



Diploma Programme
Programme du diplôme
Programa del Diploma

Geography Higher level Paper 1

9 May 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]**.

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
Option D — Geophysical hazards	7 – 8
Option E — Leisure, tourism and sport	9 – 10
Option F — Food and health	11 – 12
Option G — Urban environments	13 – 14



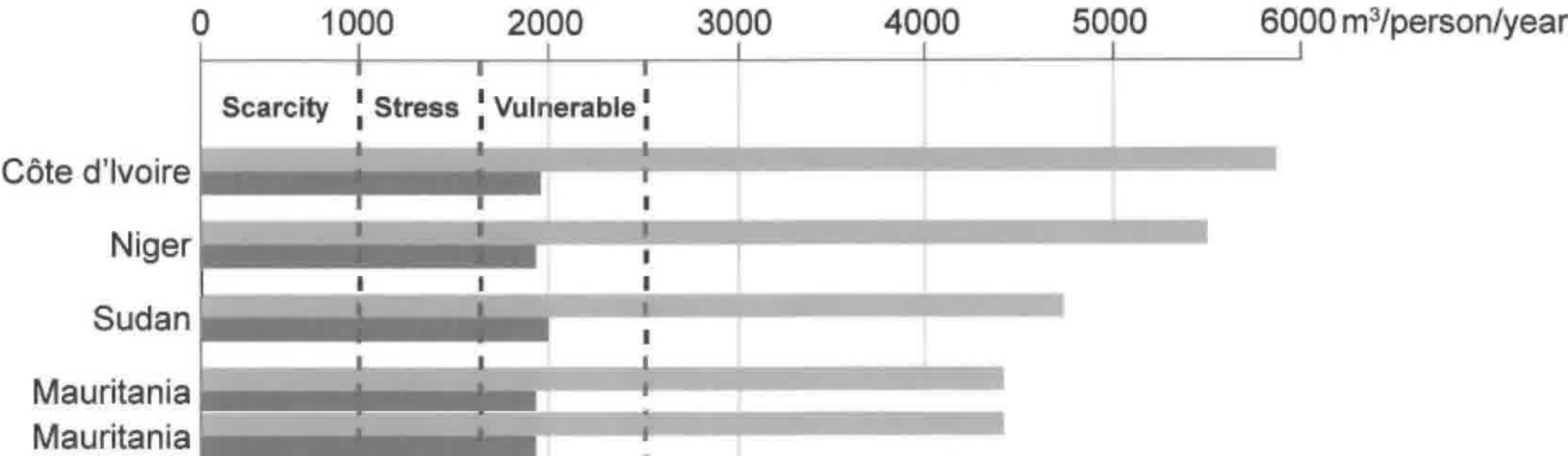
Answer the questions in **three** options.

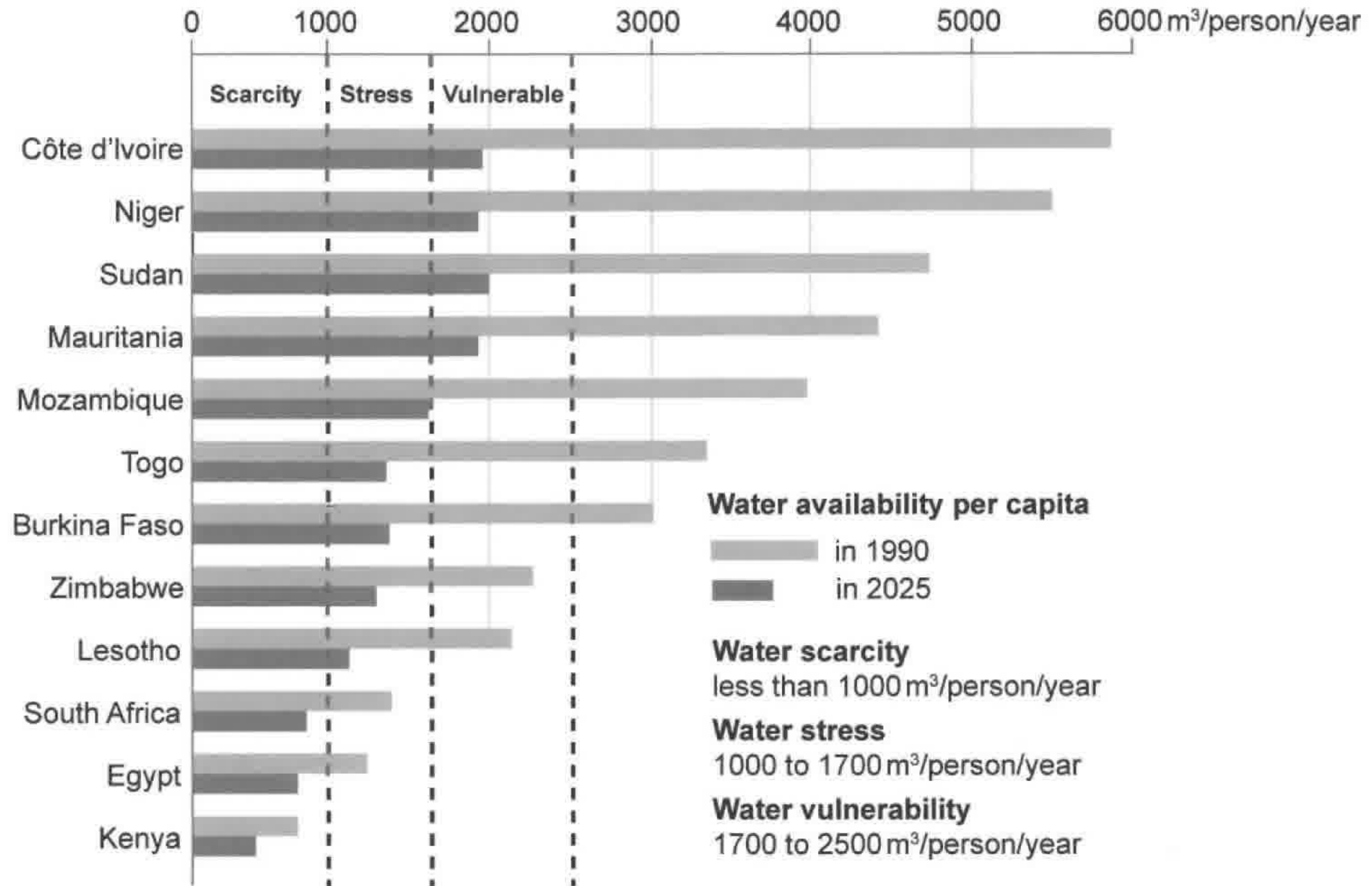
When relevant, answers should refer to case studies or examples, and where appropriate include well-drawn maps or diagrams.

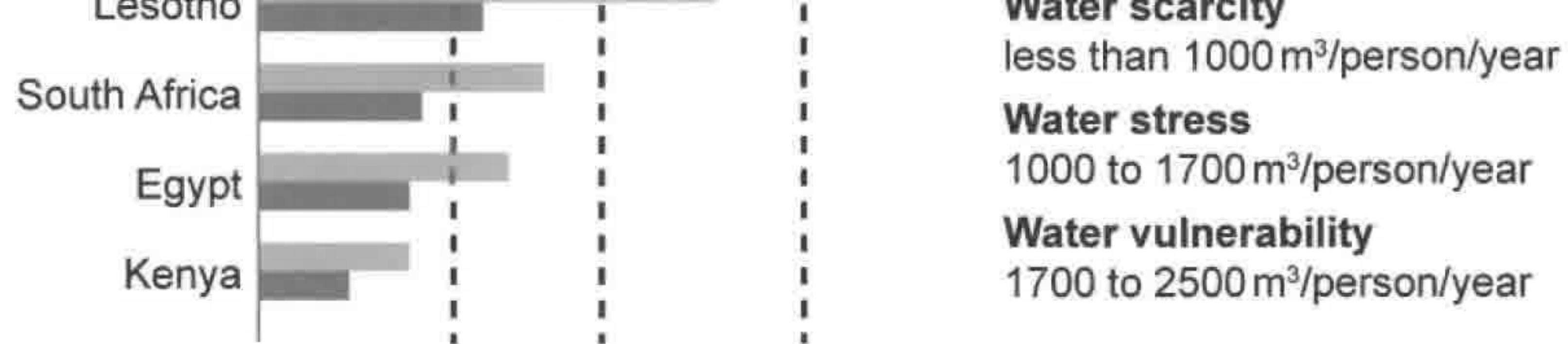
Option A — Freshwater

Answer the following question.

1. The graph shows the projected change in water availability in selected African countries between 1990 and 2025.







- (a) (i) State which country's water availability has decreased the most between 1990 and 2025. [1]
- (ii) Identify which country's water availability decreased by approximately 1500 $\text{m}^3/\text{person}/\text{year}$ between 1990 and 2025. [1]
- (b) Outline **one** possible **physical** cause for water scarcity in regions such as these. [2]
- (c) Explain **two** reasons for the growing human pressure on lakes. [3 + 3]

(Option A continues on the following page)

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

Either

2. (a) Examine the role of the processes of river erosion and deposition in the formation of meanders and floodplains. [10]

Or

2. (b) Examine the role of local communities in managing access to clean and sustainable water supplies. [10]

End of Option A

Option B — Oceans and coastal margins

Answer the following question.

3. Refer to the graph on page 2 of the accompanying resource booklet.

The graph shows the percentage of coral reefs destroyed since 2000.

- | | | | |
|-----|------|---|-----|
| (a) | (i) | Identify the area with the greatest percentage of destroyed coral reefs. | [1] |
| | (ii) | Estimate the percentage of coral reefs destroyed in the Caribbean and Atlantic Ocean. | [1] |
| (b) | | Outline one human activity responsible for the decline in coral reefs. | [2] |
| (c) | (i) | Explain one climatic impact of a La Niña event. | [3] |
| | (ii) | Explain one economic impact of a La Niña event. | [3] |

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

Either

4. (a) Evaluate the effectiveness of strategies to manage oil and plastic waste pollution in

- (b) Outline **one** human activity responsible for the decline in coral reefs. [2]
- (c) (i) Explain **one climatic** impact of a La Niña event. [3]
- (ii) Explain **one economic** impact of a La Niña event. [3]

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

Either

4. (a) Evaluate the effectiveness of strategies to manage oil and plastic waste pollution in the oceans. [10]

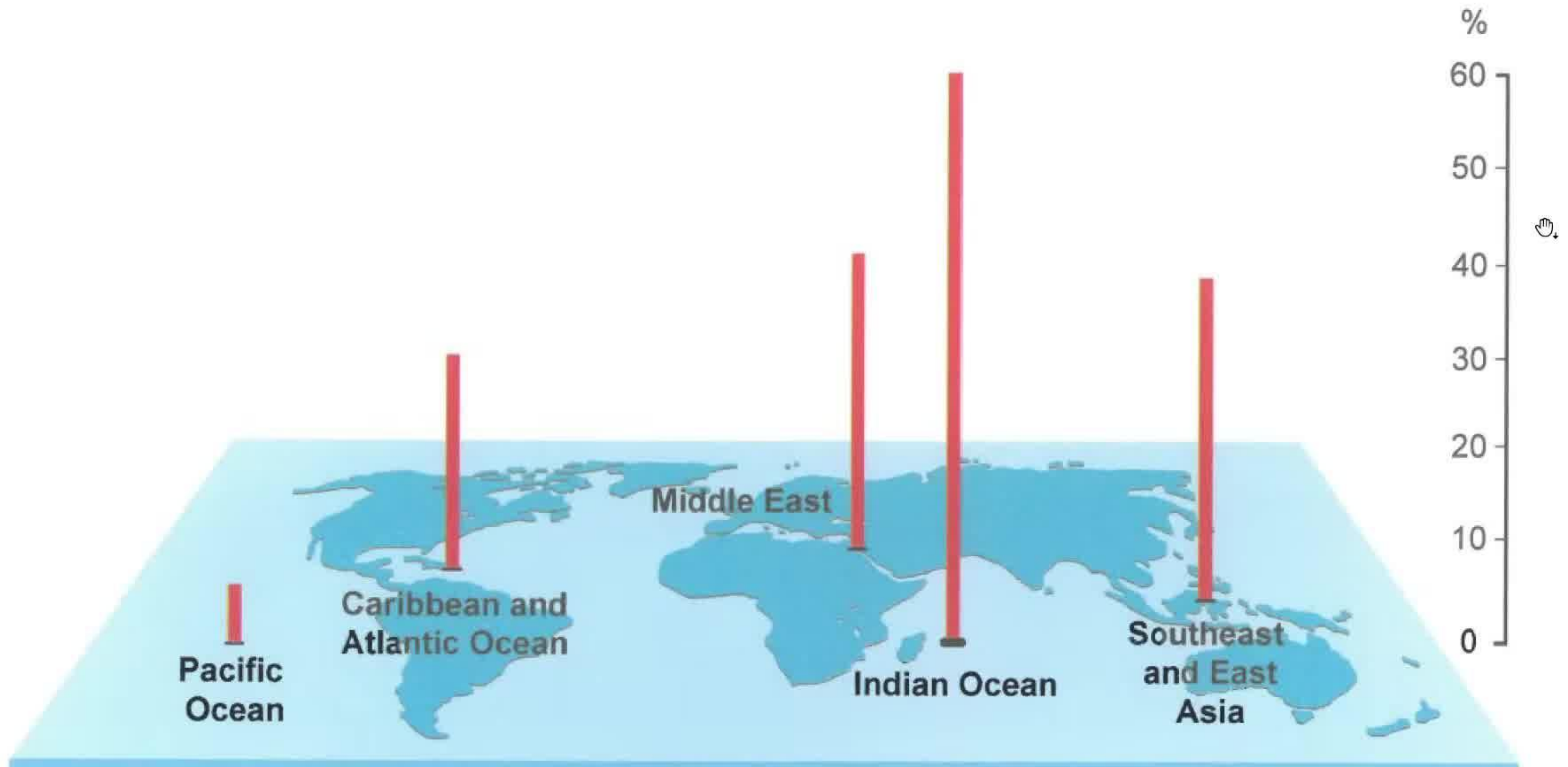
Or

4. (b) Examine why conflicts between commercial development and conservation measures at coastlines may be difficult to resolve. [10]

End of Option B

Option B — Oceans and coastal margins

3. The graph shows the percentage of coral reefs destroyed since 2000.




Option C — Extreme environments

Answer the following question.

5. Refer to the map on page 3 of the accompanying resource booklet.

The map shows the land use of plots in a few villages in a hot, arid area in Northern Senegal.

- (a) (i) Identify the main land use in the village of Widou Thiengoly. [1] 
- (ii) State the direction from the communal garden in Tessekere to the communal garden in Koyli Alpha. [1]
- (b) Outline **one** way in which water might be obtained from the water points. [2]
- (c) Explain how increasing tourism in hot, arid environments may lead to:
 - (i) **one** positive **economic** impact; [3]
 - (ii) **one** negative **environmental** impact. [3]

- (c) Explain how increasing tourism in hot, arid environments may lead to:
- (i) **one** positive **economic** impact; [3]
 - (ii) **one** negative **environmental** impact. [3]

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

Either

6. (a) Examine the role of freeze-thaw and solifluction in the formation of periglacial landscape features. [10]

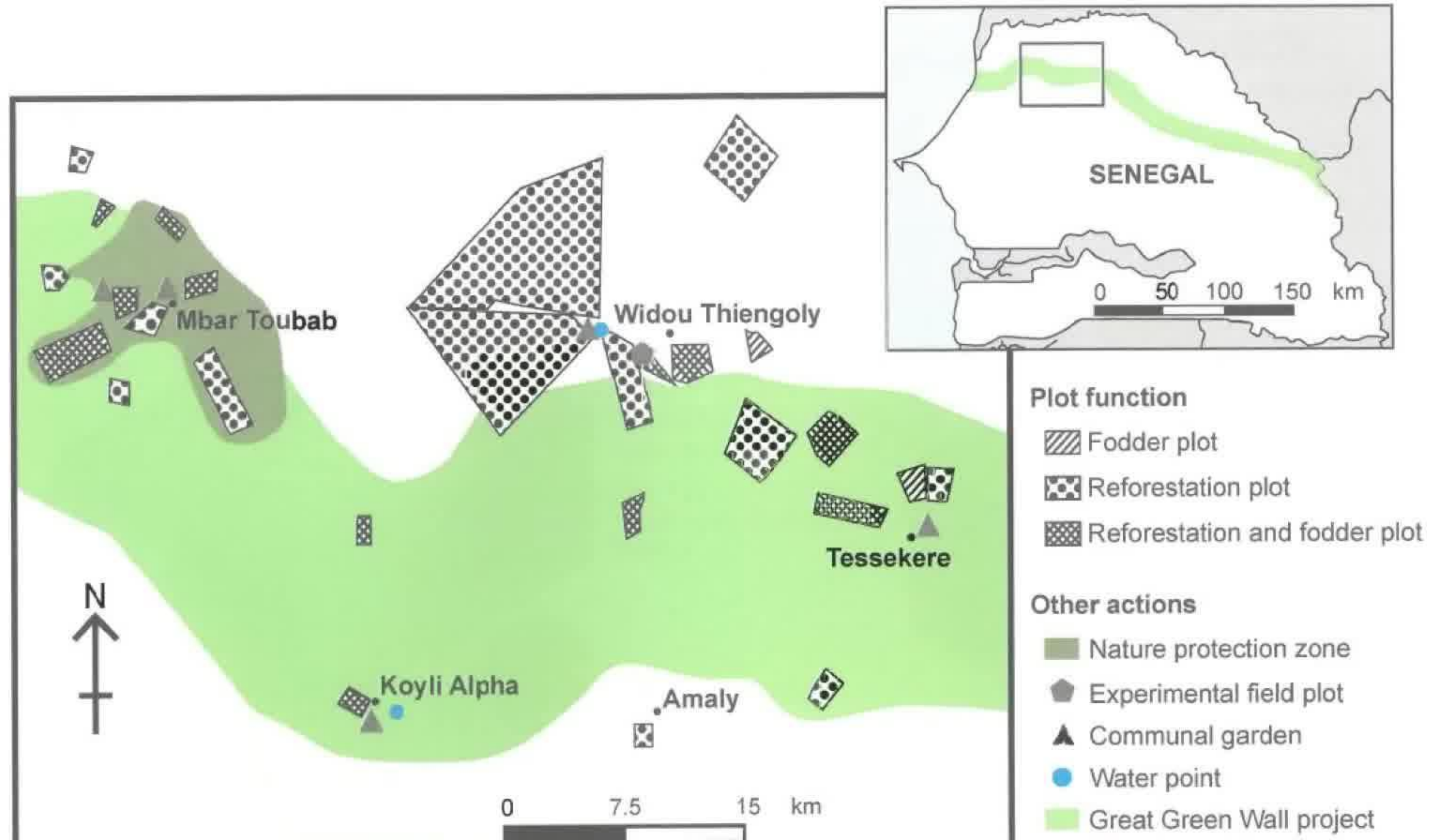
Or

6. (b) Examine the opportunities **and** challenges of using new technologies for sustainable development in **one or more** extreme environments. [10]

End of Option C

Option C — Extreme environments

5. The map shows the land use of plots in a few villages in a hot, arid area in Northern Senegal.



Option D — Geophysical hazards

Answer the following question.

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

The diagram shows the effects on a settlement of liquefaction caused by an earthquake.

- (a) (i) Identify **one** effect of liquefaction on this settlement. [1]
- (ii) Identify **one** effect of liquefaction on the physical geography of the area. [1]
- (b) Outline **one** adaptation strategy that could be used where liquefaction occurs. [2]
- (c) Explain how the hazard risk from volcanic eruptions might be affected by:
 - (i) **one demographic** characteristic of the population; [3]
 - (ii) **one economic** characteristic of the population. [3]

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

Either

8. (a) Examine the relationship between plate margin movements and the characteristics and distribution of earthquakes. [10]

- (i) **one demographic** characteristic of the population; [3]
- (ii) **one economic** characteristic of the population. [3]

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

Either

- 8. (a) Examine the relationship between plate margin movements and the characteristics and distribution of earthquakes. [10]

Or

- 8. (b) Evaluate the effectiveness of pre-event management strategies in reducing human vulnerability to earthquake hazards. [10]

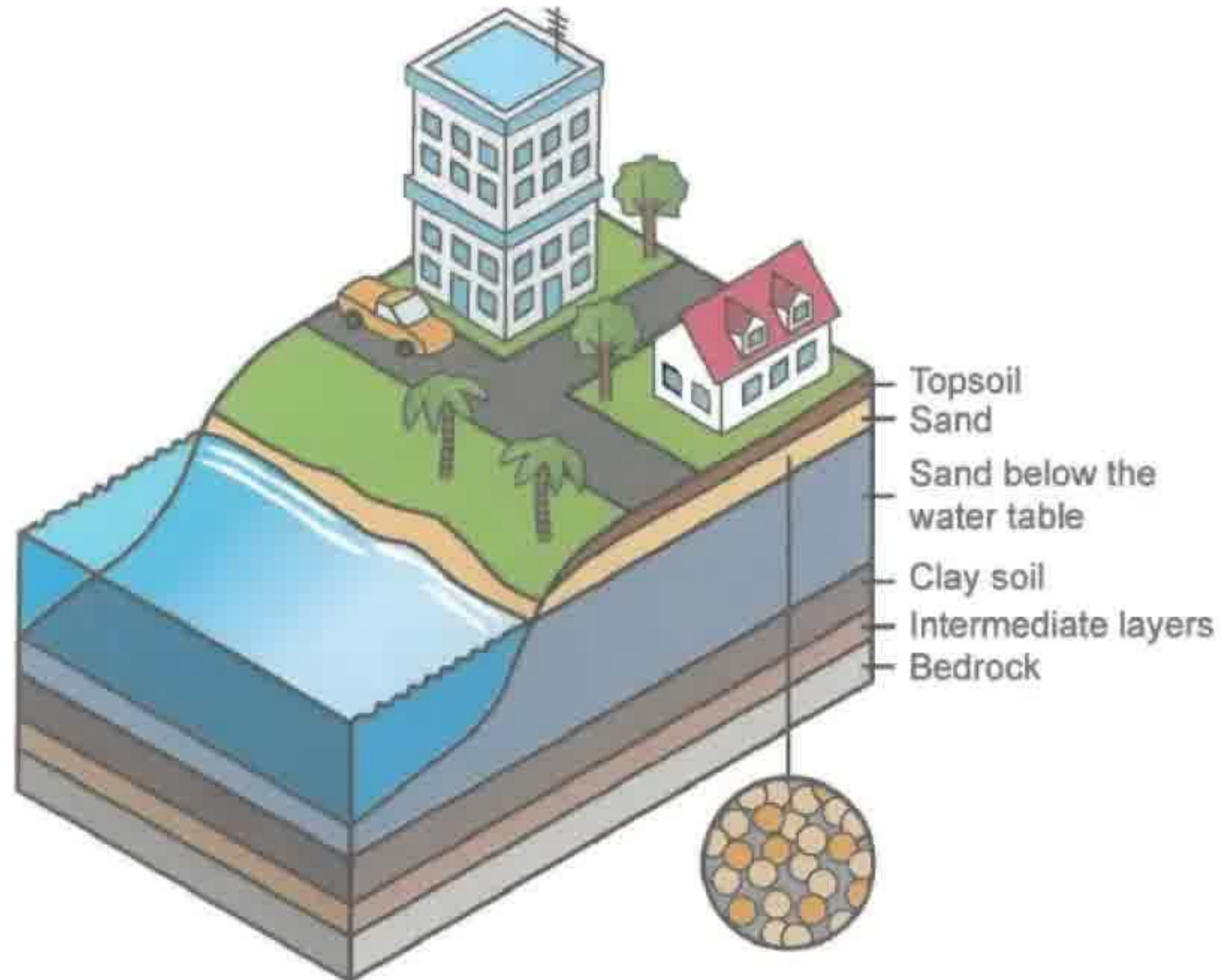
End of Option D

Option D — Geophysical hazards

7. The diagram shows the effects on a settlement of liquefaction caused by an earthquake.

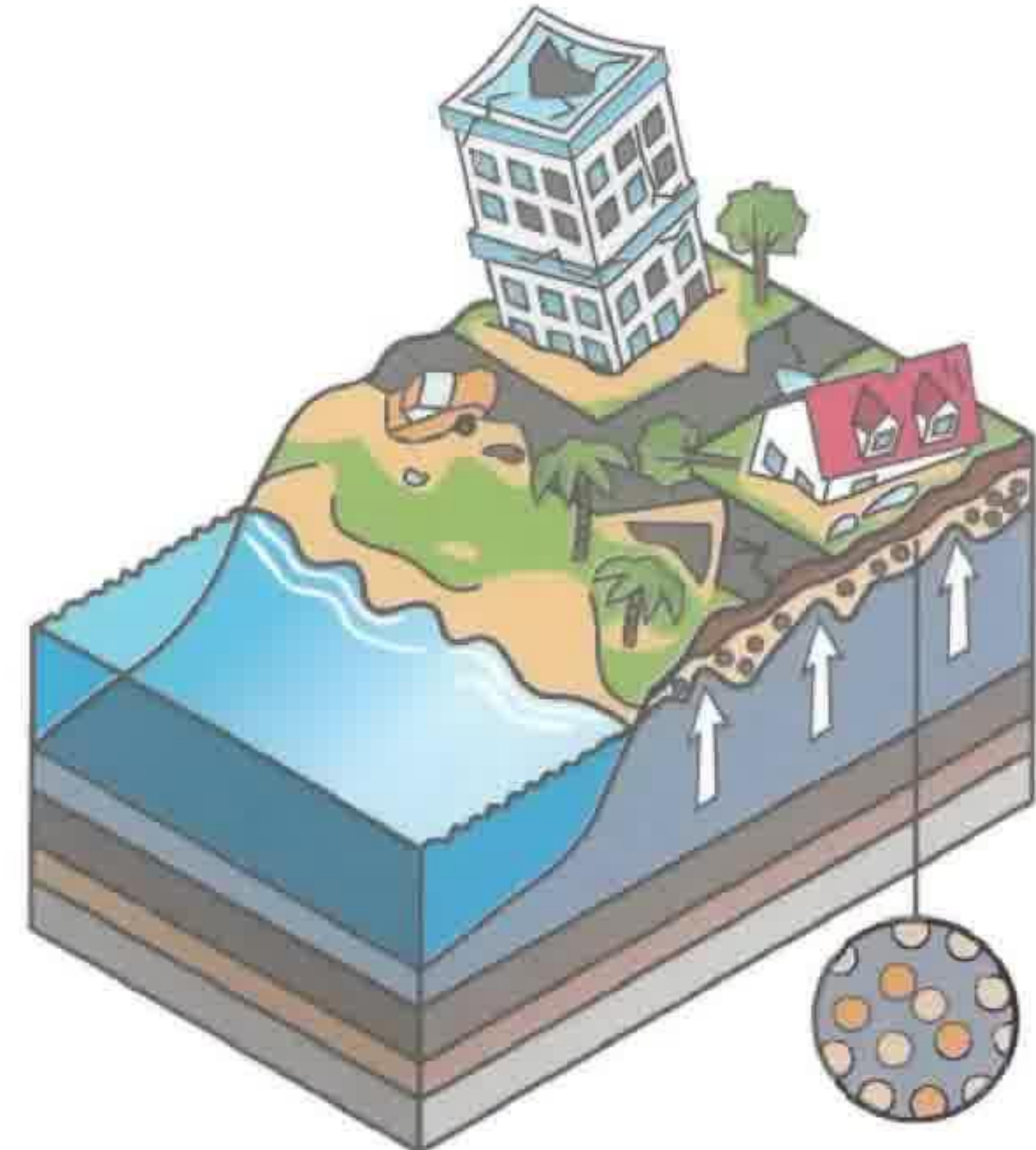
STABLE SOIL

Before earthquake



LIQUEFIED SOIL

During and after the earthquake



Option E — Leisure, tourism and sport

Answer the following question.

9. Refer to the map on page 6 of the accompanying resource booklet.

The map shows part of the Sagarmatha National Park in Nepal. The scale is 1:50 000 and the contour interval is 40 metres.

- (a) (i) State the latitude of the hotel at Phunki Tenga (point **A**). [1]
- (ii) State the altitude gain, in metres, walking from the spot height near Phunki Tenga (point **A**) to the spot height near Pangboche (point **B**). [1]
- (b) Outline **one** possible human problem caused by the large number of hotels in this area. [2]
- (c) (i) Explain **one political** reason for the growing importance of the Paralympic Games. [3]
- (ii) Explain **one cultural** reason for the growing importance of the Paralympic Games. [3]

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

Either

10. (a) Examine the role of movie location and/or heritage tourism as part of a niche national tourism strategy. [10]

- (b) Outline **one** possible human problem caused by the large number of hotels in this area. [2]
- (c) (i) Explain **one political** reason for the growing importance of the Paralympic Games. [3]
- (ii) Explain **one cultural** reason for the growing importance of the Paralympic Games. [3]

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

Either

10. (a) Examine the role of movie location and/or heritage tourism as part of a niche national tourism strategy. [10]

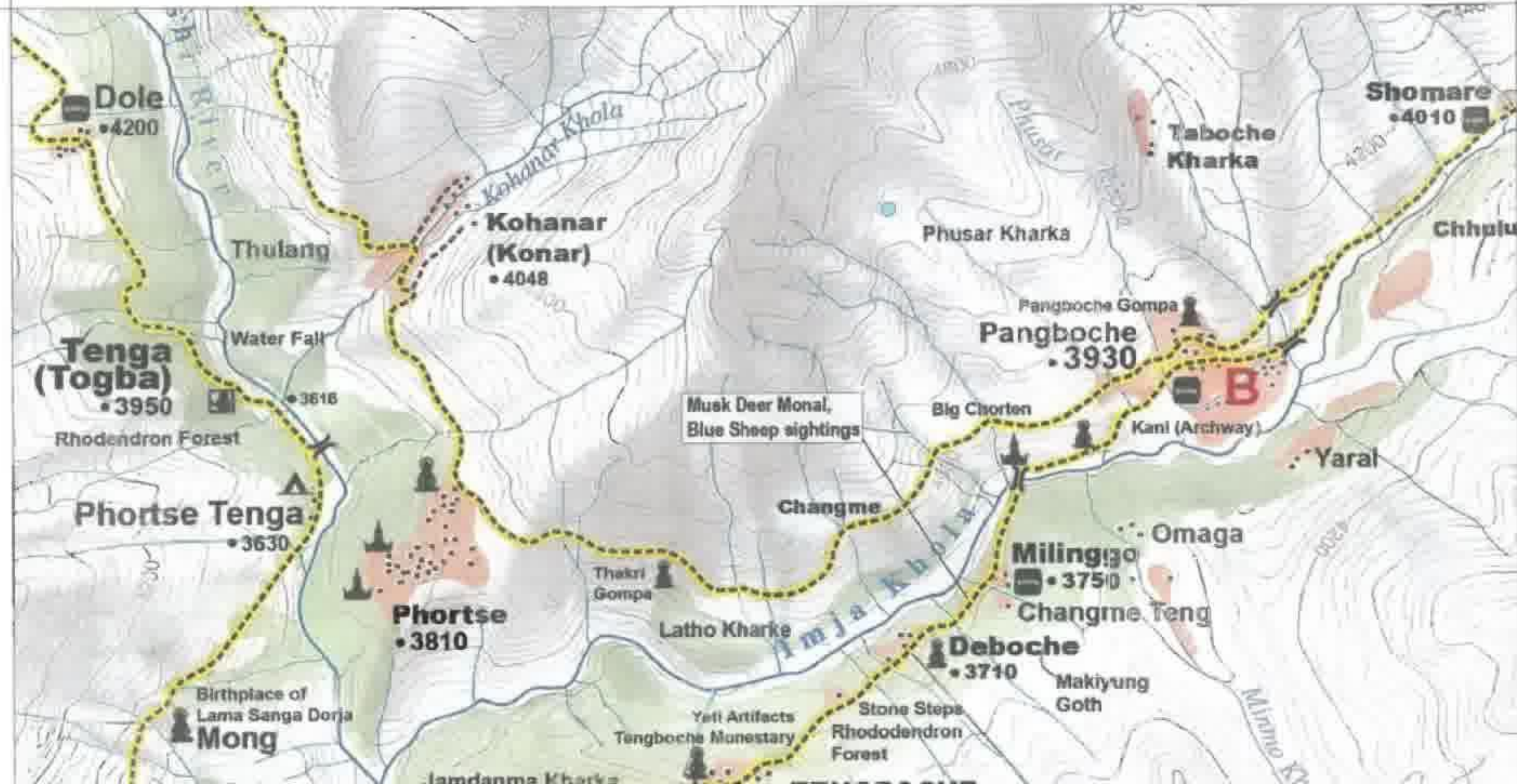
Or

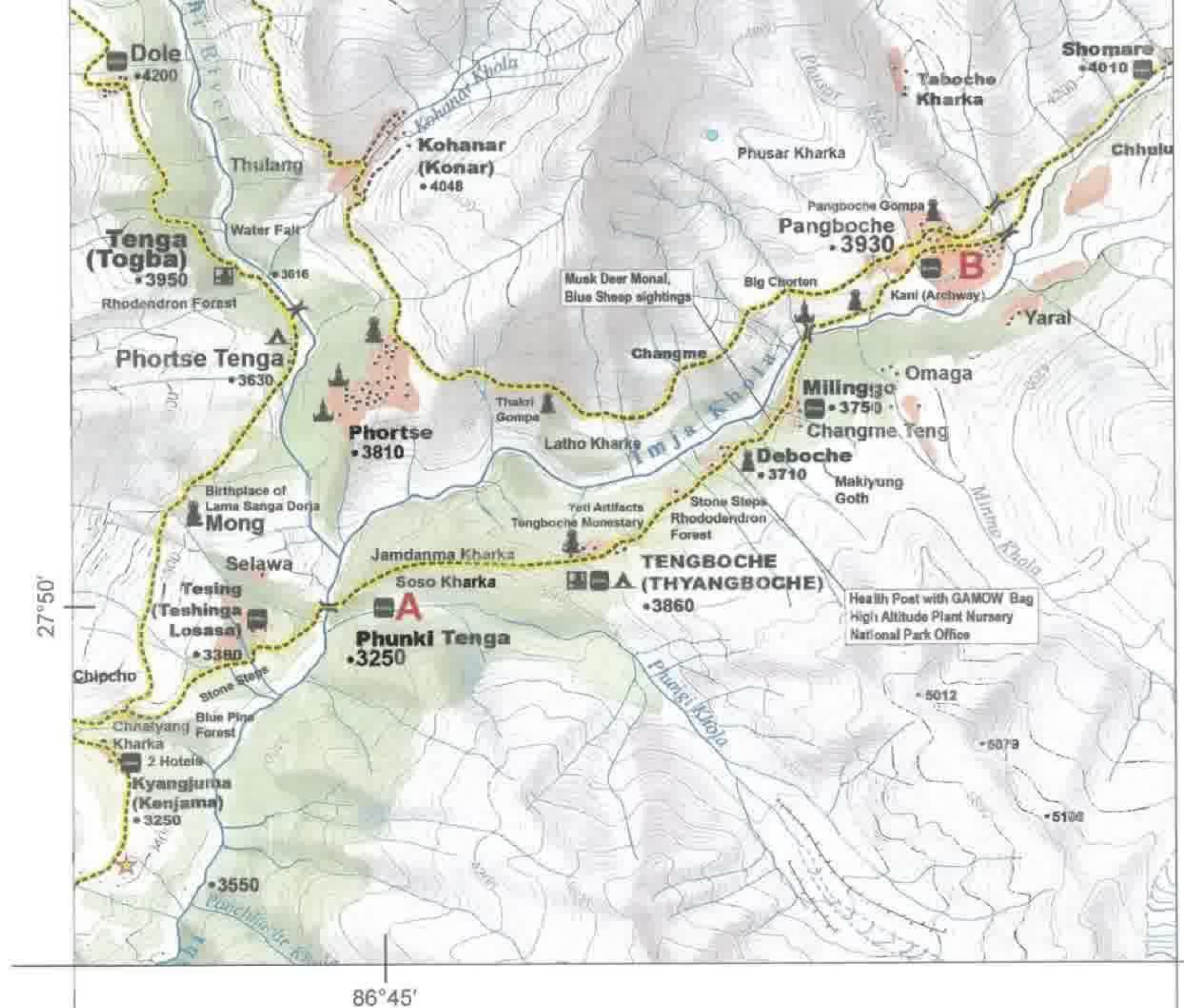
10. (b) Examine the relative importance of human **and** physical factors in the growth of tourism hotspots. [10]

End of Option E

Option E — Leisure, tourism and sport

9. The map shows part of the Sagarmatha National Park in Nepal. The scale is 1:50 000 and the contour interval is 40 metres.







Key



Main walking route



Spot height in metres



Peak, Pass



Settlement



Cultivation, Forest



Visitor centre



Cultivation, Forest



Visitor centre



Checkpoint



Post office



Health post



Airport



Hotel



Campsite



Temple, Monastery, Chorten





Airport



Hotel



Campsite



Temple, Monastery, Chorten



Cave, Waterfall



Hot spring

Contour Interval 40 metres

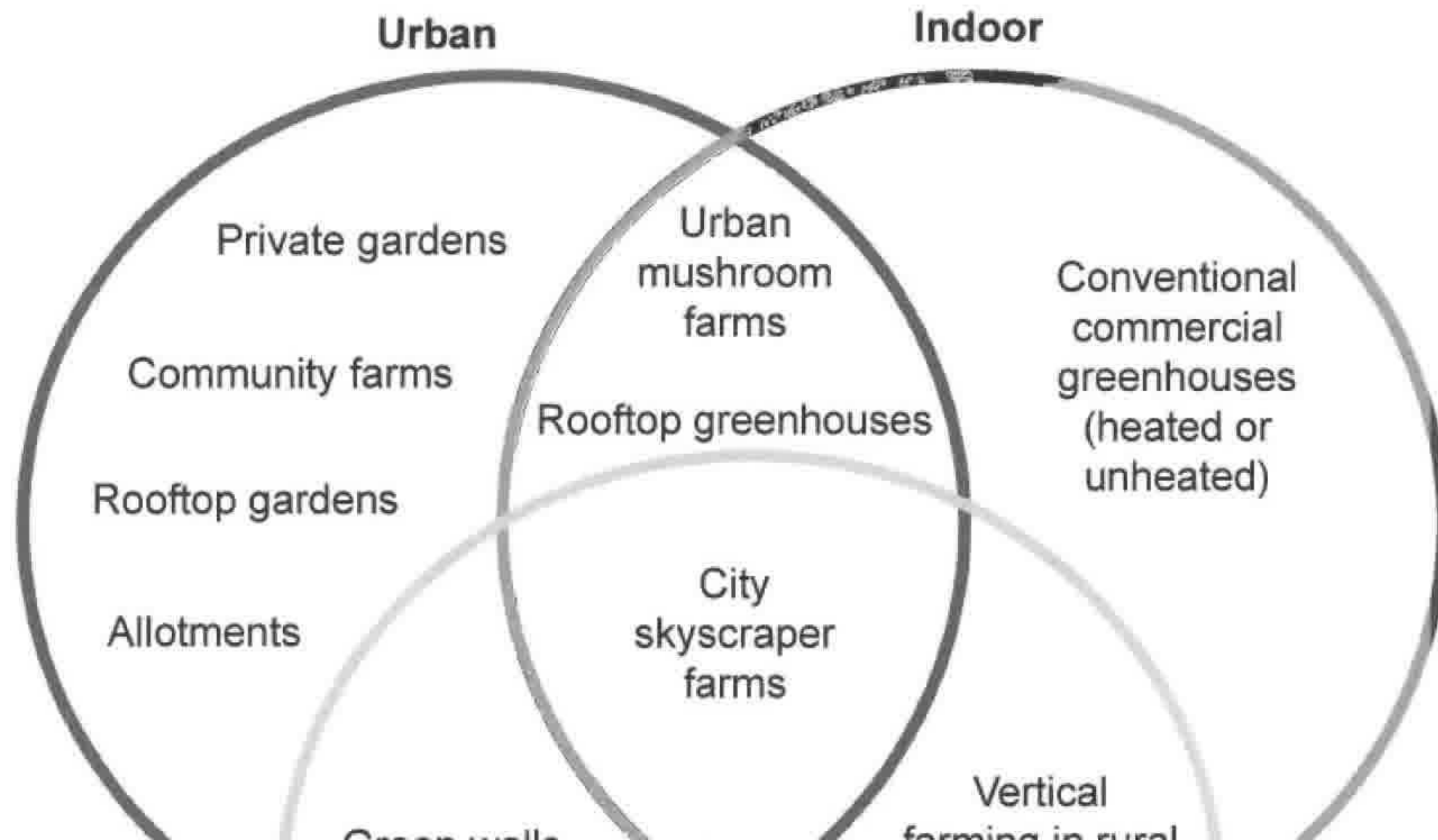


Scale 1:50 000

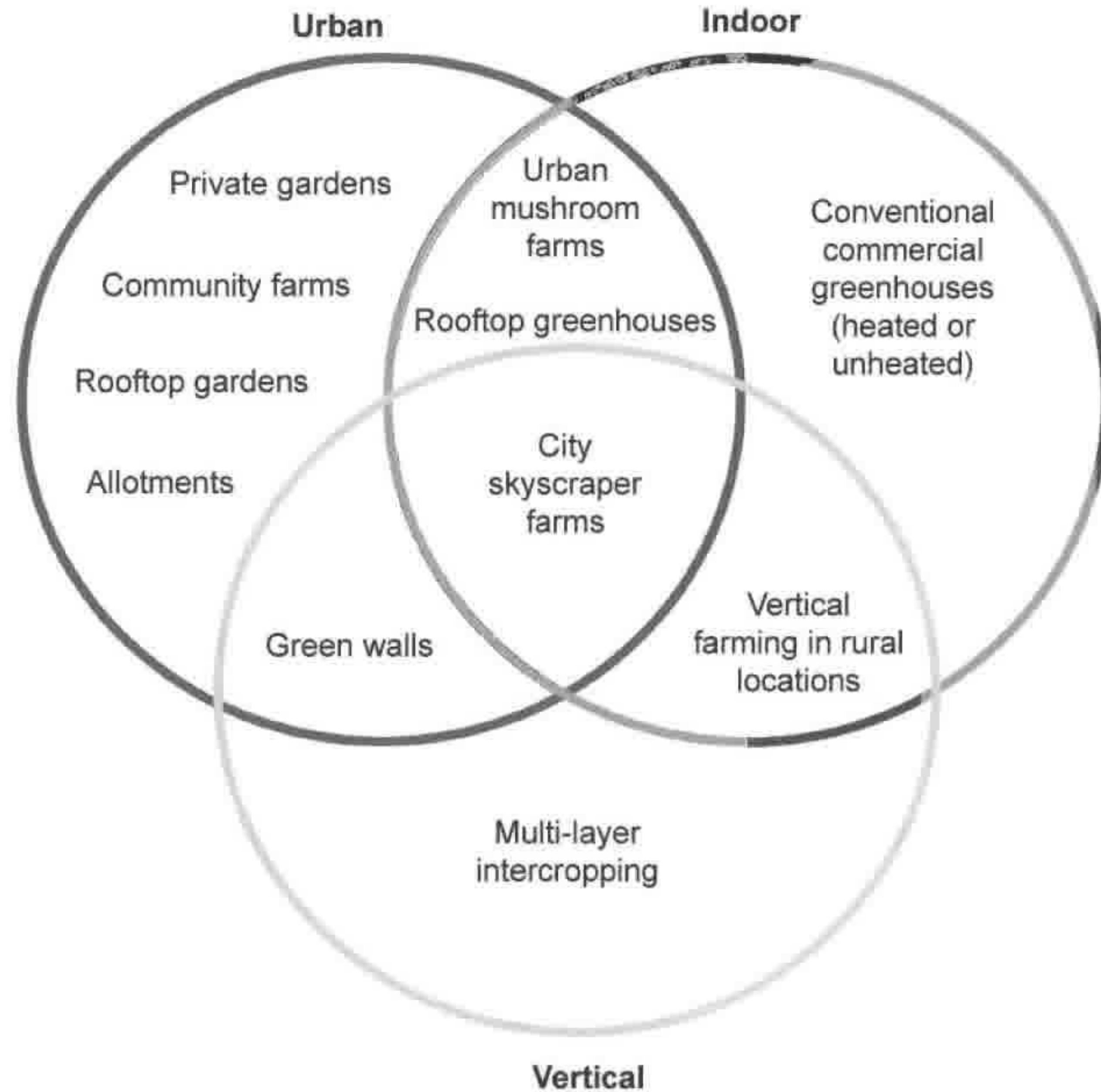
Option F — Food and health

Answer the following question.

11. The Venn diagram shows how different types of food production can be classified into urban, indoor and vertical categories.



11. The Venn diagram shows how different types of food production can be classified into urban, indoor and vertical categories.



intercropping

Vertical

- (a) (i) State the type of food production that is found in all three categories. [1]
- (ii) Identify the categories in which rooftop greenhouses are found. [1]
- (b) Outline **one** disadvantage of vertical farming for farmers. [2]
- (c) (i) Explain how **one physical** factor can lead to a change in food **production** over time. [3]
- (ii) Explain how **one human** factor can lead to a change in food **consumption** over time. [3]

(Option F continues on the following page)



(Option F continued)

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

Either

- 12.** (a) Examine the relative importance of different geographic factors contributing to the diffusion of **one or more** vector-borne diseases. [10]

Or

- 12.** (b) Evaluate possible solutions to the problem of food insecurity. [10]

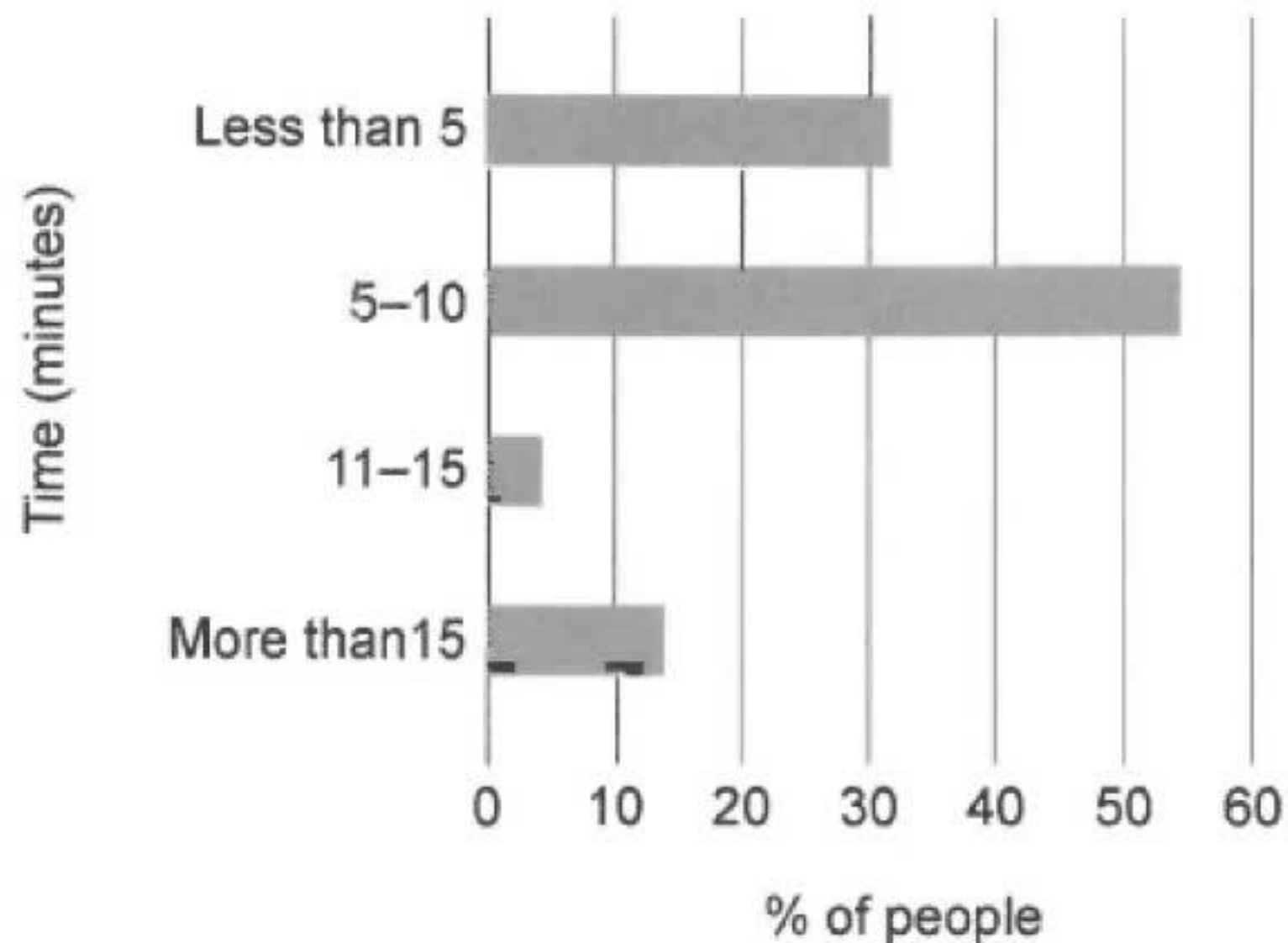
End of Option F

Option G — Urban environments

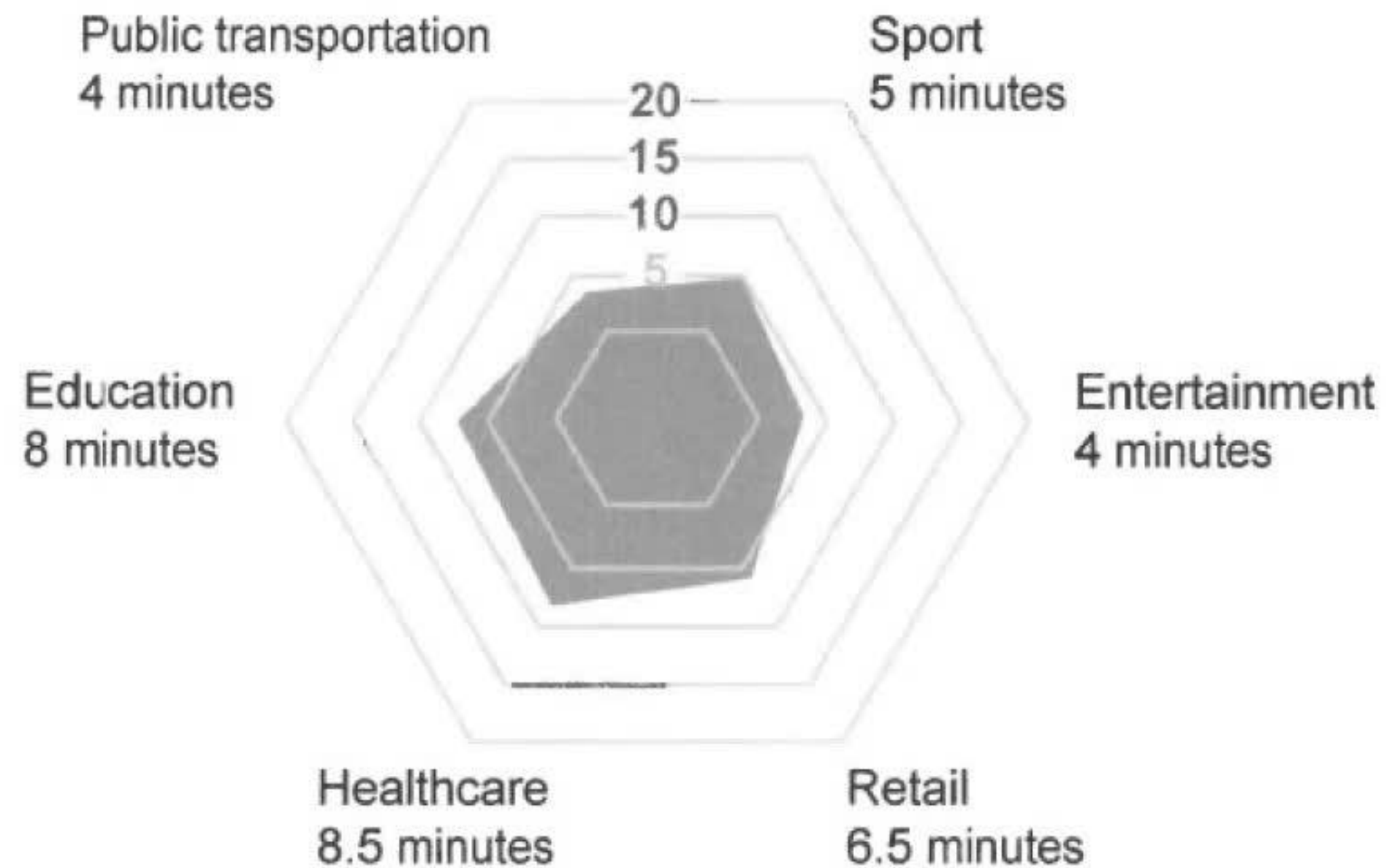
Answer the following question.

13. The diagram shows the idea of the 15-minute city, in which most essential destinations are within a 15-minute travel time (walking or cycling) from home.

Percentage of people and travel time taken to arrive at essential destinations

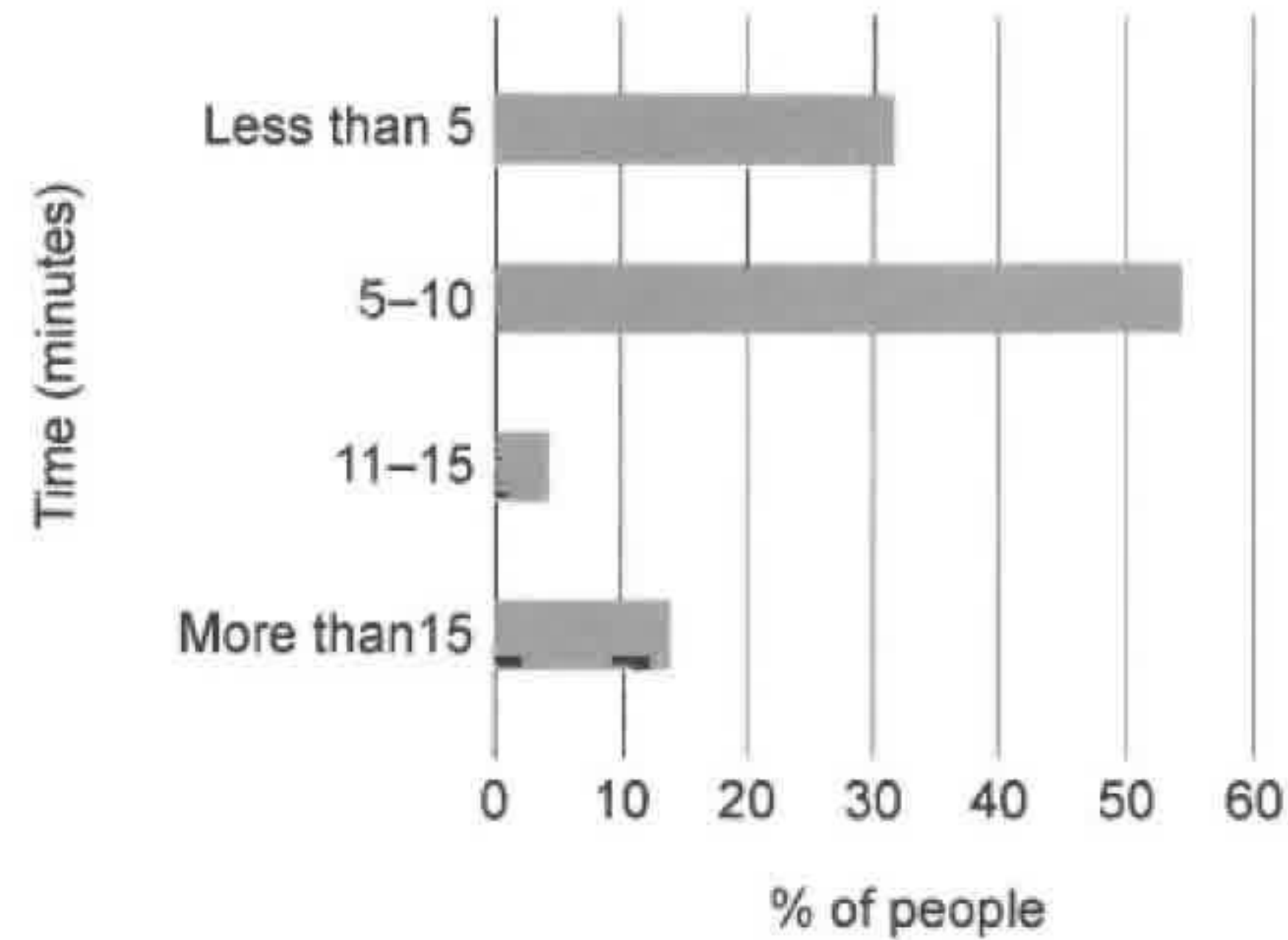


Typical travel time to each essential destination

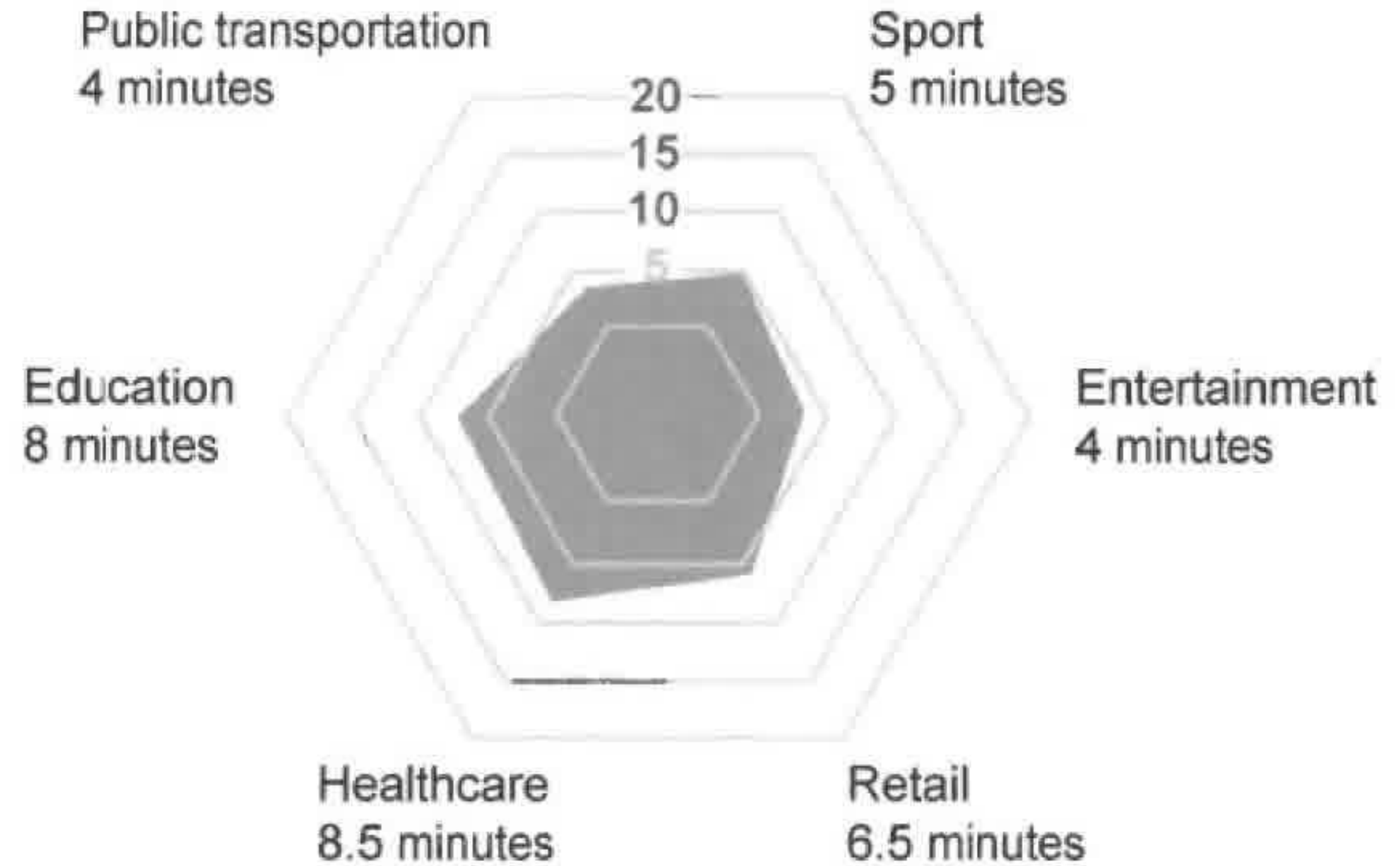


- (a) (i) Estimate the percentage of citizens who are more than 15 minutes travel from their essential destinations.

Percentage of people and travel time taken to arrive at essential destinations



Typical travel time to each essential destination



(a) (i) Estimate the percentage of citizens who are more than 15 minutes travel from their essential destinations. [1]

(ii) State the **average** travel time, in minutes, to reach the six types of essential destination. [1]

(b) Outline **one** way in which becoming a 15-minute city could help reduce a city's

0 10 20 30 40 50 60

% of people

Healthcare
8.5 minutes

Retail
6.5 minutes

- (a) (i) Estimate the percentage of citizens who are more than 15 minutes travel from their essential destinations. [1]
- (ii) State the **average** travel time, in minutes, to reach the six types of essential destination. [1]
- (b) Outline **one** way in which becoming a 15-minute city could help reduce a city's ecological footprint. [2]
- (c) Explain how the pattern of urban residential areas can be affected by:
- (i) **one physical** factor; [3]
- (ii) **one human** factor. [3]

(Option G continues on the following page)

(Option G continued)

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

Either

- 14.** (a) Examine the strengths **and** weaknesses of strategies to reduce air pollution in **one or more** urban areas. [10]

Or

- 14.** (b) Examine the role of economic **and** demographic processes contributing to inner-city gentrification. [10]

End of Option G

