H

National Qualifications 2023

X833/76/11

Geography
Physical and Human Environments

TUESDAY, 25 APRIL

09:00 AM — 10:50 AM

Total marks — 100

SECTION 1 — PHYSICAL ENVIRONMENTS — 50 marks

Attempt all questions.

SECTION 2 — HUMAN ENVIRONMENTS — 50 marks

Attempt all questions.

You will receive credit for appropriately labelled sketch maps and diagrams.

Write your answers clearly in the answer booklet provided. In the answer booklet you must clearly identify the question number you are attempting.

Use **blue** or **black** ink.

Before leaving the examination room you must give your answer booklet to the Invigilator; if you do not, you may lose all the marks for this paper.

A/PB

SECTION 1 PHYSICAL ENVIRONMENTS — 50 marks

Attempt ALL questions

Question 1

Diagram Q1 Ribbon lake

Look at Diagram Q1.

Explain the formation of a ribbon lake.   **8**

You may wish to use an annotated diagram or diagrams in your answer.

Question 2

Diagram Q2 Sand bar

Look at Diagram Q2.
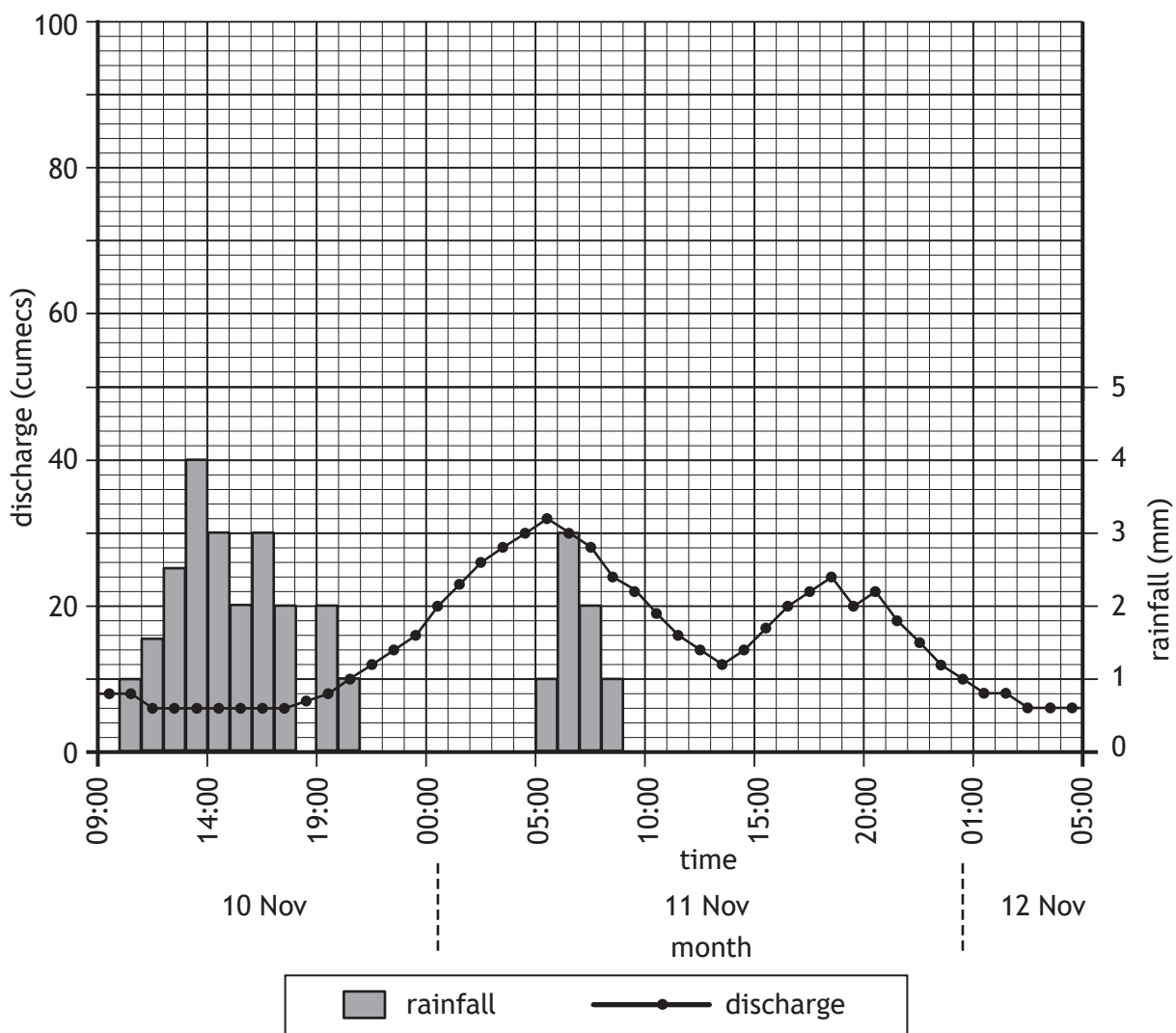
Explain the formation of a sand bar.   **8**

You may wish to use an annotated diagram or diagrams in your answer.

Question 3

Diagram Q3 Hydrograph for the River Don, Yorkshire, 10–12 November 2019

Study Diagram Q3.

For the River Don from 10–12 November:

(a) **describe** the changes in discharge level, **and**

(b) **suggest reasons** why these changes may have occurred.   **10**

Question 4

Diagram Q4 Cray Waterfall, Wharfedale

Look at Diagram Q4.

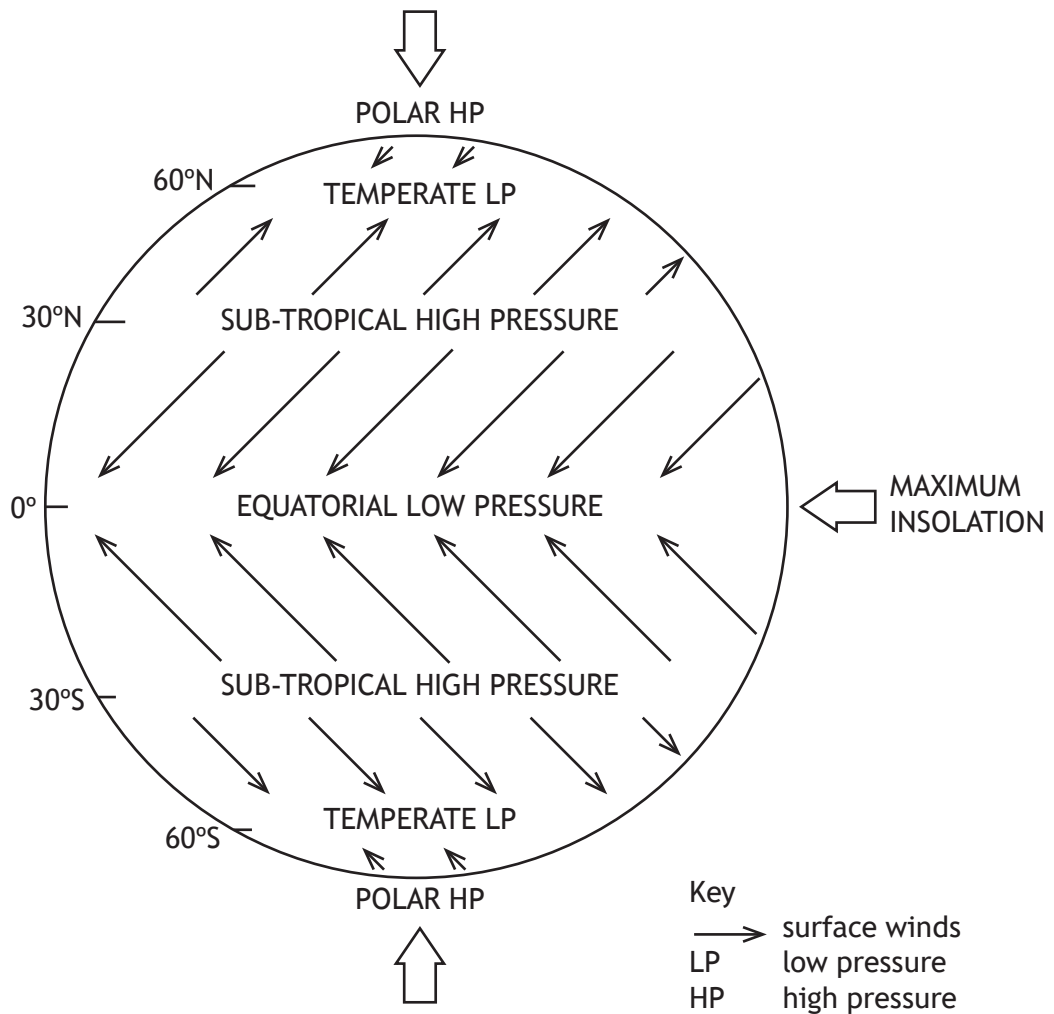**Explain** the formation of a waterfall. **8**

You may wish to use an annotated diagram or diagrams in your answer.

[Turn over

Question 5

Diagram Q5 Surface winds and pressure zones.

POLAR HP

60°N —

TEMPERATE LP

30°N —

SUB-TROPICAL HIGH PRESSURE

0° —

EQUATORIAL LOW PRESSURE

MAXIMUM
INSOLATION

SUB-TROPICAL HIGH PRESSURE

30°S —

TEMPERATE LP

60°S —

POLAR HP

Key

→ surface winds
LP low pressure
HP high pressure

Study Diagram Q5.

Explain how atmospheric circulation cells and the associated surface winds assist in
redistributing energy around the world.

8

Question 6

Draw a fully annotated soil profile of a **podzol** soil to describe its main characteristics (including horizons, colour, texture and drainage), and associated vegetation.   **8**

[Turn over

SECTION 2 HUMAN ENVIRONMENTS — 50 marks

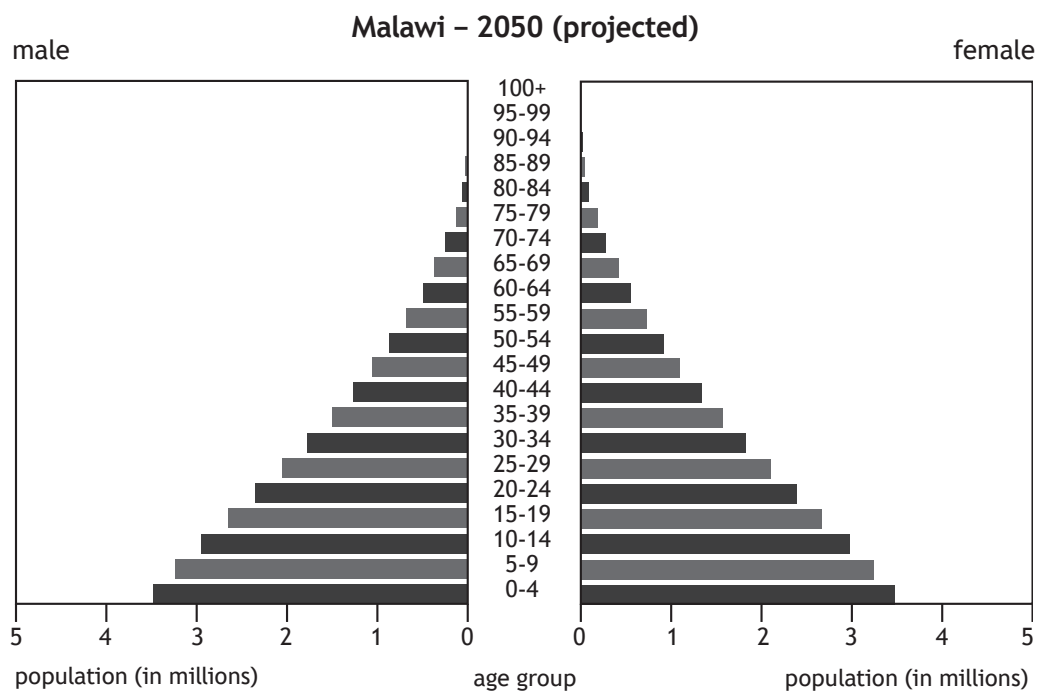**Attempt ALL questions**

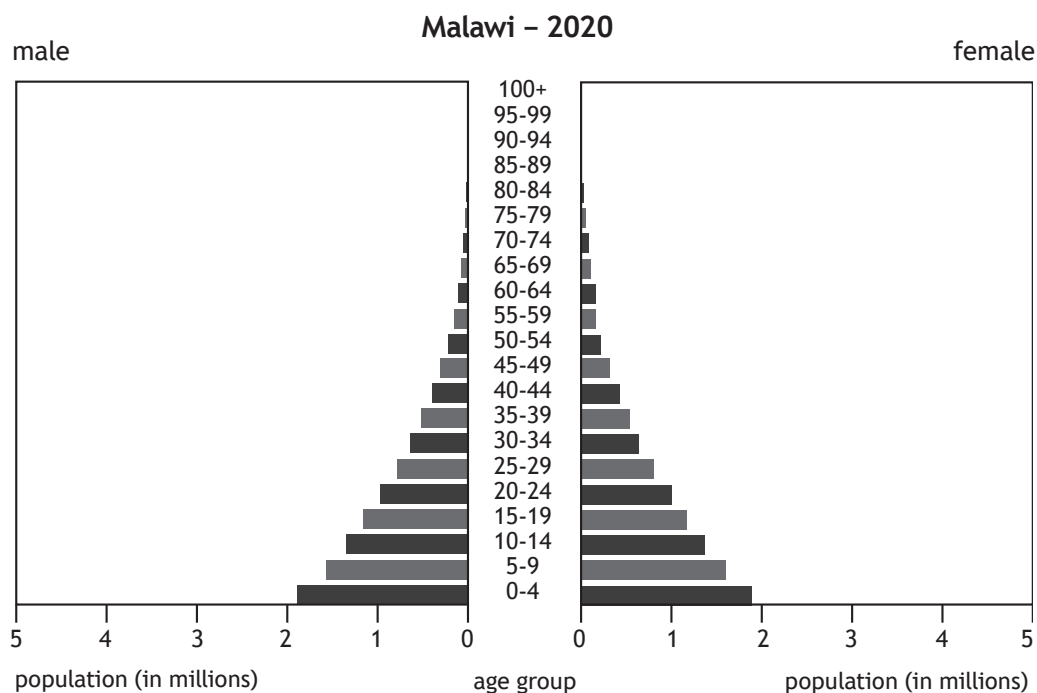**Question 7**

Describe different methods used by countries to collect population data.   **6**

Question 8

Diagram Q8 Population pyramids for Malawi 2020 and 2050 (projected)

Malawi – 2020

male

female

| 5 | 4 | 3 | 2 | 1 | 0 | | 0 | 1 | 2 | 3 | 4 | 5 |

population (in millions) age group population (in millions)

Malawi – 2050 (projected)

male

female

| 5 | 4 | 3 | 2 | 1 | 0 | | 0 | 1 | 2 | 3 | 4 | 5 |

population (in millions) age group population (in millions)

Study Diagram Q8.

Malawi's population structure is projected to change by 2050.

Discuss the possible consequences of these changes. **10**

Question 9

Diagram Q9 Leith, Edinburgh

Look at Diagram Q9.
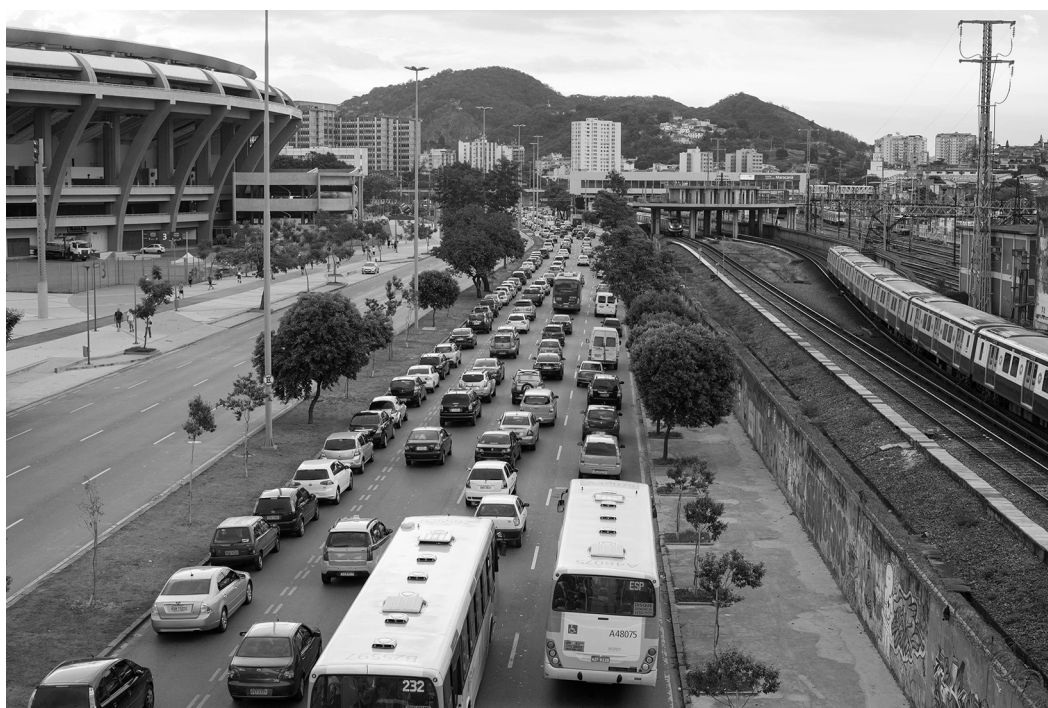
For Edinburgh, or any developed world city you have studied:

      (a) **describe** the strategies used to improve housing, **and**

      (b) **comment on** the effectiveness of these strategies.   **8**

Question 10

Diagram Q10 Traffic in Rio de Janeiro

Look at Diagram Q10.

Many strategies have been implemented to manage transport in Rio de Janeiro.
For Rio de Janeiro, or any other developing world city you have studied:

    (a) **describe** the strategies used **and**

    (b) **explain** how these strategies manage transport problems.   **8**

Question 11

Referring to a semi-arid **or** rainforest area you have studied:

    (a) **describe** strategies used to manage rural land degradation, **and**

    (b) **comment on** the effectiveness of these strategies.   **10**

[Turn over

Question 12

Diagram Q12

Look at Diagram Q12.

Referring to a glaciated **or** coastal area you have studied, **discuss** the conflicts caused by the various land uses.　　　　**8**

[END OF QUESTION PAPER]