

Advanced GCE

Geography

Unit F764: Geographical Skills

Specimen Paper

F764 QP

Morning/Afternoon

Time: 1 hour 30 minutes

Additional Materials: Answer Booklet (8 pages)
Insert



INSTRUCTIONS TO CANDIDATES

- Answer **one** question from Section A based upon geographical research.
- Answer **two** questions from Section B based upon the geographical investigations you have undertaken as part of your course.
- Answer **three** questions in total.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part of question.
- The total number of marks for this paper is **60**.

ADVICE TO CANDIDATES

- Read each question carefully and make sure you know what you have to do before starting your answer.
- You will be assessed on your ability to synthesise the knowledge, understanding and skills derived from your Advanced GCE Geography course and in your answers you should show understanding of connections between the different aspects of Geography represented in the whole of the A level Geography specification.

This document consists of 5 printed pages and an insert.

Section A
Geographical research

Candidates should answer **one** of the following questions.

- 1** **Figs 1, 2 and 3** present some of the results of a geographical investigation into the following question:

‘How and why does vegetation change across the shingle ridge succession at Slapton Sands in South Devon?’

- (a) Evaluate the effectiveness of **Figs 1, 2 and 3** in representing the data used to answer the research question. [5]
- (b) How can relevant statistical and computer based techniques be used in the analysis of variables that contribute to vegetation change in a succession? [10]
- (c) Suggest, with reference to other Geographical factors, why the results from such an investigation of variations in vegetation types might be unreliable. [5]

Or:

- 2** **Figs 4 and 5** present some of the results of geographical research into the following question:

‘How and why do the characteristics of the River Tawe change with distance downstream?’

- (a) Using the evidence in **Figs 4 and 5**, describe how the characteristics of the River Tawe change with distance downstream. [5]
- (b) How can relevant statistical and computer based techniques be used in the analysis of variables that contribute to stream efficiency and its downstream changes? [10]
- (c) Suggest, with reference to other Geographical factors, why the results from an investigation of variations in stream efficiency downstream might be unreliable. [5]

Or

3. **Figs 6, 7 and 8** show the area in and around Edinburgh being used as part of a land use survey to answer the following question:

‘Does the intensity of land use decrease with distance from the centre of Edinburgh?’

- (a) With reference to **Figs 6, 7 and 8**, assess the suitability of this research tool for gathering such information. [5]
- (b) How can relevant statistical and computer based techniques be used in the analysis of patterns of land use? [10]
- (c) Outline the uses of GIS in geographical modelling and simulations. [5]

Section A Total [20]

[Turn Over

Section B**Geographical Investigation**

Candidates should answer **both** of the following questions.

- 4 Using your fieldwork and research experience at A Level describe the use you made of modern technology in data collection, recording and presentation and assess its value. **[20]**
- 5 State the nature of an investigation (fieldwork/research) conducted during your A Level studies. What was the conclusion to your investigation? How did you reach this conclusion and to what extent was it geographically sound? **[20]**

Section B Total [40]

Paper Total [60]

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Advanced GCE

GEOGRAPHY

F764MS

Unit F764: Geographical Skills

Specimen Mark Scheme

The maximum mark for this paper is **60**.

SPECIMEN

Section A		
Question Number	Mark Scheme	Marks
1	Figs 1, 2 and 3 presents some of the results of a geographical investigation into the following question: 'How and why does vegetation change across the shingle ridge succession at Slapton Sands in south Devon?'	
1 (a)	<p>Evaluate the effectiveness of Fig 1, 2 and 3 in representing the data used to answer the research question.</p> <p>Kite diagram shows types of vegetation with distance so it shows how it does change in a longitudinal way. Visually effective and can give statistical information but only looks at species so ignores other features e.g. height, cover etc, doesn't indicate why, is visual but doesn't indicate degree of change i.e. correlation</p> <p>Level 2: Candidates clearly evaluate Figures 1, 2 and 3 giving a wide range of advantages and limitations well linked to the question. Clear reference made to figures.</p> <p>Level 1: Candidates give a limited evaluation of Figures 1, 2 and 3 with an unbalanced range of advantages and limitations with little, if any, linkage to the question or figures.</p>	<p>[4-5]</p> <p>[1-3]</p>
1 (b)	<p>How can relevant statistical and computer based techniques be used in the analysis of variables that contribute to vegetation change in a succession?</p> <p>Statistical techniques could include various correlation techniques, descriptive statistics e.g. mean etc</p> <p>Computer based could include satellite images or remote sensing of variables such as moisture, pH, organic content, salinity etc as well as computer based correlation techniques.</p> <p>Candidates may instead use examples from their own fieldwork to show how such techniques could be used to measure the variables.</p> <p>Level 3: Candidates clearly describe a range of appropriate techniques that can be used and explain in detail why the chosen techniques are effective in analysing relevant variables that contribute to vegetation change.</p> <p>Level 2: Candidates clearly describe a limited (two) range of appropriate techniques that can be used and explain why the chosen techniques are effective in analysing relevant variables that contribute to vegetation change. Alternatively, candidates may describe techniques that are only partially appropriate, but provide reasoned explanation of why the chosen technique may be effective in analysing the variables.</p>	<p>[8-10]</p> <p>[5-7]</p>

Section A		
Question Number	Mark Scheme	Marks
1 (c)	<p>Level 1: Candidates may describe a technique that is only partially appropriate to demonstrate the relationship between distance and vegetation, and are unable to provide an explanation of why the chosen technique may be effective in analysing the variables.</p>	[0-4]
	<p>Suggest, with reference to other geographical factors, why the results from such an investigation of variations in vegetation types might be unreliable.</p> <p>This draws on a wide range of factors. Many will focus on the role of human factors e.g. fires, trampling, planting vegetation etc. Equally well micro-climate, wild life, wind action, rainfall, etc may play a role that complicates the simple succession of vegetation types. Others may look at factors that impact on the carrying out of the investigation.</p> <p>Level 2: Candidates give detailed suggestions (two or more) of appropriate factors with clear cause-effect on the reliability of the investigation. Clear Synopticity demonstrated.</p>	[4-5]
	<p>Level 1: Candidates give limited suggestions (either a superficial range or one in detail) of appropriate factors with little, if any, cause-effect on the reliability of the investigation.</p>	[0-3]
2	<p>Fig. 4 and 5 present some of the results into the following question: 'How and why do the characteristics of the River Tawe change with distance downstream?'</p>	
2(a)	<p>Using the evidence in Fig 4 and 5, describe how the characteristics of the River Tawe change with distance downstream.</p> <p>Level 2: Candidates clearly describe the differences in the stream cross-sections in terms of shape, width and depth and support their answers with specific reference to the data in the resource material by quoting figures.</p> <p>Level 1: Candidates either identify no more than one difference in the stream cross-sections, but support their answer with direct reference to the data in the resource material, or identify two differences in the stream cross-sections without reference to the data in the support material.</p>	[4-5]
2(b)	<p>How can relevant statistical and computer based techniques be used in the analysis of variables that contribute to stream efficiency and its downstream changes?</p> <p>Statistical techniques could include various correlation techniques, descriptive statistics e.g. mean etc</p> <p>Computer based could include satellite images or remote sensing of variables such as local climate, drainage density, geology, gradient, vegetation etc as well as computer based correlation techniques.</p> <p>Candidates may instead use examples from their own fieldwork to show how such techniques could be used to measure the variables.</p>	[0-3]

Section A		
Question Number	Mark Scheme	Marks
2(b) Cont'd	<p>Level 3: Candidates clearly describe a range of appropriate techniques that can be used and explain in detail why the chosen techniques are effective in analysing relevant variables that contribute to downstream change.</p> <p>Level 2: Candidates clearly describe a limited (two) range of appropriate techniques that can be used and explain why the chosen techniques are effective in analysing relevant variables that contribute to downstream change. Alternatively, candidates may describe techniques that are only partially appropriate, but provide reasoned explanation of why the chosen technique may be effective in analysing the variables.</p> <p>Level 1: Candidates may describe a technique that is only partially appropriate to demonstrate the relationship between distance and stream characteristics and are unable to provide an explanation of why the chosen technique may be effective in analysing the variables.</p>	[8-10]
2(c)	<p>Suggest, with reference to other geographical factors, why the results from such an investigation of variations in stream efficiency downstream might be unreliable.</p> <p>This draws on a wide range of factors. Many will focus on the role of human factors e.g. channel modification, drainage, dams, urbanisation etc. Equally well micro-climate, vegetation, rock type, rainfall, etc may play a role that complicates the simple succession of vegetation types. Others may look at factors that impact on the carrying out of the investigation.</p> <p>Level 2: Candidates give detailed suggestions (two or more) of appropriate factors with clear cause-effect on the reliability of the investigation. Clear Synopticity demonstrated.</p> <p>Level 1: Candidates give limited suggestions (either a superficial range or one in detail) of appropriate factors with little, if any, cause-effect on the reliability of the investigation.</p>	[5-7] [0-4] [4-5] [0-3]
3 3 (a)	<p>Figs 6, 7 and 8 show the area in and around Edinburgh being used as part of a land use survey to answer the following question:</p> <p>‘Does the intensity of land use decrease with distance from the centre of Edinburgh?’</p> <p>With reference to Fig 6, 7 and 8, assess the suitability of this research tool for gathering such information.</p> <p>Satellite photos give a “snap shot” image so provide land use data at that time. This enables spatial analysis of changing land use. However this does not address all the factors that relate to intensity. Reference to all three figures should be made.</p>	[5]

Section A		
Question Number	Mark Scheme	Marks
3(a) cont'd	<p>Level 2: Candidates clearly assess the suitability of a satellite image in researching the question with a clear appreciation of its strengths and weaknesses although these may not be balanced. They support their answers with specific reference to the image and/or question.</p>	[4-5]
	<p>Level 1: Candidates assess in a limited way the suitability of a satellite image in researching the question with a limited appreciation of its strengths and weaknesses. These will not be balanced with far more of one aspect. They offer little support of their answers with specific reference to the image and/or question.</p>	[0-3]
3 (b)	<p>How can relevant statistical and computer based techniques be used in the analysis of patterns of land use?</p> <p>Statistical techniques could include various correlation techniques e.g. chi squared, nearest neighbour, descriptive statistics e.g. mean etc. Computer based could include satellite images or remote sensing of variables such as local climate, drainage density, geology, gradient, vegetation etc as well as computer based correlation techniques.</p>	[10]
	<p>Level 3: Candidates clearly describe a range of appropriate techniques that can be used and explain in detail why the chosen techniques are effective in analysing patterns of land use.</p>	[8-10]
	<p>Level 2: Candidates clearly describe a limited (two) range of appropriate techniques that can be used and explain why the chosen techniques are effective in analysing patterns of land use. Alternatively, candidates may describe techniques that are only partially appropriate, but provide reasoned explanation of why the chosen technique may be effective in analysing the pattern of land use.</p>	[5-7]
	<p>Level 1: Candidates may describe a technique that is only partially appropriate to analyse patterns of land use and are unable to provide an explanation of why the chosen technique may be effective in analysing the pattern.</p>	[0-4]

Section A		
Question Number	Mark Scheme	Marks
3 (c)	<p>Outline the uses of GIS in geographical modelling and simulations.</p> <p>To some extent the answers will reflect the experience of candidates in geographical modelling and simulations. Clearly they simplify reality so allowing the interaction of a range of variables to identify patterns and trends. More complex ones involve the chance element (Stochastic). Some borrow models from other disciplines e.g. systems.</p> <p>Level 2: Candidates clearly outline a range of uses of GIS in a range of geographical modelling and simulations well supported with specific examples.</p> <p>Level 1: Candidates outline a limited range of uses of GIS in either a limited range of geographical modelling and simulations or with a focus on either models or simulations. Little support from specific examples.</p>	<p>[5]</p> <p>[4-5]</p> <p>[0-3]</p>
	Section A Total	[20]

Section B		
Question Number	Mark Scheme	Marks
4	<p>Using your fieldwork and research experience at A Level describe the use you made of modern technology in data collection, recording and presentation and assess its value.</p> <p>Clear evidence of use of modern technology. Description of how the modern technology was used and not of technology itself. Evidence of application to data collection AND data recording AND data presentation should be made clear.</p> <p>Indication of benefits of using modern technology compared with not using it. Assessment of value should include evidence linked to fieldwork rather than generic information.</p> <p>If either aspect missing then max L2.</p> <p>Level 3: All aspects of indicative content covered in a fieldwork focused context.</p> <p>Well structured answers with accurate use of Geographical terminology.</p> <p>Level 2: Description of use of technology combined with assessment of value but partially related to fieldwork. Competent description but no assessment of value or vice versa.</p> <p>Answer may have poor structure with some inaccurate spelling and inaccurate use of geographical terminology.</p> <p>Level 1: Candidates offer limited description of the technology used which may be combined with limited assessment of value. Tends to be generic rather than linked to fieldwork across AS and A2 at bottom of level. Communication is basic with little structure and inaccurate spelling.</p>	<p>[16-20]</p> <p>[10-15]</p> <p>[0-9]</p>

Section B		
Question Number	Mark Scheme	Marks
5	<p>State the nature of an investigation (fieldwork/research) conducted during your A Level studies. What was the conclusion to your investigation? How did you reach this conclusion and to what extent was it geographically sound?</p> <p>Introductory statements about the nature of the two investigations conducted.</p> <p>Clear reference a fieldwork/research investigation undertaken during A Level Studies.</p> <p>Conclusions should be quite specific and related to the hypothesis or question that was being investigated. The description of how they were reached should focus on the interpretation of the analysis rather than simple methodology. The discriminating aspect is the evaluation of the extent and this should be related strongly to some geographical concept and/or model. Weaker answers will merely say the conclusions did match theory.</p> <p>Level 3: Candidates explain in detail the conclusions reached and how they were obtained. A detailed evaluation of the extent to which they related to particular geographical model or concept is expected and clearly related to the question or hypothesis stated. Answer is well structured with effective use of grammar and spelling. Geographical terminology is used accurately.</p> <p>Level 2: Candidates explain the conclusions reached and how they were obtained. An evaluation of the extent to which they related to particular geographical model or concept is expected and some relation to the question or hypothesis stated. Answer may have poor structure with some inaccurate spelling and inaccurate use of geographical terminology.</p> <p>Level 1: Candidates offer very limited explanation of the conclusions reached and vaguely how they were obtained. Little, if any, evaluation of the extent to which they related to particular geographical model or concept is expected and with little relation to the question or hypothesis stated. Candidates offer limited explanation of the methods used and few, if any, reasons why they conducted a risk assessment and relate them in a very limited way, or not at all, to the question or hypothesis stated. Communication is basic with little structure and inaccurate spelling.</p>	<p>[16-20]</p> <p>[10-15]</p> <p>[0-9]</p>
Section B Total		[40]
Paper Total		[60]

Assessment Objectives Grid (includes QWC)

Question	AO1	AO2	AO3	Total
1 x Q1 or 2 or 3	9	7	4	20
1 x Q4	3	4	8	20
1 x Q5	3	4	8	20
Totals	15	15	20	60

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