ESSENTIAL

SQA EXAM PRACTICE

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HIGHER GEOGRAPHY

Practice Questions & Exam Papers

QUESTIONS & PAPERS

- Practise **20+ multi-part questions** covering every question type
- Complete **2 practice papers** that mirror the real SQA exams

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Practice Questions

This grid shows the pattern of coverage across the four sections of the two papers in terms of the question types, command words and OS map skills tested in the Practice Questions.

Paper 1: Physical and human environments

Section	Question Types	Command Words						OS Map Skills	Check
		Describe (in detail)	Explain (in detail)	Suggest reasons	Discuss	Comment on	Evaluate		
Section 1: Physical environments	Atmosphere	Q2	Q1						☐
	Hydrosphere	Q3		Q3	Q4				☐
	Lithosphere		Q5, Q6						☐
	Biosphere		Q7						☐
Section 2: Human environments	Population				Q8, Q9				☐
	Urban		Q10		Q11, Q12				☐
	Rural		Q13						☐
								Totals:	☐

Paper 2: Global issues and geographical skills

Section	Question Type	Command Words						OS Map Skills	Check
		Describe (in detail)	Explain (in detail)	Suggest reasons	Discuss	Comment on	Evaluate		
Section 1: Global skills	River basis management		Q1, Q2						☐
	Development and health			Q4	Q3				☐
	Global climate change		Q5		Q6				☐
	Energy				Q8	Q7			☐
Section 2: Application of geographical skills	Geographical skills						Q9	Q9	☐
								Totals:	☐

Practice Papers

	Paper A	Paper B
Paper 1: Physical and human environments		
SECTION 1: PHYSICAL ENVIRONMENTS		
Atmosphere – energy surplus	Q1	
Atmosphere – ITCZ		Q5
Atmosphere – circulation cells and surface winds		Q6
Lithosphere – coasts – depositional feature – formation of sand spit		Q4
Lithosphere – coasts – erosional feature – formation of a headland		Q4
Lithosphere – upland glaciation – formation of corrie	Q6	
Lithosphere – lowland glaciation – formation of terminal moraine, drumlin or esker		Q2
Hydrosphere – hydrological cycle	Q3	
Hydrosphere – factors affecting a hydrograph		Q1
Hydrosphere – rivers – formation of a meander	Q4	
Hydrosphere – ocean currents	Q2	
Biosphere – soil formation	Q5	Q3
SECTION 2: HUMAN ENVIRONMENTS		
Population – census	Q7	
Population – population structure		Q10
Population – impact of migration on receiving country		Q7
Rural – impact of degradation	Q8	
Rural – strategies used to manage rural land degradation		Q8
Rural – land use conflicts		Q9
Urban – traffic management strategies – developing	Q9	
Urban – housing management – developed		Q12
Urban – strategies to improve shanty towns		Q11
Paper 2: Global issues and geographical skills		
SECTION 1: GLOBAL ISSUES		
River basin management		
Physical and human factors affecting the site of a dam	Q1a	
Evaluate three dam sites		Q1a
Negative environmental impacts of a major dam	Q1b	
Evaluation of environmental impacts		Q1b
Development and health		
Primary healthcare strategies	Q2a	
Effectiveness of strategies	Q2b	
Combat of disease – malaria, cholera or bilharzia		Q2a
Evaluation of success of measures to combat disease		Q2b
Global climate change		
Human causes of global climate change	Q3a	
Physical causes of global climate change		
Consequences on local and national scale	Q3b	
Reducing global warming		Q3a

	Paper A	Paper B
Effectiveness of strategies to reduce global warming		Q3b
Energy		
Changes in energy production	Q4a	
Generating energy from renewable resources	Q4b	
Reasons for increased energy consumption		Q4a
Advantages of renewables meeting energy demand		Q4b
SECTION 2: APPLICATION OF GEOGRAPHICAL SKILLS		
Llanberis proposed HEP scheme	Q5	
Balmaha proposed housing development		Q5

Practice makes permanent

In this section, you will have the opportunity to practise the different question types that will appear in your question papers.

You will sit two papers for your SQA Higher Geography qualification. The Practice Questions are split into Paper 1 and Paper 2.

Paper 1 has two sections: Physical environments and Human environments.

Paper 2 has two sections: Global issues and Applications of geographical skills.

Within each paper, each question type is preceded by a How to answer section, which gives advice on how to answer that particular question type.

The main command words used in the questions in this paper, along with the type of information you should include in your answers to these questions, are listed below.

- Describe (or describe in detail): Give a statement of facts or use figures. If you are asked to describe in detail a graph, diagram, map or a table, then use specific detail from them in your answer. For example, if you were asked to describe a hydrograph, you should use the graph to give the actual amounts of discharge, times of peak discharge and the millimetres of rainfall.
- Explain (or explain in detail): Give reasons to support a statement. If you are asked to explain in detail the changes in discharge of a river, you need to give reasons in your answer. For example, the river discharged peaked four hours after the rainfall stopped because not all the rainfall falls directly on the river and it takes time for the ground to become saturated.
- Suggest reasons: Justify an answer giving causes to back up a statement.
- Discuss: Give evidence to support a statement.
- Comment on: Give statements which can agree or disagree.
- Evaluate: Give evidence for and against a strategy from a range of sources in order to reach a conclusion.

Paper 1: Physical and human environments

The two sections in Paper 1, Physical environments and Human environments, are each worth 50 marks and consist of extended-response questions. The total paper is worth 100 marks. You need to answer all of the questions in each section.

You will have a total time of 1 hour 50 minutes to complete this paper. To manage your time effectively, you should allocate 50 minutes to answering each section, leaving 10 minutes for reading the questions and checking answers at the end.

In Paper 1, you will be asked questions about the topics of physical and human environments on a **local**, **regional** or **global** scale, so make sure you put appropriate examples in your answers. You will also have the opportunity to demonstrate using a wide range of geographical skills and techniques.

Section 1: Physical environments

The questions in this section will ask you to develop and apply your geographical skills, knowledge and understanding. They will also ask you to develop and apply knowledge and understanding of the processes at work and interactions with human environments on a **local**, **regional** and **global** scale.

Atmosphere questions

There are three main topics you can be asked questions on in this section:

- the global heat budget
- the redistribution of energy by atmospheric circulation (winds) and oceanic circulation (ocean currents)
- the cause, characteristics and impact of the Intertropical Convergence Zone (ITCZ).

MARKS

Questions about atmosphere

HOW TO ANSWER

Many of these questions include diagrams. Before answering the questions, look at the diagrams. The diagrams usually have information on them that you can use in your answer. If it is a **describe** question, give detailed facts. If it is an **explain** question, make a statement then give a reason backing up your statement.

1 Solar energy

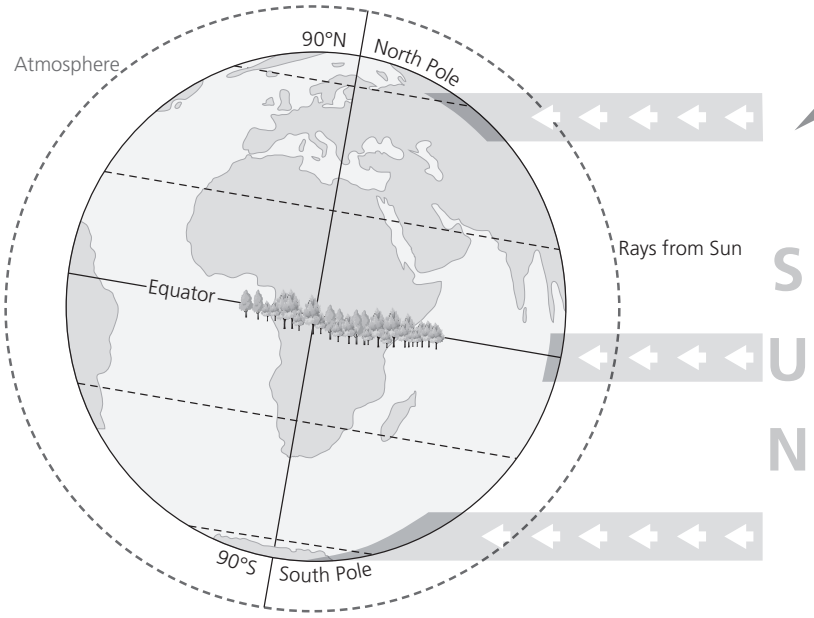

Diagram Q1: Solar energy

Look at Diagram Q1.

Explain why there is a surplus of solar energy in the tropical latitudes and a deficit of solar energy towards the poles. 6

Top Tip!

In this diagram, there are clues to the answer. For example, it clearly shows that the area covered by the rays is greater at the poles than the equator, so you can use this in your answer. The question is worth 6 marks and there are five points you can talk about on the diagram. Take each number on the diagram, describe each point then explain how it affects the absorption of energy.

Top Tip!

A common mistake made with this question is using reverse points. For example, if you have already mentioned in your answer that the Sun's rays pass through less atmosphere at the equator and therefore less energy is lost through absorption, reflection and scattering, **do not** repeat yourself by saying the opposite – the Sun's rays pass through more atmosphere at the poles and therefore more energy is lost through absorption, reflection and scattering. You will only be credited once!

MARKS

2 Air masses and the ITCZ

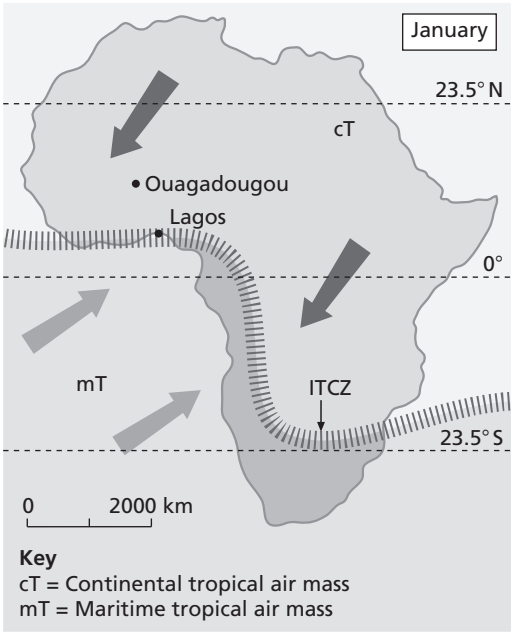

Diagram Q2: ITCZ over Africa in January

Look at Diagram Q2.

Describe the origin, nature and characteristics of the maritime tropical and continental tropical air masses. 6

Top Tip!

This is a 6-mark question but, to make it easier, it can be broken into two parts, each worth 3 marks. Talk about each air mass separately, say where it comes from and then say something about the weather it brings. Remember there are clues on the diagram.

Top Tip!

Try to avoid giving vague locations in your answer as this will not gain a mark. Be specific about origins of the air masses. Do not simply say 'over the sea' or 'over the land'.

Hydrosphere questions

There are three main topics you can be asked questions about in this section:

- formation of erosional and depositional features in river landscapes:
  - V-shaped valley
  - waterfall
  - meander
  - oxbow lake
- hydrological cycle within a drainage basin
- interpretation of hydrographs.

Questions about hydrographs

» HOW TO ANSWER

When describing hydrographs, make sure you use the correct scale when there are two scales on the same diagram. The discharge of the river is usually shown as a line graph and measured in cumecs, whereas the rainfall is shown as bars and measured in millimetres. Use accurate figures from the graph. Use the terms shown on the diagram along with the figures to get the most marks for your answer.

Section 2: Application of geographical skills

This question is designed to examine your geographical skills, including your ability to interpret an Ordnance Survey (OS) map, using six-figure grid references and understanding/using scale, direction and distance. You should also be able to extract and interpret information from a variety of graphs and charts. You should be able to use/evaluate the information you have been given to make judgements and back up your answer with map evidence and information from the diagrams.
This question is worth 20 marks. There is no choice of questions. You should plan on spending 20 minutes answering this question.

Top Tip!

As the question is worth 20 marks, it is sensible to break it down into smaller parts to make it easier to manage.

Question applying geographical skills

» HOW TO ANSWER

Start by reading the question carefully. Then take time to read through all the sources and study the diagrams. Find the area on the OS map. Try to make comments on each source given. Your comments could be both positive and negative. The question asks you to evaluate, so give your opinion using evidence from the diagrams.

In the question below, start with the first point, that is the amount of wind needed. Look at the diagram on wind speeds and describe what it shows. Then say if there is too little, enough or too much wind for the proposed wind farm or state any other relevant point. Then move on to the next point to be considered. Look at the appropriate diagram and again evaluate it. Do this with all of the sources, as well as using OS map evidence. At the end, if it is an evaluation question, give your opinion with reasons in answer to the question.

Top Tip!

Make sure you refer to the sources when answering the question. The sources will help you answer the question. You should also use grid references in your answer.

MARKS

9 Study the Ordnance Survey map extract and Diagrams Q9A–Q9F.

Referring to map evidence and other information from the sources, evaluate, in relation to the considerations below, whether the smaller proposed wind farm should be given planning permission.

20

Considerations when siting a wind farm:

- adequate wind – at least 11 miles per hour on average
- impact on environment, plant and animal life
- visual and noise pollution
- impact on Scotland's greenhouse gas emissions
- impact on the local economy

Ambitious plans to build the largest wind farm in the whole of Europe were revealed in 2004. It was proposed to site the wind farm on the Isle of Lewis in the Outer Hebrides of Scotland. The suggestion was that 234 turbines would be constructed, each 135 metres high. Planning permission for such a large wind farm was denied; however, a smaller 42-turbine wind farm has now been suggested which would be sited just outside the town of Stornoway. This would be known as the Stornoway Wind Farm.

Paper 1: Physical and human environments

Duration: 1 hour and 50 minutes
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.

Section 1: Physical environments

Total marks: 50
Attempt ALL questions.

MARKS

1 Explain why there is a surplus of solar energy in tropical latitudes and a deficit of solar energy towards the poles. You may wish to use a diagram(s) in your answer. **8**

2

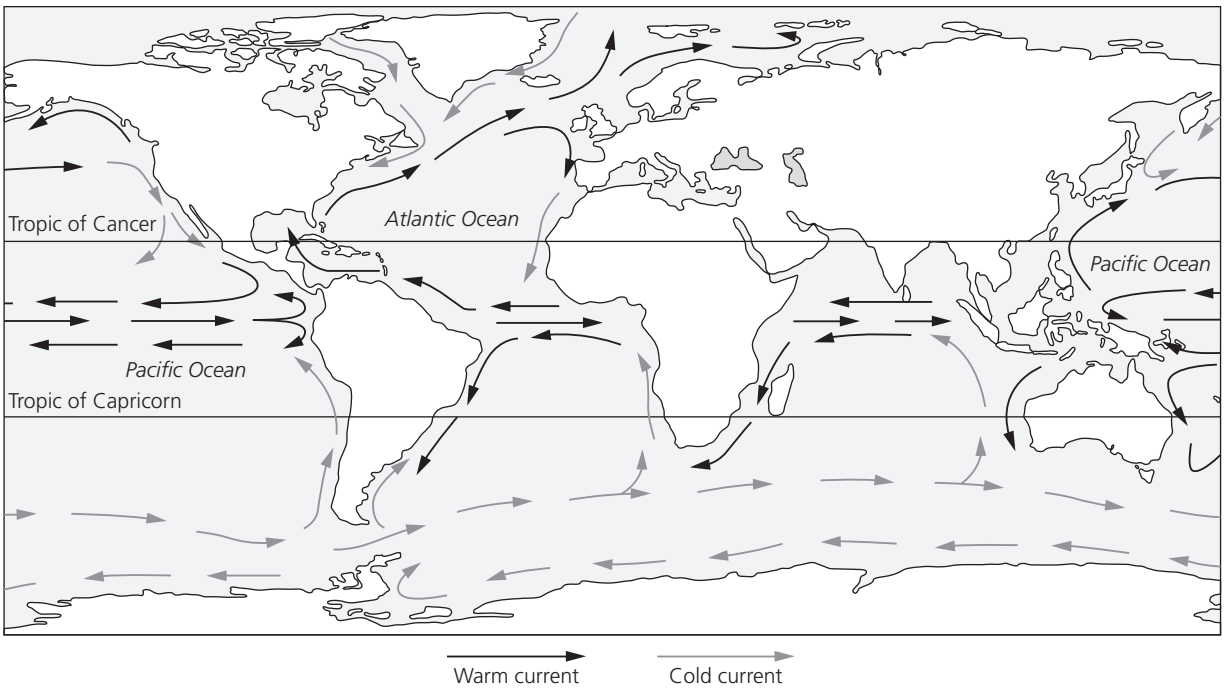

Diagram Q2: Ocean circulation

Study Diagram Q2.

a Describe the ocean currents in the Atlantic Ocean.

b Explain how they help to maintain the global energy balance. **8**

Paper 2: Global issues and geographical skills

Duration: 1 hour 10 minutes
Total marks: 60

Section 1 – GLOBAL ISSUES – 40 MARKS
Attempt TWO questions.

Section 2 – APPLICATION OF GEOGRAPHICAL SKILLS – 20 MARKS
Attempt the question.
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.

Section 1: Global issues

Total marks: 40
Attempt TWO questions.

MARKS

1 River basin management

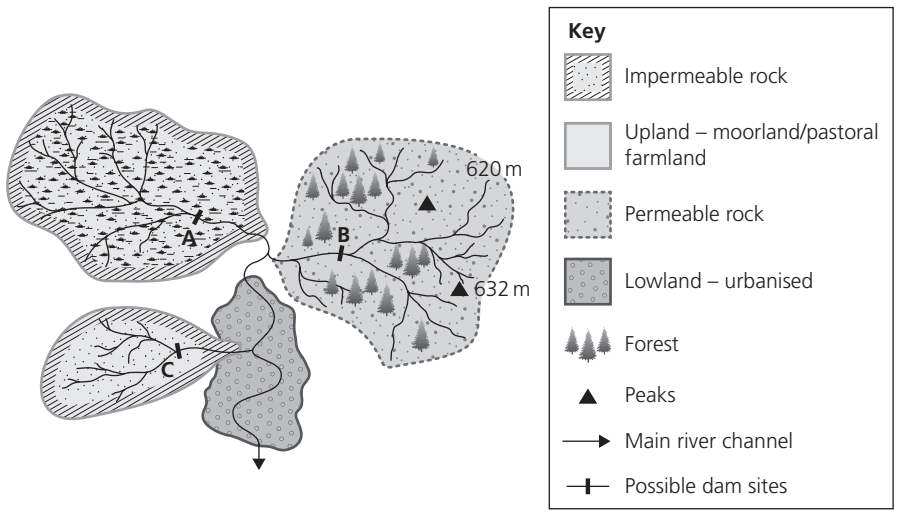

Diagram Q1A: Possible sites for a dam

Source: adapted from SQA Intermediate 2 paper 2013

a Look at Diagram Q1A.
Evaluate the suitability of sites A, B and C for the location of a dam. **10**

Section 2: Application of geographical skills

Total marks: 20
Attempt the question.

MARKS

5 A plan to build 22 new houses at Balmaha within the Loch Lomond and The Trossachs National Park has been proposed.

Study the Ordnance Survey map extract of the Balmaha area and Diagrams Q5A–E before answering this question.

Referring to evidence from the Ordnance Survey map, and other information from the sources, discuss:

a the advantages and disadvantages of the proposed housing development; and

b any possible impacts on the surrounding area. **20**

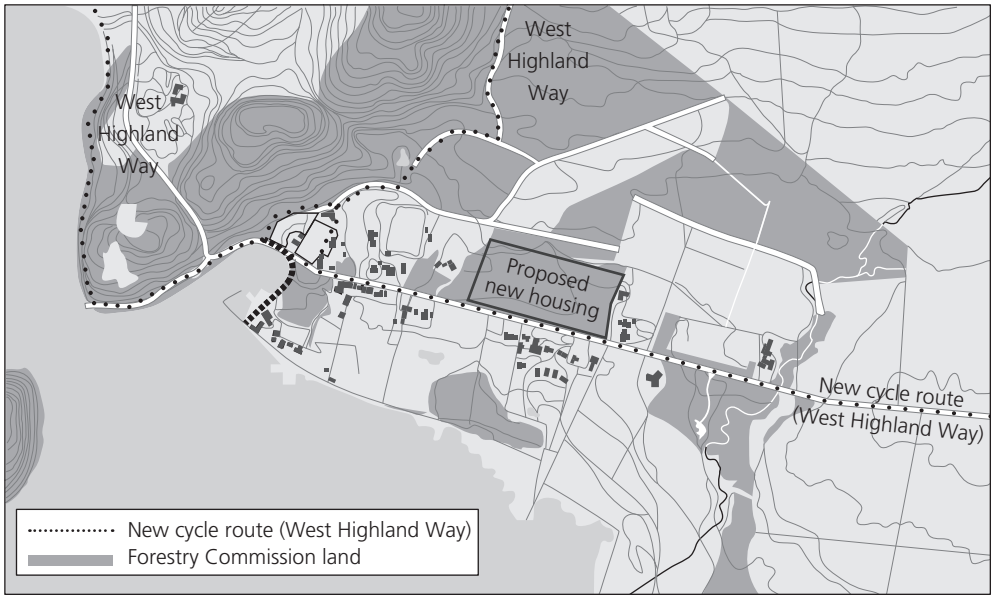

Diagram Q5A: Proposed site of new housing in Balmaha

Source: adapted from www.gov.scot

It is proposed to build 22 houses on a 5-acre woodland site owned by the Forestry Commission, close to the West Highland Way. Twenty of the houses will be a modest size and will be affordable homes for young people, families and older people. Two of the plots will be for private sale. The housing will be eco-friendly and blend in with its surroundings, and screened from the road by trees.

Diagram Q5B: Proposed housing development at Balmaha

Question	Expected answer	Marks	Commentary with hints and tips
3	In urban areas, people remove trees and vegetation and then cover soil in impermeable materials such as tarmac, which increase surface run-off (1). This leads to higher river levels and increases the risk of flooding (1). It also reduces the amount of water that returns to groundwater storage, possibly reducing the water table (1). Deforestation means that there are no tree leaves and roots to soak up precipitation (1), leading to increased run-off and flooding through increased river flows (1). Deforestation can lead to a decrease in evapotranspiration rates, which means less moisture going into the atmosphere (1), leading to less cloud formation and therefore less rainfall (1). Water is taken from the water table for domestic use, causing the water table to drop so there is no base flow into rivers resulting in rivers drying out (1). Water removed from rivers and underground stores for irrigation results in reduced river flow and lowers the water table (1). The silting-up of lakes, rivers and reservoirs due to waste products and mining processes can result in reduced storage in these areas (1). Water is taken from the water table for domestic water use causing the water table to drop so there is no base flow into rivers resulting in rivers drying out (1).	**10**	Read the question carefully. This question can be asked for human environment reasons, physical environment reasons, or both physical **and** human environment reasons.
4	Lateral erosion takes place in the middle/lower course of a river as the land is flatter (1). Pools and riffles develop due to changes in river speed (1). The river is eroded in three ways. First, hydraulic action (1), which is when air is compressed into the river bank causing materials to be dislodged (1). Second, abrasion (1) when the force of the water scrapes bedload against the banks (1). Third, attrition (1) when rocks/pebbles carried by the river smash into each other breaking apart allowing for further abrasion to occur (1). Erosion takes place on the outside (concave) bank of the bends due to faster flow (1), helicoidal (corkscrew) flow moves material to the other river bank (1), deposition occurs on the inside (convex) bank of bends due to slower flow (1), creation of point bars (1), migration of meanders downstream (1).	**8**	You must mention processes in your answer for full marks.
5	Podzols tend to form on the upper slopes of upland areas where precipitation is heavy, the temperature cold, or where the vegetation is coniferous forest (1). Coniferous needles produce a thin, acidic humus due to slow decomposition in a cold climate (1). The ash/grey colour of the A-horizon is due to greater rainfall and lack of organic material (1). Rainfall is greater than evaporation, resulting in downward leaching of the minerals (1). An iron pan develops in the illuviation zone in the upper B-horizon as a result of the redeposition of iron; this can impede drainage, resulting in waterlogging and gleying in the B-horizon (1). The C-horizon parent material is generally of weathered glacial material with a mixture of particle sizes and shapes (1). The acid conditions are a deterrent to soil organisms such as worms; as a result the soil is not well mixed, so distinctive horizons are formed (1). The slow rate of weathering of the parent rock gives a shallow soil which, due to its acidity and lack of humus, is usually infertile (1).	**8**	Avoid simple description of the soil profile. You need to explain the features of the profile. Remember that a well-labelled diagram with explanations can get full marks. An example of this can be seen in Practice Paper B, Question 3.