Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer all questions in Sections A and B.
- In Section C1 answer either Question 8 or Question 9.
- In Section C2 answer either Question 10 or Question 11.
- Answer the questions in the spaces provided – there may be more space than you need.
- Where asked you must show all your working out with your answer clearly identified at the end of your solution.

Information

- The total mark for this paper is 94.
- The marks for each question are shown in brackets – use this as a guide as to how much time to spend on each question.
- The marks available for spelling, punctuation, grammar and use of specialist terminology are clearly indicated.

Advice

- Read each question carefully before you start to answer it
- Check your answers if you have time at the end.
SECTION A
The UK’s Evolving Physical Landscape

Answer ALL questions in this section. Write your answers in the spaces provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an
answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 Study Figure 1 which is a photograph of a landscape in southern England.

Figure 1

(a) Identify which one of the following is the most likely rock type of this landscape.

☐ A Granite
☐ B Schist
☐ C Chalk
☐ D Clay

(b) Identify which one of the following is an igneous rock.

☐ A Granite
☐ B Schist
☐ C Chalk
☐ D Clay
(c) Explain **one** difference in the climates of uplands and lowlands in the UK.

(Total for Question 1 = 4 marks)
Coastal Change and Conflict

2 (a) Study Figure 2 which is a photograph of part of the coastline of Suffolk, looking northwards.

![Coastline Photograph](image)

(i) State the process that moves sediment along this coastline.

(ii) Identify which one of the following is the most likely direction of sediment movement along this coastline.

- A east to west
- B north to south
- C south to north
- D west to east
(iii) Explain one reason for your answer to (a)(ii).

(b) Explain why there is an increasing risk of coastal flooding on many UK coastlines.

(Total for Question 2 = 8 marks)
Study Figure 3 which is a hydrograph showing the changing discharge of the River Thames at Kingston during a major flood event.

Figure 3

(a) Identify which **one** of the following is the best description of this flood event.  

☐ A  Discharge exceeded 500 cumecs for over 20 days.  
☐ B  Peak discharge was 1000 cumecs higher than discharge on Day 1.  
☐ C  Peak discharge was over 20 times higher than discharge on Day 1.  
☐ D  Discharge was highest on Day 58.

(b) Explain **one** reason why high discharge is likely to increase erosion.  

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(c) Explain **two** ways in which human activities can affect storm hydrographs. (4)

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2. ..........................................................................................................................

(Total for Question 3 = 7 marks)
Investigating a UK Geographical Issue

4 Analyse Figure 4a and Figure 4b which show data about the climate and land use of Scotland.

- Figure 4a shows the annual average precipitation for Scotland.
- Figure 4b shows the land use of Scotland.
Assess the influence of precipitation on land use in Scotland.
SECTION B
The UK's Evolving Human Landscape

Answer ALL questions in this section. Write your answers in the space provided.

Some questions must be answered with a cross in a box ☒. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

5 (a) Study Figure 5 which shows the employment status of men and women aged 16 and over in the UK for 2016.

![Figure 5](image)

Economically inactive women aged 65 and over (5.65 million)
Economically inactive men aged 65 and over (4.44 million)
Economically inactive women aged 16 to 64 (5.59 million)
Economically inactive men aged 16 to 64 (3.33 million)
Unemployed women (756,000)
Unemployed men (919,000)
Women working full-time (8.47 million)
Men working part-time (2.24 million)
Men working full-time (14.49 million)
Women working part-time (6.19 million)

Figure 5

(i) Identify which one of the following is the total number of economically inactive men and women aged 65 and over.

- [ ] Just over 5 million
- [ ] Just over 10 million
- [ ] Just over 15 million
- [ ] Just over 20 million
(ii) Calculate the percentage of the population aged 16 and over who were in full-time employment in 2016.

Answer to one decimal place.

You must show your working in the space below.

.............................................................. %

(iii) State two possible reasons why employment of women has grown in recent years.

1 .......................................................................................................................... ...
2 .......................................................................................................................... ...

(b) Explain one impact of globalisation on secondary sector employment in the UK.

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(Total for Question 5 = 7 marks)
(a) Study Figure 6a which shows variations in GCSE scores in the London Boroughs and Figure 6b which shows both GCSE scores and variations in child poverty.

The size of the Borough compared to Figure 6a is scaled according to levels of child poverty so, for example, when a borough is larger than shown on Figure 6a it has high child poverty.
(i) Identify which **one** of the following London boroughs has the highest GCSE scores.

- A  Lambeth
- B  Enfield
- C  Kingston upon Thames
- D  Islington

(ii) State a relationship between child poverty and GCSE scores that could be investigated.

(iii) Explain **one** reason why child poverty varies between different parts of a city.
(b) For a named UK city, explain two reasons why the functions of its inner-city areas have changed in recent years.

Named UK city ................................................................. (4)

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2 ..........................................................................................................................
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(c) For a named UK city, explain why changes in the city have caused economic and social changes in the surrounding accessible rural areas.

Named UK city ............................................................................................

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(Total for Question 6 = 12 marks)
7 Analyse the information in Figure 7 which shows the percentage of the population of England and Wales born outside the UK, based on the 2011 Census data.

![Figure 7](image)

**Percentage**
(Total number of areas = 348)

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Region Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.1 and above</td>
<td>65</td>
</tr>
<tr>
<td>10.1 to 15.0</td>
<td>57</td>
</tr>
<tr>
<td>7.6 to 10.0</td>
<td>54</td>
</tr>
<tr>
<td>5.1 to 7.5</td>
<td>74</td>
</tr>
<tr>
<td>2.6 to 5.0</td>
<td>91</td>
</tr>
<tr>
<td>2.5 and below</td>
<td>7</td>
</tr>
</tbody>
</table>

**Figure 7**

Assess the causes of variations in the distribution shown in Figure 7.

(8)
SECTION C1
Geographical Investigations: Fieldwork in a Physical Environment

Answer EITHER Question 8 OR Question 9 in this section.
Write your answers in the space provided.

Some questions must be answered with a cross in a box ☑. If you change your mind about an
answer, put a line through the box ☑ and then mark your new answer with a cross ☑.

If you answer Question 8 put a cross in the box ☑.

Investigating Coastal Change and Conflict

8 (a) Study Figure 8, which is the data collected by a group of students studying beach
profiles in two different locations with contrasting rock types.

- The students measured beach gradient at four sites in two contrasting locations
  chosen using a geology map.
- They measured beach gradient using ranging poles, tapes and a clinometer.
- At each location they followed a straight line transect measuring gradient at four
different positions from the shoreline to the cliff line.

<table>
<thead>
<tr>
<th>Location 1</th>
<th>Geology = Boulder Clay</th>
<th>Average beach gradient (Degrees°)</th>
<th>Maximum beach gradient (Degrees°)</th>
<th>Minimum beach gradient (Degrees°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1</td>
<td>7°</td>
<td>10°</td>
<td>3°</td>
<td></td>
</tr>
<tr>
<td>Site 2</td>
<td>5°</td>
<td>11°</td>
<td>2°</td>
<td></td>
</tr>
<tr>
<td>Site 3</td>
<td>6°</td>
<td>12°</td>
<td>2°</td>
<td></td>
</tr>
<tr>
<td>Site 4</td>
<td>8°</td>
<td>15°</td>
<td>4°</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location 2</th>
<th>Geology = Sandstone</th>
<th>Average beach gradient (Degrees°)</th>
<th>Maximum beach gradient (Degrees°)</th>
<th>Minimum beach gradient (Degrees°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1</td>
<td>4°</td>
<td>6°</td>
<td>2°</td>
<td></td>
</tr>
<tr>
<td>Site 2</td>
<td>5°</td>
<td>7°</td>
<td>2°</td>
<td></td>
</tr>
<tr>
<td>Site 3</td>
<td>4°</td>
<td>8°</td>
<td>3°</td>
<td></td>
</tr>
<tr>
<td>Site 4</td>
<td>3°</td>
<td>5°</td>
<td>2°</td>
<td></td>
</tr>
</tbody>
</table>

Figure 8
(i) Suggest a suitable enquiry question that the students could have investigated.

(ii) Suggest two factors which should have been considered when choosing the fieldwork locations.

1

2

(iii) Describe the results of the students’ fieldwork shown on Figure 8.
(b) You have carried out your own fieldwork investigating the impact of coastal management on coastal processes and communities.

Name your coastal environment fieldwork location:

Assess the role of secondary data sources in your investigation.
(Total for Question 8 = 18 marks)
Investigating River Processes and Pressures

9  (a) Study Figure 9, which is the data collected by a group of students studying river gradient changes in two different upland locations with contrasting rock types.

- The students measured river gradient on two different streams at locations chosen using a geology map.
- They measured river gradient at eight sites at each location using ranging poles, tapes and a clinometer.
- The sites were about 1 km apart with Site 1 furthest upstream and Site 8 furthest downstream.

<table>
<thead>
<tr>
<th>Location 1 – Boulder Clay</th>
<th>Gradient (degrees°)</th>
<th>Location 2 – Sandstone</th>
<th>Gradient (degrees°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1</td>
<td>7</td>
<td>Site 1</td>
<td>12</td>
</tr>
<tr>
<td>Site 2</td>
<td>7</td>
<td>Site 2</td>
<td>8</td>
</tr>
<tr>
<td>Site 3</td>
<td>6</td>
<td>Site 3</td>
<td>10</td>
</tr>
<tr>
<td>Site 4</td>
<td>6</td>
<td>Site 4</td>
<td>9</td>
</tr>
<tr>
<td>Site 5</td>
<td>5</td>
<td>Site 5</td>
<td>4</td>
</tr>
<tr>
<td>Site 6</td>
<td>6</td>
<td>Site 6</td>
<td>4</td>
</tr>
<tr>
<td>Site 7</td>
<td>4</td>
<td>Site 7</td>
<td>10</td>
</tr>
<tr>
<td>Site 8</td>
<td>3</td>
<td>Site 8</td>
<td>7</td>
</tr>
<tr>
<td><strong>Average Gradient</strong></td>
<td><strong>5.5</strong></td>
<td><strong>Average Gradient</strong></td>
<td><strong>8.0</strong></td>
</tr>
</tbody>
</table>

**Figure 9**

(i) Suggest a suitable enquiry question that the students could have investigated.

(2)
(ii) Suggest **two** factors which should have been considered when choosing the fieldwork locations.

1

2

(iii) Describe the results of the students' fieldwork shown on Figure 9.
(b) You have carried out your own fieldwork investigating how and why drainage basin characteristics influence flood risk for people and property.

Name your river environment fieldwork location:

Assess the role of secondary data sources in your investigation. (8)
SECTION C2

Geographical Investigations: Fieldwork in a Human Environment

Answer EITHER Question 10 or Question 11 in this section. Write your answers in the space provided.

Some questions must be answered with a cross in a box ☐. If you change your mind about an answer, put a line through the box ☐ and then mark your new answer with a cross ☐.

If you answer Question 10 put a cross in the box ☐.

Investigating Dynamic Urban Areas

10 You have carried out your own fieldwork investigating environmental quality in an urban area.

Name your urban area:

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(a) Explain one reason why you chose that urban area. (2)
(b) Using an annotated sketch map, explain how you chose your sites or location for data collection.

(4)
(c) Explain why the conclusions that you reached might be unreliable.

(d) In 2017 a group of 20 students carried out questionnaires in an urban area on a Wednesday afternoon. They asked 40 randomly selected residents to select the three problems in the area that they rated as the most serious.

They compared these results with the results of a similar survey gathered by students in 2014 who also randomly selected 40 residents.

These two sets of results are shown below.

![Figure 10](image-url)
The students concluded that the social, economic and environmental conditions in the urban area had improved since 2014.

Assess the evidence for this conclusion.
(Total for Question 10 = 18 marks)
Do not answer Question 11 if you have answered Question 10.

If you answer Question 11 put a cross in the box □.

Investigating Changing Rural Areas

11 You have carried out your own fieldwork investigating environmental quality in a rural area.

Name your rural area:

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(a) Explain one reason why you chose that rural area.

(2)
(b) Using an annotated sketch map, explain how you chose your sites or location for data collection.

(4)
(c) Explain why the conclusions that you reached might be unreliable.

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(d) In 2017 a group of 20 students carried out questionnaires in a rural area on a Wednesday afternoon. They asked 40 randomly selected residents to select the three problems in the area that they rated as the most serious.

They compared these results with the results of the same survey gathered by students in 2014 who also randomly selected 40 residents.

These two sets of results are shown below.

![Bar chart showing the percentage of people interviewed who mentioned various problems in 2017 and 2014.

Figure 11

% of people interviewed who mentioned this problem

- Crime
- Pollution of environment
- Not enough being done for young people
- Lack of jobs
- Not enough being done for elderly people
- Lack of affordable housing
- Poor local services
- Poor public transport
- Litter/Dirt in streets
- 2017
- 2014

Figure 11
The students concluded that the social, economic and environmental conditions in the rural area had improved since 2014.

Assess the evidence for this conclusion.
(Total for Question 11 = 18 marks)

TOTAL FOR SECTION C2 = 18 MARKS
TOTAL FOR PAPER = 94 MARKS