OCR
Oxford Cambridge and RSA

Thursday 13 June 2019 – Morning

GCSE (9–1) Geography A (Geographical Themes)

J383/03 Geographical Skills

Time allowed: 1 hour 30 minutes

You must have:
- the Resource Booklet (inserted)

You may use:
- a scientific or graphical calculator
- a ruler (cm/mm)

Please write clearly in black ink. **Do not write in the barcodes.**

Centre number | | | | | | Candidate number | | | | |

First name(s) _____

Last name _____

INSTRUCTIONS
- The separate Resource Booklet will be found inside this document.
- Use black ink. You may use an HB pencil for graphs and diagrams.
- Answer **all** the questions.
- Write your answer to each question in the space provided. If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.

INFORMATION
- The total mark for this paper is **80**.
- The marks for each question are shown in brackets **[ ]**.
- Quality of extended responses will be assessed in questions marked with an asterisk (*).
- Spelling, punctuation and grammar and the use of specialist terminology (SPaG) will be assessed in questions marked with a pencil (✎).
- This document consists of **16** pages.

Section A – Geographical Skills

Answer **all** the questions.

1 Study **Fig. 1** in the separate Resource Booklet, an article about renewable energy.

(a) (i) Calculate the percentage of energy supplied by **non-renewable** sources on 7 June 2017.

..... **[1]**

(ii) Identify the two renewable sources of energy mentioned in **Fig. 1**.

A gas and coal
B nuclear and solar
C wind and nuclear
D wind and solar

Write the correct letter in the box. ☐ **[1]**

(iii) Using information from **Fig. 1**, identify **two** benefits of the increased use of renewable energy.

1 .....

2 .....

[2]

Study **Fig. 2** in the separate Resource Booklet, a map showing average sunshine hours for the United Kingdom.

(b) (i) Name the shading technique being used to display the information in **Fig. 2**.

A Choropleth
B Isoline
C Proportional
D Relief

Write the correct letter in the box. ☐ **[1]**

(ii) Describe the pattern of January sunshine hours across the UK. Use data from **Fig. 2** in your answer.

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..... **[4]**

(iii) Suggest **one** reason for the pattern of sunshine hours seen in **Fig. 2**.

..... **[1]**

(c) The table below shows the mean July sunshine hours for a number of UK cities.

City	Mean sunshine hours (July)
Birmingham	184
Cambridge	188
Ipswich	217
London	192
Oxford	207
Manchester	180
Newcastle	172
Sheffield	200
Cardiff	199
Edinburgh	174
Glasgow	154

Calculate the lower quartile value of sunshine hours for the cities shown.
You must show your working out.

..... **[3]**

(d) Study **Fig. 3a** in the separate Resource Booklet, information about a solar farm near Ipswich, Suffolk.

Using **Fig. 3a** and the table above, suggest **two** reasons for the choice of site.

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..... **[2]**

(e)* Study **Fig. 3b** in the separate Resource booklet, a diagram about the impact of mechanised farming.

To what extent do you agree with the statement that *'Renewable energy has modified the UK environment more than the mechanisation of farming'*?

Use **Figs 3a and 3b** from the Resource Booklet **and your own understanding** to answer.

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..... **[8]**

2 Study **Fig. 4** in the separate Resource Booklet, information about electricity use in selected LIDCs.

(a) Which country has the highest proportion of its citizens who are without electricity?

A Ethiopia
B Ghana
C Nigeria
D Tanzania

Write the correct letter in the box. ☐ **[1]**

(b) Calculate the number of people in Ghana who **do have** access to electricity.

Show your working out.

..... **[2]**

(c) **Fig. 4** uses proportional blocks to display some of its information. Describe how, and use data to provide an example.

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(d) Using information from **Fig. 4**, compare electricity use in Kenya and Nigeria.

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(e) Suggest **one** alternative way that the data in **Fig. 4** might be displayed effectively. Justify your choice.

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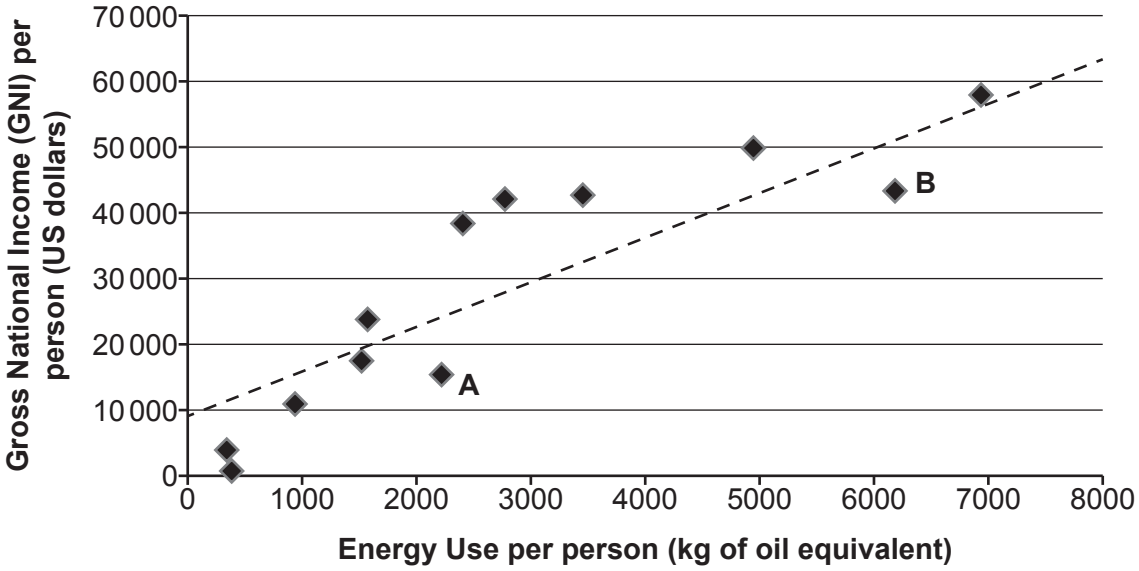
..... **[3]**

3 Study the scatter graph below, which shows data on energy use and gross national income (GNI) for selected countries.



(a) Estimate the energy use per person for a country with a GNI per person of 30 000 US dollars.

..... **kg of oil equivalent [1]**

(b) What would be the most likely GNI per person for a country with an energy use of 9000 kg of oil equivalent?

A 65 000 US dollars
B 70 000 US dollars
C 80 000 US dollars
D 85 000 US dollars

Write the correct letter in the box. ☐ **[1]**

(c) Suggest **one** reason for the relationship shown. Explain your answer.

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..... **[3]**

(d) State whether Country **A** or **B** on the graph on page 7 is more likely to be an Emerging Developing Country (EDC). Justify your choice.

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..... **[2]**

(e) Study **Fig. 5** in the separate Resource Booklet, a newspaper article about an LIDC aid project.

Assess whether renewable energy will have a greater long-term impact in **Lower Income Developing Countries (LIDCs)**, such as Sierra Leone, than in **Advanced Countries (ACs)**, such as the UK.

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Section B – Geographical Fieldwork

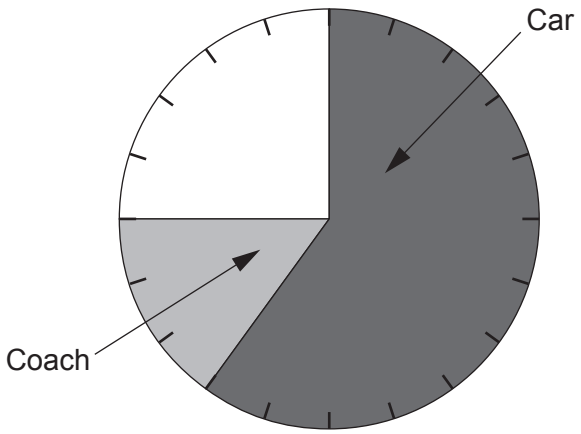
Answer **all** the questions.

4 Some Geography students have been conducting **human geography** fieldwork in the Lake District. They were investigating the effects of tourism.

The results of part of a questionnaire they completed are shown in the table below.

Question	Answer	Number of responses
1. How far have you travelled today?	<1	35
	between 1–5	28
	5–10	8
	10 or more	29
2. How did you get to Ambleside?	Car	60
	Coach	15
	Bus	5
	Walked	20

(a) (i) Complete and label the pie chart below to show the results of Question 2 from the questionnaire shown above.



[2]

(ii) Suggest **two** ways that the data collected for Question 1 of the questionnaire might be improved.

1 .....

2 .....

[2]

(iii) Suggest **one** more question that might be used in the questionnaire to investigate the effects of tourism.

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[1]

(b) Study **Fig. 6** in the separate Resource Booklet, which shows a map and photographs of the sites studied.

Add **three** annotations to the photograph of site 1 below, to show the effects of tourism at the site.

[3]

(c) The students also completed environmental surveys at the two sites. The results are shown below.

Ambleside Environmental Quality Survey		
Environmental Quality	**Site 1**	**Site 2**
Traffic Noise	–2	3
Air Quality	–3	2
Building attractiveness	3	1
Road Maintenance	–1	2
Graffiti	3	3
Illegal Parking	–2	1
Noise from pedestrians	1	3

–3 most negative score
+3 most positive score

Select **one** method that might be used to display the data from the table above. Explain why you chose this method.

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..... **[2]**

(d) Using evidence from **all** the fieldwork data provided, examine whether traffic is likely to be a problem for the village of Ambleside.

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..... **[6]**

5 You will have taken part in fieldwork in a **physical geography** environment as part of your studies. Examples might include a river or coastal study.

State your fieldwork question for investigation: .....

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Location of study area: .....

(a) Assess whether your primary data collection was successful.

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..... **[6]**

(b)* Evaluate whether your **physical geography** fieldwork conclusions improved your understanding of a geographical question or issue.

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..... **[8]**

Spelling, punctuation and grammar and the use of specialist terminology **[3]**

END OF QUESTION PAPER

ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).