Please check the examination details below before entering your candidate information

| Candidate surname | Other names |
|---|---|
| | |

Centre Number | Candidate Number

# Pearson Edexcel International Advanced Level

## Tuesday 23 May 2023

Afternoon (Time: 1 hour 30 minutes)

**Paper reference** **WGE02/01**

# Geography

## International Advanced Subsidiary
## UNIT 2: Geographical Investigations

**You must have:**
Resource Booklet (enclosed)

Total Marks

### 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 and **ONE** question in Section C.
- Answer the questions in the spaces provided – *there may be more space than you need.*

### Information

- The total mark for this paper is 60.
- 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.

### Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

*Turn over*


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## SECTION A

**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 ☒.**

### Crowded Coasts

**1** Study Figure 1 in the Resource Booklet.

(a) (i) Identify the missing label X.

**(1)**

☐ **A** Beach nourishment

☐ **B** Rip rap

☐ **C** Sea wall

☐ **D** Groynes

(ii) Identify the missing label Y.

**(1)**

☐ **A** Revetment

☐ **B** Offshore breakwater

☐ **C** Dune stabilisation

☐ **D** Cliff re-grading

(b) Explain **one** way that coastal management decisions cause conflict between different players.

**(2)**

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(c) Examine how coastal ecosystems can help protect coasts from erosion and flooding.

**(8)**

**(Total for Question 1 = 12 marks)**

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## Urban Problems, Planning and Regeneration

**2** Study Figure 2 in the Resource Booklet.

(a) (i) Identify **two** possible problems caused by the population densities of Hong Kong and Dhaka.

**(2)**

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2 .....

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(ii) Explain **one** problem for cities that have low population density.

**(2)**

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(b) Assess the problems of waste management for developing and developed world cities.

**(8)**

**(Total for Question 2 = 12 marks)**

**TOTAL FOR SECTION A = 24 MARKS**

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## SECTION B

### Compulsory Fieldwork Section

**Answer ALL questions. Write your answers in the spaces provided.**

**3** You have undertaken geography fieldwork as part of the course.

Use this experience to answer Question 3.

State the title or question of your fieldwork investigation.

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(a) Explain **one** reason why your title or question was appropriate for your fieldwork investigation.

**(3)**

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(b) Explain **one** benefit of using secondary research in your fieldwork investigation.

**(3)**

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(c) Explain why the techniques you used to present your geographical data were suitable.

**(6)**

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(d) Evaluate the accuracy and reliability of the conclusions to your fieldwork investigation.

**(12)**

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**(Total for Question 3 = 24 marks)**

**TOTAL FOR SECTION B = 24 MARKS**

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## SECTION C

## Geographical Fieldwork and Skills

**Answer ONE question in this section – EITHER Question 4 OR Question 5.**

**Write your answers in the spaces provided.**

**If you answer Question 4, put a cross in the box ☒ .**

### Investigating Crowded Coasts

**4** (a) Study Figure 3a in the Resource Booklet.

> A group of students studied sand dunes as part of a study of coastal ecosystems.
>
> They used a photograph of the area they intended to visit (Figure 3a) in order to consider health and safety.

(i) Suggest **one** possible risk for students visiting the area shown.

**(2)**

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(ii) Explain **one** way the students could manage this risk.

**(3)**

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The students visited a beach on one morning in August to investigate beach slope and sediment characteristics in relation to coastal erosion risk.

(b) Study Figure 3b below.

| Sample number | Beach slope angle (°) | Length of sediment long axis (mm) |
|---|---|---|
| 1 | 8 | 10 |
| 2 | 5 | 8 |
| 3 | 5 | 9 |
| 4 | 12 | 12 |
| 5 | 4 | 6 |
| 6 | 6 | 6 |
| 7 | 8 | 12 |
| 8 | 8 | 9 |
| 9 | 10 | 14 |
| 10 | 13 | 12 |

**Figure 3b**

**Beach slope and sediment data on one morning in August**

(i) Calculate the mode for beach slope angle.

**(1)**

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(ii) Calculate the median for sediment long axis.

**(2)**

Show your working.

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(iii) Explain why the data shown in Figure 3b may lead to unreliable conclusions.

**(4)**

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**(Total for Question 4 = 12 marks)**

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**Investigating Urban Problems, Planning and Regeneration**

**If you answer Question 5, put a cross in the box ☒ .**

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

A group of students studied an urban area as part of a study of regeneration.

They used a photograph of the area they intended to visit (Figure 4a) in order to consider health and safety.

(i) Suggest **one** possible risk for students visiting the area shown.

**(2)**

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(ii) Explain **one** way the students could manage this risk.

**(3)**

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The students visited the city centre on one morning in August to investigate traffic flows in relation to transport issues.

(b) Study Figure 4b below.

| Sample number | Noise level (dB) | Number of vehicles (per minute) |
|---|---|---|
| 1 | 60 | 85 |
| 2 | 72 | 80 |
| 3 | 87 | 121 |
| 4 | 65 | 102 |
| 5 | 60 | 72 |
| 6 | 76 | 145 |
| 7 | 80 | 109 |
| 8 | 65 | 126 |
| 9 | 65 | 70 |
| 10 | 77 | 101 |

**Figure 4b**

**Noise level and vehicle data on one morning in August**

(i) Calculate the mode for noise level.

**(1)**

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(ii) Calculate the median for number of vehicles.

**(2)**

Show your working.

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(iii) Explain why the data shown in Figure 4b may lead to unreliable conclusions.

**(4)**

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**(Total for Question 5 = 12 marks)**

**TOTAL FOR SECTION C = 12 MARKS**
**TOTAL FOR PAPER = 60 MARKS**

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# Pearson Edexcel International Advanced Level

## Tuesday 23 May 2023

Afternoon (Time: 1 hour 30 minutes)

Paper reference **WGE02/01**

# Geography

## International Advanced Subsidiary
## UNIT 2: Geographical Investigations

**Resource Booklet**

**Do not return this Booklet with the question paper.**

*Turn over*

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## SECTION A

**This resource relates to Question 1.**

**Figure 1**

**Two types of coastal management**

**This resource relates to Question 2.**

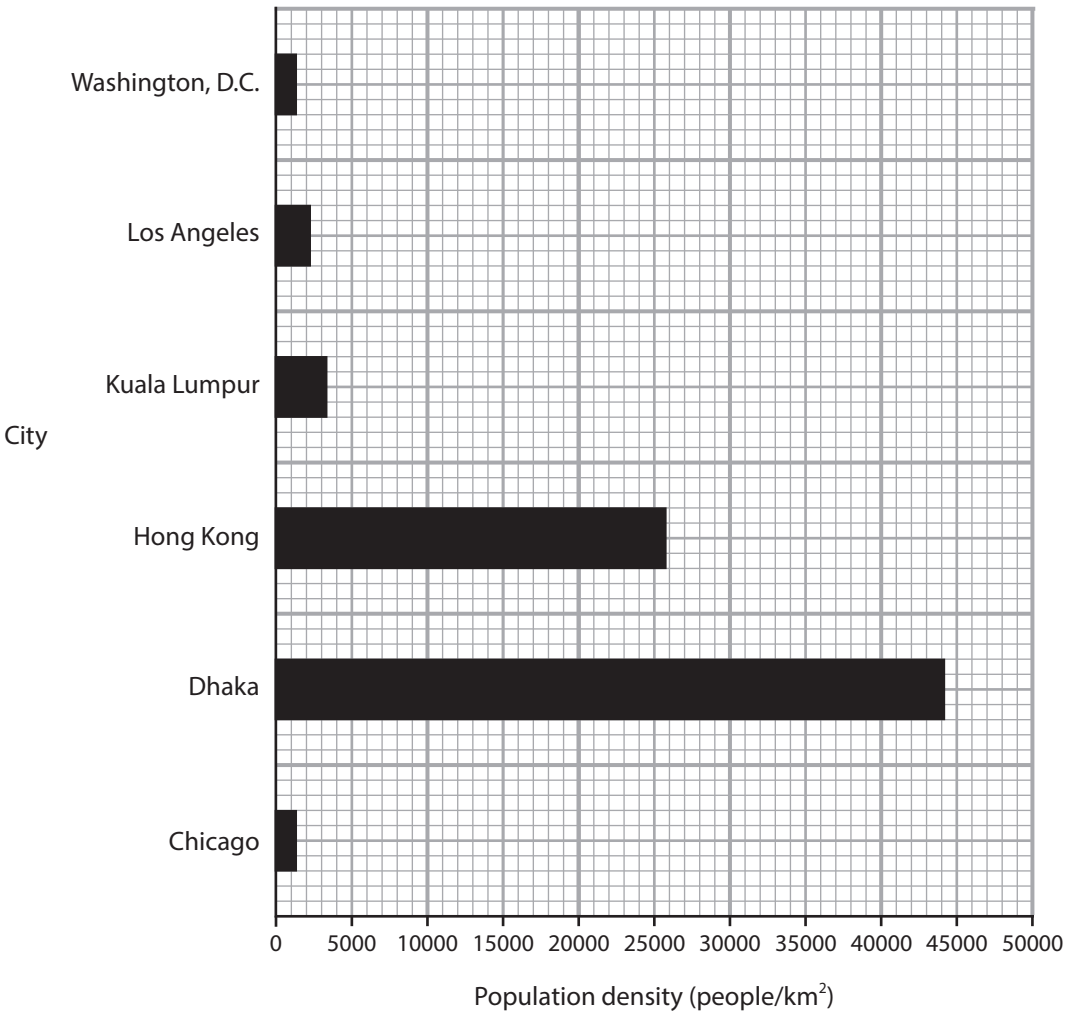


**Figure 2**

**Population density for six cities (number of people/km$^2$)**

**This resource relates to Question 4.**

**Figure 3a**

**A coastal sand dune ecosystem in southern England**

**This resource relates to Question 5.**

**Figure 4a**

**An area of Osaka, a city in Japan**

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**Acknowledgements**

Pearson Education Ltd. gratefully acknowledges all following sources used in preparation of this paper:

Figure 1 : © Leonard Zhukovsky/Shutterstock and © SW Aerial Surveys Ltd/Shutterstock

Figure 2 adapted from : https://ourworldindata.org/grapher/population-density-by-city

Figure 3a : © Lilly Trott/Shutterstock

Figure 4a : © Kristi Blokhin/Shutterstock