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Geography
Higher level and standard level
Paper 2

Monday 9 November 2020 (morning)

Candidate session number

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1 hour 15 minutes

Instructions to candidates

- Write your session number in the boxes above.
- Do not open this examination paper until instructed to do so.
- Section A: answer all questions.
- Section B: answer the question.
- Section C: answer one question.
- Answers must be written within the answer boxes provided.
- The accompanying **geography resource booklet** is required for this examination paper.
- The maximum mark for this examination paper is **[50 marks]**.



Section A

Answer **all** questions.

Answers must be written within the answer boxes provided.

When relevant, answers should refer to case studies or examples, and where appropriate include well-drawn maps or diagrams.

1. Changing population

Refer to the graph on page 3 of the accompanying resource booklet.

The graph shows the actual and projected population trends in Japan, from 1880 to 2100.

- (a) Describe the projected trends for the two dependent population groups from 2020 to 2060. [2]

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- (b) Suggest **two** potential socio-economic problems that could result from the projected population trend. [2+2]

Socio-economic problem 1:

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Socio-economic problem 2:

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(This question continues on the following page)



(Question 1 continued)

(c) Explain **two** ways in which **one named** country benefits from a demographic dividend. [2+2]

Named country:

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Way 1:

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Way 2:

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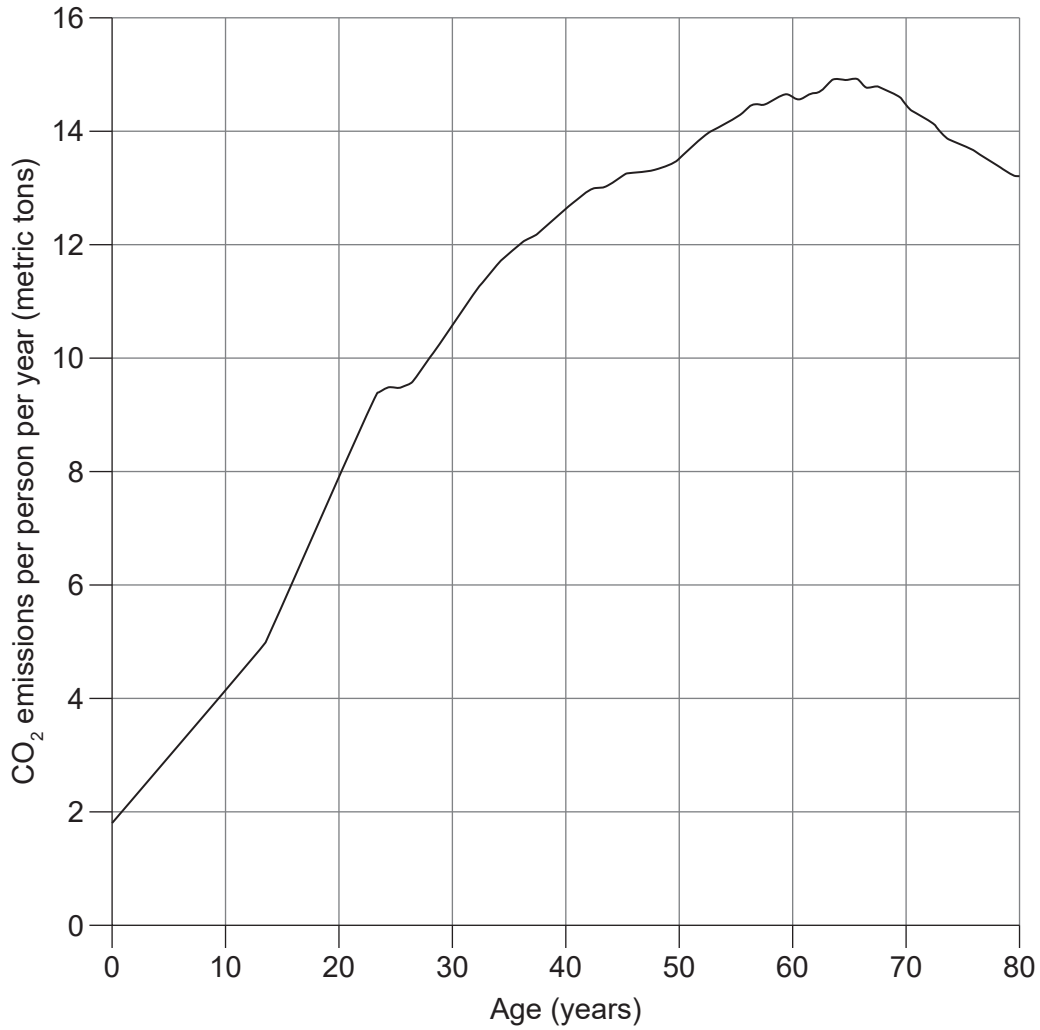
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2. Global climate – vulnerability and resilience

The graph shows carbon dioxide (CO₂) emissions related to the typical American’s activities over a lifetime.



(a) (i) State the age at which the average US citizen produces the most CO₂ emissions. [1]

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(This question continues on the following page)



(Question 2 continued)

(ii) State the age range in which the most rapid increase in CO₂ emissions occurs. [1]

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(b) Suggest **two** health hazards that may result from climate change. [2+2]

Health hazard 1:

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Health hazard 2:

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(c) Explain how **two** methods of geo-engineering could mitigate climate change. [2+2]

Method 1:

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Method 2:

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3. Global resource consumption and security

(a) Describe what is meant by an individual's ecological footprint. [2]

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(b) Suggest **two** ways in which meeting a nation's water needs could result in reduced food availability. [2+2]

Way 1:

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Way 2:

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(c) Explain how a circular economy approach can contribute to:

(i) reduced use of new resources; [2]

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(This question continues on the following page)



(Question 3 continued)

(ii) changing attitudes to product ownership.

[2]

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Section B

Answer the following question.

4. Refer to the infographic on pages 4 and 5 of the accompanying resource booklet.

The infographic has been produced by Australia's National Roads and Motorists' Association to show selected characteristics of Australia's energy security.

- (a) Describe trends in the proportion of fuel directly imported into Australia between 2000 and 2013.

[2]

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- (b) Suggest **one** graphical method that could depict the information in box A, giving a reason for your choice.

[2]

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(This question continues on the following page)



(Question 4 continued)

- (c) To what extent might this infographic make Australian citizens more concerned about their energy security than they need to be?

[6]

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Section C

Answer **one** question.

Where relevant, answers should refer to case studies or examples, and where appropriate include well-drawn maps or diagrams.

5. "The growth of the global middle class will inevitably accelerate climate change."
To what extent do you agree with this statement? [10]

6. "Resource insecurity is becoming the main cause of forced migration." To what extent do you agree with this statement? [10]

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16EP11

Turn over

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16EP12

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16EP13

Turn over

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16EP14

A large rectangular area with horizontal dotted lines, intended for writing or drawing.



References:

2. Reprinted by permission from Springer Nature; "The Leverage of Demographic Dynamics on Carbon Dioxide Emissions: Does Age Structure Matter?", Emilio Zagheni, © 2011.



16EP16