

Paper Reference 4GE1/02
Pearson Edexcel
International GCSE (9–1)

Total Marks

Geography
PAPER 2: Human geography

Friday 24 November 2023 – Morning

Time: 1 hour 45 minutes

**In the boxes below, write your name,
centre number and candidate number.**

Surname					
Other names					
Centre Number					
Candidate Number					

Y74640A

YOU MUST HAVE
Calculator

YOU WILL BE GIVEN
Resource Booklet
Diagram Booklet

Turn over

INSTRUCTIONS

In Section A, answer TWO questions from Questions 1, 2 AND 3.

In Section B, answer ONE question from Questions 4, 5 AND 6.

In Section C, answer ONE question from Questions 7, 8 AND 9.

Answer the questions in the spaces provided in this Question Paper or on the separate diagrams – 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.

Turn over

INFORMATION

The total mark for this paper is 105.

The marks for EACH question are shown in brackets – use this as a guide as to how much time to spend on each question.

Calculators may be used.

There may be spare copies of some diagrams in case you need them.

ADVICE

Read each question carefully before you start to answer it.

Check your answers if you have time at the end.

Turn over

SECTION A

Answer TWO questions from this section.

Some questions are multiple choice. Write the letters(s) of your chosen answer(s) in the box(es) provided.

If you answer Question 1, put a cross in this box

☐

Turn over

1. Economic activity and energy

(a) (i) Identify ONE factor that affects the location of primary industry.

- A access to areas with low air pollution**
- B access to large car parks**
- C access to sports facilities**
- D access to road network**

Answer

(1 mark)

(continued on the next page)

Turn over

1. (a) continued.

(ii) State ONE example of a
quaternary sector industry.
(1 mark)

(continued on the next page)

Turn over

1. continued.

(b) Identify ONE impact of a shift from a primary industry (agriculture) to secondary industries.

A ageing rural populations

B ageing urban populations

C growth in rural areas

D growth in rural services

Answer

(1 mark)

(continued on the next page)

Turn over

1. continued.

**(c) Study Figure 1a in the
Resource Booklet which shows
information about employment
structure for selected countries.**

**Suggest ONE reason for the
difference in employment
structure.**

(2 marks)

**Answer lines continue on the
next page.**

Turn over

1. (c) continued.

(continued on the next page)

Turn over

1. continued.

**(d) State what is shown by the
Clark Fisher model.**

(1 mark)

(continued on the next page)

Turn over

1. continued.

(e) For a named megacity, explain
ONE advantage and ONE
disadvantage of informal
employment.

(4 marks)

Answer lines continue on the
next page.

Named megacity

Advantage

Turn over

1. (e) continued.

Disadvantage

(continued on the next page)

Turn over

1. continued.

**(f) Study Figure 1b in the
Resource Booklet which shows
energy consumption in Europe.**

**Suggest ONE possible reason
for the differences in energy
consumption.**

(3 marks)

**Answer lines continue on the
next page.**

Turn over

1. (f) continued.

(continued on the next page)

Turn over

1. continued.

(g) Explain TWO environmental impacts of using non-renewable energy sources.

(4 marks)

Answer lines continue on the next page.

1

Turn over

1. (g) continued.

2

(continued on the next page)

Turn over

1. continued.

**(h) Study Figure 1c in the
Resource Booklet.**

**Analyse the ways to make energy
use more sustainable.**

**Refer to the resource in your
answer.**

(8 marks)

**Answer lines continue on the
next four pages.**

Turn over

1. (h) continued.

Turn over

1. (h) continued.

Turn over

1. (h) continued.

Turn over

1. (h) continued.

(Total for Question 1 = 25 marks)

Turn over

23

**If you answer Question 2, put a
cross in this box**

☐

Turn over

2. Rural environments

(a) (i) Identify ONE type of farm diversification.

A increasing irrigated land

B increasing land used for flood defences

C opening a farm shop

D opening a new barn to store crops

Answer

(1 mark)

(continued on the next page)

Turn over

2. (a) continued.

**(ii) State ONE reason for using
genetically modified (GM)
crops.**

(1 mark)

(continued on the next page)

Turn over

2. continued.

(b) Identify the best definition of intensive farming.

- A Farming which uses large amounts of resources and labour.**
- B Farming which uses no chemical fertilisers or pesticides.**
- C Farming which uses traditional irrigation methods.**
- D Farming which grows crops to support the family.**

Answer

(1 mark)

(continued on the next page)

Turn over

2. continued.

**(c) Study Figure 2a in the
Resource Booklet which shows
the distribution of selected
biomes.**

**Explain ONE reason for the
distribution of different biomes.
(2 marks)**

(continued on the next page)

Turn over

2. continued.

**(d) State ONE characteristic of a
temperate forest biome.**

(1 mark)

(continued on the next page)

Turn over

2. continued.

- (e) Explain TWO ways natural ecosystems provide services.
(4 marks)**

Answer lines continue on the next page.

1

2

Turn over

2. (e) continued.

(continued on the next page)

Turn over

2. continued.

(f) Study Figure 2b in the Resource Booklet which shows increases in the percentage (%) of cereal yield, and land used for growing cereals, in Asia 1961 to 2020.

Suggest ONE possible reason for the increased yields.

(3 marks)

Answer lines continue on the next page.

Turn over

2. (f) continued.

(continued on the next page)

Turn over

2. continued.

(g) For a named developing or emerging country, explain how non-governmental organisations (NGOs) have tried to manage TWO challenges within a rural environment.

(4 marks)

Answer lines continue on the next page.

Named developing or emerging country

Turn over

2. (g) continued.

1

2

(continued on the next page)

Turn over

2. continued.

**(h) Study Figure 2c in the
Resource Booklet.**

**Analyse the factors that may
contribute to the negative
multiplier effect.**

**Refer to the resource in your
answer.**

(8 marks)

**Answer lines continue on the
next four pages.**

Turn over

2. (h) continued.

Turn over

2. (h) continued.

Turn over

2. (h) continued.

Turn over

2. (h) continued.

(Total for Question 2 = 25 marks)

Turn over

40

**If you answer Question 3, put a
cross in this box**

☐

Turn over

3. Urban environments

(a) (i) Identify ONE strategy used to make cities more environmentally sustainable.

A increased number of car parks

B increased network of cycle lanes

C increased shopping facilities

D increased healthcare services

Answer

(1 mark)

(continued on the next page)

Turn over

3. (a) continued.

**(ii) State ONE way politicians
can manage challenges in a
city.**

(1 mark)

(continued on the next page)

Turn over

3. continued.

(b) Identify ONE factor that can lead to increased urbanisation.

A air pollution

B farm diversification

C high urban crime rate

D employment

Answer

(1 mark)

(continued on the next page)

Turn over

3. continued.

**(c) Study Figure 3a which shows
a land use map for an area of
Virginia, USA.**

**Suggest ONE factor that may
have affected the land use
patterns shown.**

(2 marks)

**Answer lines continue on the
next page.**

Turn over

3. (c) continued.

**(d) State where in an urban area you
would be most likely to find a
science park.**

(1 mark)

(continued on the next page)

Turn over

3. continued.

(e) Explain ONE advantage and ONE disadvantage of building housing estates on the rural–urban fringe.

(4 marks)

Answer lines continue on the next page.

Advantage

Turn over

3. (e) continued.

Disadvantage

(continued on the next page)

Turn over

3. continued.

(f) Study Figure 3b in the Resource Booklet which shows urban and rural populations in the United States.

Suggest ONE factor that may have caused the trend shown.

(3 marks)

Answer lines continue on the next page.

Turn over

3. (f) continued.

(continued on the next page)

Turn over

3. continued.

(g) For a named developing or emerging country, explain TWO challenges caused by rapid urbanisation.

(4 marks)

Answer lines continue on the next page.

Named developing or emerging country

Turn over

3. (g) continued.

1

2

(continued on the next page)

Turn over

3. continued.

**(h) Study Figure 3c in the
Resource Booklet.**

**Analyse the benefits of building
on brownfield sites.**

**Refer to the resource in your
answer.**

(8 marks)

**Answer lines continue on the
next four pages.**

Turn over

3. (h) continued.

Turn over

3. (h) continued.

Turn over

3. (h) continued.

Turn over

3. (h) continued.

(Total for Question 3 = 25 marks)

TOTAL FOR SECTION A = 50 MARKS

Turn over

SECTION B**Geographical enquiry**

Answer ONE question only from this section.

Some questions are multiple choice. Write the letters(s) of your chosen answer(s) in the box(es) provided.

If you answer Question 4, put a cross in this box

☐

Turn over

4. Investigating economic activity and energy

(a) Study Figure 4a in the Resource Booklet.

**(i) Identify ONE type of secondary data that could support this enquiry.
(1 mark)**

(continued on the next page)

Turn over

4. (a) continued.

(ii) Explain ONE advantage of
using secondary data.
(2 marks)

(continued on the next page)

Turn over

4. continued.

**Study Figure 4b in the
Resource Booklet. It shows some of
the results from the Environmental
Quality Survey (EQS).**

(continued on the next page)

Turn over

4. continued.

(b) (i) Look at the diagram for Question 4(b) in the Diagram Booklet. It shows an incomplete radar graph. Plot the data for the EQS (from Figure 4b in the Resource Booklet) to complete the radar graph in the Diagram Booklet. Some data has been plotted for you as an example.

(2 marks)

(continued on the next page)

Turn over

4. (b) continued.

(ii) State ONE observation you can make from the data presented in the diagram for Question 4(b) in the Diagram Booklet.

(1 mark)

(continued on the next page)

Turn over

4. (b) continued.

(iii) Identify ONE advantage of
using this type of graph to
present data.

(1 mark)

(continued on the next page)

Turn over

4. (b) continued.

**(iv) Calculate the modal
Environmental Quality
Score for the data shown
in Figure 4b in the
Resource Booklet.**

Show all your workings.

(2 marks)

**Answer space continues on
the next page.**

Turn over

4. (b) (iv) continued.

(continued on the next page)

Turn over

4. continued.

**(c) Explain how the student's own
photographs could be used in
this enquiry.**

(3 marks)

(continued on the next page)

Turn over

4. continued.

(d) You have studied economic activity and energy as part of your own geographical enquiry.

State the title of your geographical enquiry.

Evaluate how the conclusions you made demonstrated that you had answered your enquiry question.

(8 marks)

Answer lines are on the next four pages.

Turn over

4. (d) continued.

Geographical Enquiry Title

Turn over

4. (d) continued.

Turn over

4. (d) continued.

Turn over

4. (d) continued.

(Total for Question 4 = 20 marks)

Turn over

72

**If you answer Question 5, put a
cross in this box**

☐

Turn over

5. Investigating rural environments

(a) Study Figure 5a in the Resource Booklet.

**(i) Identify ONE type of secondary data that could support this enquiry.
(1 mark)**

(continued on the next page)

Turn over

5. (a) continued.

**(ii) Explain ONE advantage of
using secondary data.
(2 marks)**

(continued on the next page)

Turn over

5. continued.

**Study Figure 5b in the
Resource Booklet. It shows some of
the results from the Environmental
Quality Survey (EQS).**

(continued on the next page)

Turn over

5. continued.

(b) (i) Look at the diagram for Question 5(b) in the Diagram Booklet. It shows an incomplete radar graph. Plot the data for the EQS (Figure 5b in the Resource Booklet) to complete the radar graph in the Diagram Booklet. Some data has been plotted for you as an example.

(2 marks)

(continued on the next page)

Turn over

5. (b) continued.

(ii) State ONE observation you can make from the data presented in the diagram for Question 5(b) in the Diagram Booklet.

(1 mark)

(continued on the next page)

Turn over

5. (b) continued.

**(iii) Identify ONE advantage of
using this type of graph to
present data.**

(1 mark)

(continued on the next page)

Turn over

5. (b) continued.

**(iv) Calculate the modal
Environmental Quality
Score for the data shown
in Figure 5b in the
Resource Booklet.**

Show all your workings.

(2 marks)

**Answer space continues on
the next page.**

Turn over

5. (b) (iv) continued.

(continued on the next page)

Turn over

5. continued.

**(c) Explain how the student's own
photographs could be used in
this enquiry.**

(3 marks)

(continued on the next page)

Turn over

5. continued.

(d) You have studied rural environments as part of your own geographical enquiry.

State the title of your geographical enquiry.

**Evaluate how the conclusions you made demonstrated you had answered your enquiry question.
(8 marks)**

Answer lines are on the next four pages.

Turn over

5. (d) continued.

Geographical Enquiry Title

Turn over

5. (d) continued.

Turn over

5. (d) continued.

Turn over

5. (d) continued.

(Total for Question 5 = 20 marks)

Turn over

87

**If you answer Question 6, put a
cross in this box**

☐

Turn over

6. Investigating urban environments

(a) Study Figure 6a in the Resource Booklet.

**(i) Identify ONE type of secondary data that could support this enquiry.
(1 mark)**

(continued on the next page)

Turn over

6. (a) continued.

**(ii) Explain ONE advantage of
using secondary data.
(2 marks)**

(continued on the next page)

Turn over

6. continued.

**Study Figure 6b in the
Resource Booklet. It shows some of
the results from the Environmental
Quality Survey (EQS).**

(continued on the next page)

Turn over

6. continued.

- (b) (i) Look at the diagram for Question 6(b) in the Diagram Booklet. It shows an incomplete radar graph. Plot the data for the Environmental Quality Survey (Figure 6b in the Resource Booklet) to complete the radar graph in the Diagram Booklet. Some data has been plotted for you as an example.**
- (2 marks)**

(continued on the next page)

Turn over

6. (b) continued.

(ii) State ONE observation you can make from the data presented in the diagram for Question 6(b) in the Diagram Booklet.

(1 mark)

(continued on the next page)

Turn over

6. (b) continued.

**(iii) Identify ONE advantage of
using this type of graph to
present data.**

(1 mark)

(continued on the next page)

Turn over

6. (b) continued.

**(iv) Calculate the modal
Environmental Quality
Score for the data shown
in Figure 6b in the
Resource Booklet.**

Show all your workings.

(2 marks)

**Answer space continues on
the next page.**

Turn over

6. (b) (iv) continued.

(continued on the next page)

Turn over

6. continued.

(c) Explain how the student's own photographs could be used in this enquiry.

(3 marks)

(continued on the next page)

Turn over

6. continued.

(d) You have studied urban environments as part of your own geographical enquiry.

State the title of your geographical enquiry.

**Evaluate how the conclusions you made demonstrated you had answered your enquiry question.
(8 marks)**

Answer lines are on the next four pages.

Turn over

6. (d) continued.

Geographical Enquiry Title

Turn over

6. (d) continued.

Turn over

6. (d) continued.

Turn over

6. (d) continued.

(Total for Question 6 = 20 marks)

TOTAL FOR SECTION B = 20 MARKS

Turn over

SECTION C

Global Issues

Answer ONE question only from this section.

Some questions are multiple choice. Write the letters(s) of your chosen answer(s) in the box(es) provided.

If you answer Question 7, put a cross in this box

☐

Turn over

7. Fragile environments and climate change

(a) Identify ONE natural cause of climate change.

A glacial melt

B air travel

C renewable energy

D solar variations

Answer

(1 mark)

(continued on the next page)

Turn over

7. continued.

(b) Identify which statement best explains how volcanoes can affect climate change.

- A** eruptions release greenhouses gases
- B** eruptions release volcanic bombs
- C** eruptions lead to damaged houses
- D** eruptions lead to damaged pipes

Answer

(1 mark)

(continued on the next page)

Turn over

7. continued.

**(c) State TWO human causes of
global climate change.**

(2 marks)

1

2

(continued on the next page)

Turn over

7. continued.

**(d) (i) Study Figure 7a in the
Resource Booklet.**

**Identify the labelled country
with the highest reduction in
CO₂ emissions per capita.
(1 mark)**

(continued on the next page)

Turn over

7. (d) continued.

**(ii) Compare the pattern shown
for Africa and North America.
(2 marks)**

(continued on the next page)

Turn over

7. (d) continued.

**(iii) Suggest ONE reason for the
pattern shown in Figure 7a.
(2 marks)**

(continued on the next page)

Turn over

7. (d) continued.

(iv) Suggest ONE other type of data which could be used to understand the causes of climate change.

(2 marks)

(continued on the next page)

Turn over

7. continued.

**(e) State TWO characteristics of a
desert environment.**

(2 marks)

1

2

(continued on the next page)

Turn over

7. continued.

(f) Explain TWO causes of desertification.

(4 marks)

Answer lines continue on the next page.

1

2

Turn over

7. (f) continued.

(continued on the next page)

Turn over

7. continued.

**(g) Study Figure 7b in the
Resource Booklet.**

**Assess strategies that could be
used to try and resolve water
resource shortages.**

(6 marks)

**Answer lines continue on the
next two pages.**

Turn over

7. (g) continued.

Turn over

7. (g) continued.

(continued on the next page)

Turn over

7. continued.

(h) Discuss the view:

“The most effective way to protect fragile environments is through international agreements.”

Use Figures 7a and 7b from the Resource Booklet, and your own knowledge and understanding to support your answer.

Refer to the resources in your answer.

(12 marks)

Answer lines are on the next five pages.

Turn over

7. (h) continued.

Turn over

7. (h) continued.

Turn over

7. (h) continued.

Turn over

7. (h) continued.

Turn over

7. (h) continued.

(Total for Question 7 = 35 marks)

Turn over

**If you answer Question 8, put a
cross in this box**

☐

8. Globalisation and migration

(a) (i) Identify ONE reason for the growth of mass tourism.

A more carbon emissions

B more disposable income

C more informal jobs

D more renewable energy

Answer

(1 mark)

(continued on the next page)

Turn over

8. (a) continued.

(ii) Identify ONE strategy
designed to make tourism
more sustainable.

- A** Employing local people
at tourist resorts
- B** Importing products for
tourists
- C** Removing restrictions on
tourist numbers
- D** Building new large
hotels for tourists

Answer

(1 mark)

(continued on the next page)

Turn over

8. continued.

**(b) State TWO factors that can
affect geopolitical relationships
between countries.**

(2 marks)

1

2

(continued on the next page)

Turn over

8. continued.

**(c) (i) Study Figure 8a in the
Resource Booklet**

**Identify the country with the
highest value of trade as a
percentage of GDP.
(1 mark)**

(continued on the next page)

Turn over

8. (c) continued.

**(ii) Compare the pattern shown
for South America and Africa.
(2 marks)**

(continued on the next page)

Turn over

8. (c) continued.

**(iii) Suggest ONE reason for the
pattern shown in Figure 8a.
(2 marks)**

(continued on the next page)

Turn over

8. (c) continued.

**(iv) Explain why the data shown
in Figure 8a would be
useful for understanding
globalisation.**

(2 marks)

(continued on the next page)

Turn over

8. continued.

**(d) State TWO push factors for
migration.**

(2 marks)

1

2

(continued on the next page)

Turn over

8. continued.

(e) Explain TWO approaches to managing migration.

(4 marks)

Answer lines continue on the next page.

1

2

Turn over

8. (e) continued.

(continued on the next page)

Turn over

8. continued.

**(f) Study Figure 8b in the
Resource Booklet.**

**Assess the role of international
institutions in creating a more
globalised economy.**

(6 marks)

**Answer lines continue on the
next two pages.**

Turn over

8. (f) continued.

Turn over

8. (f) continued.

(continued on the next page)

Turn over

8. continued.

(g) Discuss the view:

“One of the greatest benefits of globalisation is economic growth”.

Use Figures 8a and 8b from the Resource Booklet, and your own knowledge and understanding to support your answer.

Refer to the resources in your answer.

(12 marks)

Answer lines are on the next five pages.

Turn over

8. (g) continued.

Turn over

8. (g) continued.

Turn over

8. (g) continued.

Turn over

8. (g) continued.

Turn over

8. (g) continued.

(Total for Question 8 = 35 marks)

Turn over

142

**If you answer Question 9, put a
cross in this box**

☐

Turn over

9. Development and human welfare

(a) (i) Identify ONE social indicator of development.

A adult literacy rate

B GDP per capita

C value of cars manufactured

D percentage of foreign direct investment (FDI)

Answer

(1 mark)

(continued on the next page)

Turn over

9. (a) continued.

(ii) Identify ONE reason for a fall in death rates.

- A** improved access to retail services
- B** improved access to healthcare services
- C** improved access to airports
- D** improved access to legal services

Answer

(1 mark)

(continued on the next page)

Turn over

9. continued.

**(b) State TWO indicators used to
create the Human Development
Index (HDI).**

(2 marks)

1

2

(continued on the next page)

Turn over

9. continued.

**(c) (i) Study Figure 9a in the
Resource Booklet.**

**Identify the country labelled
in Figure 9a with the highest
levels of inequality.**

(1 mark)

(continued on the next page)

Turn over

9. (c) continued.

**(ii) Compare the pattern shown
for Africa and Asia.**

(2 marks)

(continued on the next page)

Turn over

9. (c) continued.

(iii) Suggest ONE possible
reason for the pattern shown
on Figure 9a.

(2 marks)

(continued on the next page)

Turn over

9. (c) continued.

**(iv) Explain why the data shown
on Figure 9a is useful
for understanding global
development.**

(2 marks)

(continued on the next page)

Turn over

9. continued.

(d) State ONE advantage and ONE disadvantage of top–down development projects.

(2 marks)

Advantage

Disadvantage

(continued on the next page)

Turn over

9. continued.

(e) Explain TWO factors that can lead to uneven development WITHIN a country.

(4 marks)

Answer lines continue on the next page.

1

Turn over

9. (e) continued.

2

(continued on the next page)

Turn over

9. continued.

**(f) Study Figure 9b in the
Resource Booklet.**

**Assess the role of international
aid in reducing the development
gap.**

(6 marks)

**Answer lines continue on the
next two pages.**

Turn over

9. (f) continued.

Turn over

9. (f) continued.

(continued on the next page)

Turn over

9. continued.

(g) Discuss the view:

“Continuing uneven global development is caused by economic factors.”

Use Figures 9a and 9b from the Resource Booklet, and your own knowledge and understanding to support your answer.

Refer to the resources in your answer.

(12 marks)

Answer lines are on the next five pages.

Turn over

9. (g) continued.

Turn over

9. (g) continued.

Turn over

9. (g) continued.

Turn over

9. (g) continued.

Turn over

9. (g) continued.

(Total for Question 9 = 35 marks)

TOTAL FOR SECTION C = 35 MARKS

TOTAL FOR PAPER = 105 MARKS

END OF PAPER
