null hypothesis and accept the alternative hypothesis that there is a relationship between the distance people travel to the National Park and the length of time that they visited.</p>																																																																				

Question		Expected Answer(s)	Max Mark	Additional Guidance
3	(c)	<p>The test is useful in measuring the differences between what has been observed and what is expected. It is useful when the expected distribution of data is not known. Useful when the data can be grouped into classes. The <math>X^2</math> value can be compared with the significance tables to confirm whether the deviation from random in the observed data is merely a chance effect or does pose statistical significance.</p> <p>There are limitations with the test. There has to be a minimum of 20 observations. Data must be the form of frequencies. Data must have precise numerical values and be organised into categories or groups. The expected frequency in any one cell must be greater than 5.</p>	4	
3.	(d)	<p>The table shows that for the group of people who live closest to the park are more likely to visit for a shorter length of time than the other group. This could be because this group will visit the National Park on a more regular basis so do not need to spend so much time for each visit. The activities that they do are likely to be activities which may take a few hours to do eg walking, mountain biking, sightseeing.</p> <p>For the group that live further away their stay will last longer as the group will be more likely to stay at the National Park for a short break or longer holiday and are not likely to visit the National Park on a regular basis.</p> <p>From the atlas, students should be able to identify that the more populated areas are much further away than 30 km so people are more likely to have to travel further to visit the National Park and take part in the various activities that can be found there.</p> <p>The activities that can be found in the National Park are varied enough that people staying for different lengths of time can find something to do.</p>	9	

(20)

Question		Expected Answer(s)	Max Mark	Additional Guidance
4.	(a)	<ul style="list-style-type: none"> <li>Allows data to be compared easily</li> <li>Results can be displayed on one graph</li> <li>Shows negative and positive responses clearly</li> <li>Scores are easily identified</li> <li>Results could have been shown on a radar graph or a multiple line graph.</li> </ul>	4	
4.	(b)	<ul style="list-style-type: none"> <li>Site 2 has more positive values and scores +5 for both condition of buildings and provision of car parking</li> <li>Site 3 has only negative scorings but mainly range between -2 and -3</li> <li>Site 1 has three positive values and the rest are negative, scoring a -5 for parking provision</li> <li>All three sites have negative scores for noise.</li> </ul>	4	
4.	(c)	<p><b>Reasons for distribution</b></p> <ul style="list-style-type: none"> <li>To the NW they are found in a line – a main road</li> <li>Most are found close to the potential site (close to other services)</li> <li>Few in the east – could be open space, industrial land, mainly residential</li> <li>To the S and SE the coffee shops could be located in smaller villages/commuter settlements.</li> </ul> <p><b>Other information</b></p> <ul style="list-style-type: none"> <li>A land use map</li> <li>Topographic map</li> <li>Photographs</li> <li>Aerial photograph</li> </ul> <ul style="list-style-type: none"> <li>Must make reference to both parts to get full marks, otherwise mark out of 4.</li> </ul>	6	



Question			Expected Answer(s)	Max Mark	Additional Guidance
4.	(d)	(i)	Flow map – brief description but must mention the need for accurate scale on arrow width. Credit could be given for diagrams.		
4.	(d)	(ii)	The direction of pedestrian flow can be easily compared on both sides of the street.	6	

(20)

## Section C

Question		Expected Answer(s)	Max Mark	Additional Guidance
5.	(a)	<p>This is a very open, and straightforward question that should allow students to reflect on their understanding of statistical methods of analysis in the Geographical Methods and Techniques part of the AH Geography programme. Thus a wide range of responses are acceptable, though there are some techniques that are more applicable to the sort of data being investigated.</p> <p>The most appropriate techniques are correlation coefficients. If only one is mentioned or there is no specification of correlation coefficient type, give two marks. Chi Square could be used by categorising days into rain days/dry days and sunny days/cloudy days, but this is not really appropriate as methods of assessing distribution (standard deviation). Give one mark for these. It is likely that these latter responses will not provide a useful means of discussing advantages and disadvantages in part (b).</p>	5	
5.	(b)	<p>Good answers will focus on the utility of Pearson and Spearman correlation coefficients, pointing out that the former is a stronger test but requires real number, ratio data. Spearman is easier to compute but should not be used when it is possible to compute the Pearson test. Good answers will note the type and quality of the data available. Give up to 2 marks for the discussion of each technique and up to 2 marks for discussion of the data. These latter 3 marks can be awarded if the discussion is embedded in the discussion of specific techniques. Bar charts or graphs set out using the same dimension of X axis (time base) provides a visual but purely descriptive method of comparison.</p> <p>It is unlikely that discussion of other techniques will gain more than 1 mark. However a very good review of an essentially inappropriate method, which focuses accurately on disadvantages, may gain 2 marks.</p>	5	

(10)

[END OF MARKING INSTRUCTIONS]