Diploma Programme
Programme du diplôme
Programa del Diploma

Geography
Higher level
Paper 1

11 November 2025

Zone A afternoon | **Zone B** afternoon | **Zone C** afternoon

2 hours 15 minutes

Instructions to candidates

- Do not open this examination paper until instructed to do so.
- Answer the questions in three options.
- The accompanying **geography resource booklet** is required for this examination paper.
- The maximum mark for this examination paper is **[60 marks]**.

Option	Questions
Option A — Freshwater	1 – 2
Option B — Oceans and coastal margins	3 – 4
Option C — Extreme environments	5 – 6
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Option G — Urban environments	13 – 14

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Answer the questions in **three** options.

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

Option A — Freshwater

Answer the following question.

1. Refer to the map and key on pages 2–3 of the accompanying resource booklet.

The topographical map shows a small section of the Rangitīkei River in New Zealand. The scale of the map is 1:50 000 and the contour interval is 20 metres.

(a) (i) State the main land cover in the box, **A**, in the south east of the map. [1]

(ii) State the height difference, in metres, between the spot heights in grid squares 2982 and 3383. [1]

(b) Outline the main features of **one** landform, formed by river processes, shown on the map. [2]

(c) Explain **two** challenges arising from the use of internationally shared water resources. [3 + 3]

Answer either part (a) or part (b).

Either

2. (a) Examine the extent to which human activities increase the frequency **and** magnitude of river flooding. [10]

Or

2. (b) Examine the extent to which the benefits exceed the costs of integrated drainage basin management (IDBM) plans. [10]

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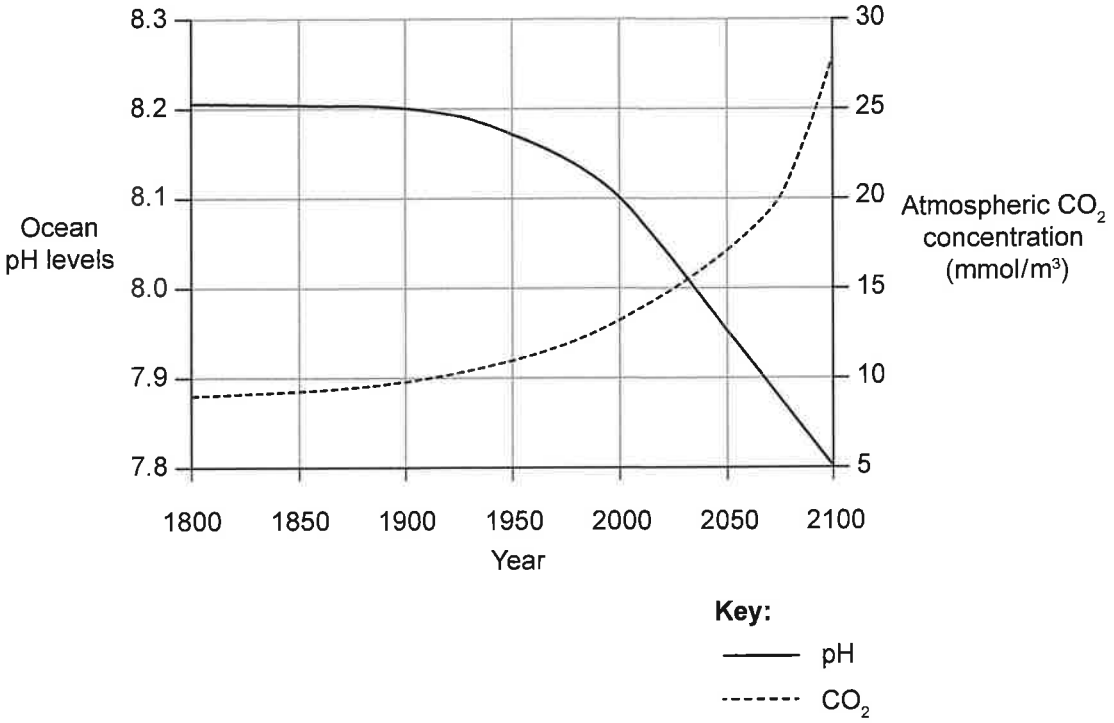
End of Option A

Option B — Oceans and coastal margins

Answer the following question.

3. The graph shows ocean pH levels and atmospheric carbon dioxide (CO_2) concentration between 1800 and 2100 (projected).



(a) (i) State the change in ocean pH between 1900 and 2000. [1]

(ii) Estimate the year in which atmospheric carbon dioxide (CO_2) concentration is projected to reach 20 millimoles per cubic metre (mmol/m³). [1]

(b) Outline **one** way in which oceans can be a source of carbon dioxide (CO_2). [2]

(c) Explain **two** reasons for international conflict over the control of transit choke points. [3 + 3]

Answer either part (a) or part (b).

Either

4. (a) Examine ways in which different coastal processes contribute to the formation of spits. [10]

Or

4. (b) Evaluate the viability of alternatives to overfishing. [10]

End of Option B

Option C — Extreme environments

Answer the following question.

5. Refer to the map on page 4 of the accompanying resource booklet.

The map shows the populations living on permafrost in different Arctic areas in 2017.

(a) (i) Identify the area with the largest number of people living in inland settlements on permafrost. [1]

(ii) Estimate the percentage of people in Alaska living in settlements that are **not** on permafrost. [1]

(b) Outline **one** way in which settlements are affected by the melting of permafrost in this area. [2]

(c) Explain **two** reasons for the occurrence of flash floods in hot, arid areas. [3 + 3]

581 Answer either part (a) or part (b).

Either

6. (a) Examine the relative importance of physical challenges **and** human challenges for resource extraction (minerals, oil, gas) in hot, arid environments. [10]

Or

6. (b) Examine the importance of glacial processes in creating unique landscapes in glaciated upland areas. [10]

End of Option C

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Option D — Geophysical hazards

Answer the following question.

7. Refer to the map on page 5 of the accompanying resource booklet.

The map shows the distribution of active volcanoes and the amount of material ejected by past volcanic eruptions.

(a) (i) State the number of supervolcanoes located in the Northern Hemisphere. [1]

(ii) State the amount of ejected material, in cubic kilometres (km^3), from the smallest supervolcano. [1]

(b) Outline **one** reason for the distribution of active volcanoes. [2]

(c) Explain **two** ways in which people's vulnerability to volcanic hazards may be reduced. [3 + 3]

Answer either part (a) or part (b).

Either

8. (a) Examine how the risk to communities from **one or more** geophysical hazards is influenced by different human factors. [10]

Or

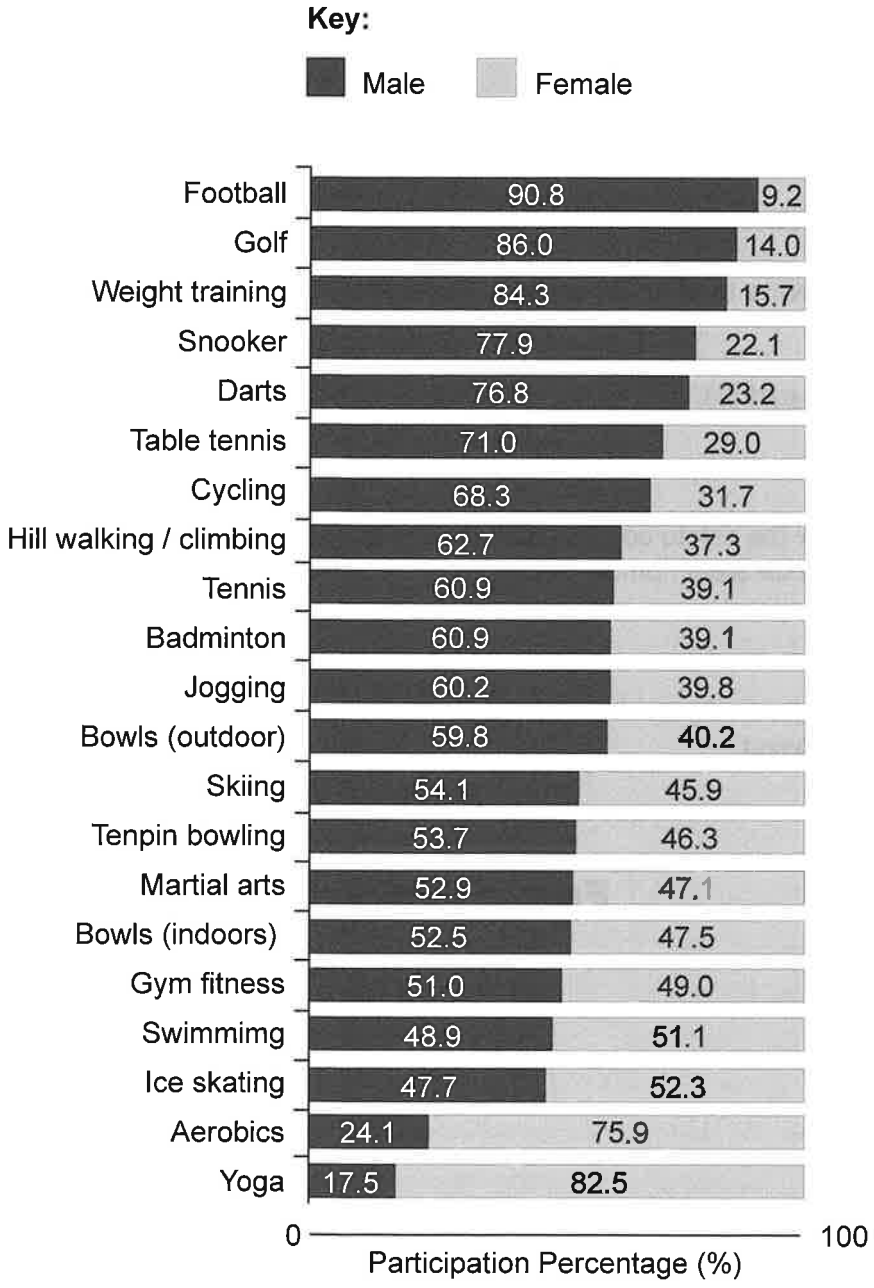
8. (b) Examine reasons why earthquake hazard events may have contrasting impacts on human well-being. [10]

End of Option D

Option E — Leisure, tourism and sport

Answer the following question.

9. The graph shows survey results of the participation of males and females in 21 selected sports in the United Kingdom (UK).



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(Option E continues on the following page)

(Option E continued)

(a) (i) State the sport with the most equal participation percentage between males and females. [1]

(ii) State the sport with the median participation percentage for males. [1]

(b) Outline **one** reason why a person's lifecycle stage may affect their participation in sport. [2]

(c) Explain how using tourism as a national development strategy can bring:

(i) **one** economic **benefit** to a country; [3]

(ii) **one** economic **cost** to a country. [3]

Answer either part (a) or part (b).

Either

10. (a) Examine the extent to which the benefits exceed the costs for a country hosting an international sporting event. [10]

Or

10. (b) Examine the effectiveness of management strategies used to increase site resilience in rural tourist hotspots. [10]

End of Option E

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Option F — Food and health

Answer the following question.

11. Refer to the graph on page 6 of the accompanying resource booklet.

The graph shows banana production by continent from 1961 to 2020.

(a) (i) State the total amount of bananas produced, in millions of tonnes, in Asia in 2010. [1]

(ii) Estimate the total increase in worldwide banana production, in millions of tonnes, between 1961 and 2020. [1]

(b) Outline **one** way in which the use of genetically modified organisms (GMOs) could increase food production. [2]

(c) Explain **one** barrier to the diffusion of:

(i) a named vector-borne disease; [3]

(ii) a named water-borne disease. [3]

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Answer either part (a) or part (b).

Either

12. (a) Examine the roles of international organizations **and** governments in combating food insecurity. [10]

Or

12. (b) Evaluate strategies of prevention **and** treatment in the management of **one or more** diseases. [10]

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End of Option F

Option G — Urban environments

Answer the following question.

13. The table shows the location and estimated population of the world's largest informal housing areas in 2022.

Informal housing area	City	Country	Estimated population
Orangi Town	Karachi	Pakistan	2 400 000
Ciudad Neza	Mexico City	Mexico	1 200 000
Dharavi	Mumbai	India	1 000 000
Kibera	Nairobi	Kenya	700 000
Shomolu	Lagos	Nigeria	600 000
Mathare	Nairobi	Kenya	500 000
Ajegule	Lagos	Nigeria	500 000
Khayelitsha	Cape Town	South Africa	400 000
Makoko	Lagos	Nigeria	250 000

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(a) (i) Identify which country has the largest number of informal housing areas. [1]

(ii) State the mode of the estimated population. [1]

(b) Outline **one** economic reason for the growth of informal housing areas. [2]

(c) Explain **two** challenges facing urban areas when making improvements to infrastructure. [3 + 3]

Answer either part (a) or part (b).

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Either

14. (a) Evaluate the effectiveness of resilient city design strategies in managing risks caused by climate change. [10]

Or

14. (b) Examine the extent to which physical factors **and** economic factors affect the pattern of residential areas in cities. [10]

End of Option G

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