

**2003 Geography**

**Intermediate 2**

**Finalised Marking Instructions**

## Geography

### Intermediate 2

#### Physical Landscapes and Land Use

**Q1 a** 3 marks

Upland glaciation – Lake District, Snowdonia, Torridon.

Upland limestone – Yorkshire Dales, Peak District, the Burren.

6 x ½

**b** 6 marks

Surface features: pavement, swallow hole/pot hole, clints/grykes, gorge.

eg Limestone Pavement – top surface scraped by ice sheets during ice-age (1) exposing bare rock (1). Acidic rainwater falls on the alkaline limestone (1) dissolving the rock (1) and widening the joints (1).

Underground features: cavern, stalactite/stalagmite/pillar, underground river.

eg Stalactite – rainwater containing calcium carbonate (1) drips from the roof of caverns (1). As it evaporates it leaves a small deposit of calcium carbonate (1). These deposits grow downwards from the cavern roof forming a stalactite (1).

One feature from each list must be chosen for full marks. Credit to be given for accurate sketches with explanatory labels.

mark 3/3, 2/4 or 4/2

**c (i)** 2 marks

1 - U-shaped Valley

2 - Corrie

3 - Pyramidal Peak.

3 correct - 2 marks, 1 or 2 correct - 1 mark

- (ii) 5 marks  
Maximum 1 mark for grid reference,  
if no reference to the map, mark out of 4

**Farming** - There is flat or gently sloping land to the north east and south east of Harrapool (1) which could support arable farming or crofting (1). The valley floor east of Kilbride (5920) also has flat land suitable for farming (1). In these areas the soil is better (1) and the climate more suitable (1). Due to the height and steepness of the slopes (1), the main activity would be hill-sheep farming (1).

Commercial farming activity would be limited because of steep land, poor soils, cold weather, and inaccessibility to markets (1).

**Forestry** - Because the land is generally unsuitable for farming due to poor soils and steep slopes (1), forestry would be a more profitable land use (1). The best areas would be on the lower slopes near the main roads (1) to provide access for transport and machinery (1). The higher mountainous area to the west is less suitable due to colder growing conditions/poorer soil (1), and the difficulty of using machinery on steep slopes (1).

**Industry** - There is a small industrial estate at 638238 (1). The main industry will be connected with tourism with income from caravan and camp sites (1) (6722) (2) or the museums, hotels and reptile centre in the village of Broadford (1). The lack of flat land in the area would hinder industrial development (1) and the low population would not provide an adequate workforce (1) or potential market (1).

The presence of two piers in Broadford Bay suggests a possible fishing industry (1).  
List given – maximum of 2.

- d 4 marks

For full marks candidates must refer to Scottish Natural Heritage or other examples of voluntary or public bodies in specific areas. - National Park Authorities, the National Trust, Yorkshire Dales Society, RSPB.

eg SNH identifies areas for the protection of wildlife and habitat (1), introduces land management schemes (1) and closely monitors planning applications for future development (1). The National Trust acquires historical sites or areas of outstanding natural beauty (1). National Park Authorities closely control development within the area (1) and encourage traditional farming methods and other countryside activities (1). All of these bodies promote wide public education programmes concerning the protection of the countryside (1).

## Landscapes and Tourism

<b>Q2</b>	<b>a (i)</b>	3 marks	
		U- shaped valley	567257
		Headland	627262
		Corrie	595226
		Beach	577199

4 correct      3 marks  
2 or 3 correct   2 marks  
1 correct      1 mark

- (ii)** 4 marks  
Waves erode soft rock faster than hard rock (1) by the processes of hydraulic action (1) and corrosion (1). The softer rocks are eroded back to form bays (1) and the harder rock juts out into the sea forming a headland (1).  
Diagrams must be included for full marks. Otherwise mark out of 3.

- (iii)** 4 marks  
Advantages - The area is near glaciated mountain scenery which attracts sightseers, hillwalkers and mountaineers (2). There is attractive coastal scenery with sandy beaches (1). There are two camping/caravan sites in the area (1). There are tourist facilities in Broadford (1) such as Information Centre, museums, and a reptile centre (1). There is a Youth Hostel (1) at 642242 (1).  
Disadvantages - There may be a limited range of shops and services (1) as the village is very small (1). The road to the south is only single track with passing places (1) making access very difficult (1).  
(Max 2 marks for stating advantages **to** Broadford)

- b** 4 marks  
Plug: When a volcano becomes extinct magma in the vent solidifies (1). The volcano is eroded/weathered over time (1) but the solid magma (plug) erodes more slowly than the surrounding landscape (1) as it is more resistant (1).  
Volcanic sill: magma forces its way between rock layers (1) but does not reach the surface (1) over a long period of time rocks above are eroded (1) until magma is exposed (1) because magma is more resistant (1). Forms a ridge called a sill (1)

c 5 marks. Mark 4:1 2:3 3:2 1:4

**Dartmoor** - increased by traffic causes parking problems at honeypot (1). More litter is a danger to animals (1) and may increase the risk of fire (1). Many walkers can cause footpath erosion (1) and farmers may find crops damaged or animals disturbed by thoughtless actions of visitors (1)

**Edinburgh** - increased numbers of large coaches and lack of available parking (1) creates traffic congestion (1) and air pollution (1). Large number of tourists creates a demand for hotels, restaurants and shops causing a lot of new building work (1) which may spoil the landscape (1). There is an increase in litter (1).

**Norfolk coast** - local roads unsuitable for increased traffic (1). Coastal footpath and beach erosion is caused by large numbers of day trippers (1). There is increased pollution from fuel and sewage on the inland waterways (1). Wildlife and vegetation is under pressure (1).

**Lake District** - more walkers cause footpath erosion (1), increased traffic problems in "honeypot" areas such as Ambleside (1). Scenery destroyed by campsites and car parks (1).

Measures taken - the role of SNH or National Trust (1) is important in acquiring and protecting areas of outstanding beauty or historical interest (1).

In Edinburgh, Park'n Ride schemes have been introduced (1) along with coach parks, pedestrian only routes and traffic calming measures (1).

Other relevant points could include RSPB or SSSI protected sites (1), use of rangers and wardens (1), educating the public about countryside protection (1), cordoning off eroded areas (1), renovation of paths (1), coastal protection schemes (1). Tourism should be sustainable (1).

If no solutions mentioned, mark out of 4.

## People and Environment: Europe

### Environmental Issues

**Q3 a** 4 marks

No mark awarded for naming area.

Description of the environmental pressures could include: acid rain particularly if in relation to a forested area of Scandinavia, and that it comes from the burning of fossil fuels (1). Acid rain seeps into the soil and leaches the soil (1) making it less fertile for tree growth (1). Acid rain can also poison tree roots (1) and weaken trees, making them more prone to diseases (1), and extreme weather (1).

Other problems in forested areas can be deforestation or lumbering (1). Scandinavian forests are being cut down to make into pulp and paper (1) and this causes loss of wildlife habitats (1). Some animals are now under threat (1) and the traditional way of life of people such as the Lapps is now disappearing (1). Also risk of avalanches etc (1).

No mark for acid rain/lumbering on its own.

**b (i)** 4 marks

The richest, most industrialised countries produce most acid rain (1).

This is because of their larger amounts of industry, power stations etc (1) and as they have a larger number of vehicles producing exhaust fumes (1). The prevailing south westerly wind (1) carries the acid rain in clouds across the North Sea (1) and the pollution ends up in less industrialised countries such as those of Scandinavia (1).

Reference to acid rain production (1) maximum.

**(ii)** 3 marks

There are agreements in place by the European Union that the amount of sulphur dioxide released into the air will be reduced by each member country (1). All cars must now be fitted with catalytic converters (1) which reduces the amount of nitrogen oxide produced (1). The EU also gives grants to poorer eastern European countries to help reduce their levels of atmospheric pollution (1). Other groups such as Greenpeace and Friends of the Earth have held protests (1) and print material on the Internet regarding industrial pollution (1).

c (i) 4 marks

The landscape has been spoiled by the building of large towerblock hotels and other tourist facilities such as restaurants (2). The mountain sides have been scarred with new ski runs (1) which causes soil erosion (1), and chairlifts and ski tows are unsightly running up the side of the mountain (1). Trees have been removed to allow ski runs and this takes away from the natural beauty of the landscape (1). The removal of trees also leads to increased avalanches and landslides (1). Without trees less rain is infiltrated and so the amount of run off is greater (1) which can lead to flooding (1).

(ii) 5 marks

Mark 3 +2, 2 + 3, etc for advantages and disadvantages.

The advantages and disadvantages discussed in the answer must be **for** the people living in the area.

Advantages: There are new jobs for locals eg in hotels and restaurants (1).

The tourists bring in money to the area and this boosts the local economy (1). Prevents rural depopulation (1) as young people are more likely to get a job and so won't leave for the city (1).

Disadvantages: Villages become noisy with tourists (1) and increased traffic on the roads will lead to air and noise pollution (1) which will affect the local farming (1). In the summer - off peak - there will be few visitors and so hotels and restaurants may close (1) and so locals only have jobs for a proportion of the year (1). Traditional methods of farming are disappearing (1) as young people are more interested in jobs in the tourist industry (1).

- Q4 a (i)** Mark 2 + 4, 3 + 3.  
If the answer has no comparative statement then award 0 marks.  
Examples of statements: Sweden has a lower % of population under age 15 than Albania (1). Quote figures for % of population under 15 (1). Italy has a higher percentage of population over age 60 than Albania (1). Quote figures for population (1).  
Maximum of 3 marks for this part of question.
- (ii)** 6 marks  
Must make reference to both countries, maximum of 2 marks for reference to one country only.  
Sweden has the structure of a developed, rich country (1) it has a low birth rate because most people choose to have small families (1), the availability of birth control (1), people marry quite late leaving less time for children (1), many women have careers which they want to maintain (1) and avoid the cost of having children (1). Death rate is low in Sweden because of good health care eg plenty doctors (1), well equipped hospitals and advanced surgery (1). Developed countries have better diets (1) and good services such as sewage (1).  
Albania has the structure of a poorer country (1) it has a high birth rate because many people still choose to have large families (1), this can be because families still work on land (1), and the lack of family planning advice (1) and contraception (1). There are also less career opportunities for women (1). Death rates are higher because Albania can't afford good quality health care (1).
- b** 4 marks  
1 mark for correct labels (male and female).  
1 mark for scale along bottom.  
1 mark for completion of male side of graph  
1 mark for completion of female side of graph
- c** 5 marks  
Answer must make reference to a named country if not mark out of 4 marks.  
eg the influx of migrants to Germany began to create problems when less workers were needed (1). The family of migrants moved to be with husbands and fathers and these people all required housing which became in short supply (1). Taxes were raised to fund the increased need for housing and other services (1) and this in turn lowered the standard of living for many people (1). As Germany moved into a period of economic recession during the late 1970's/early 1980's restrictions were placed on migration and migrants were encouraged to leave Germany (1). This eventually led to social unrest and bad feeling between native Germans and migrants (1). There were some protests and strikes (1).  
Reference must be made to both 'receiving' and 'losing' countries.

**d**

5 marks

Must make reference to a named city - if not mark out of 4.

Mark 5 x 1 marks, 2 marks for a developed point.

Description of methods of reducing traffic congestion should make reference to: restrictions on cars and vehicles which can be in the city centre at certain times (1) - reference to a named city feature (1) where particular registration plates are allowed into the city centre on particular days (1). Also, trams and light railways being used in city centres (1), ring road developments (1), one way systems (1), roundabouts replacing traffic lights (1), park 'n' ride systems in place (1).

Any other valid type of traffic reducing method can be described.

## Global Issues: Development and Health

- Q5 a** 4 marks  
Mark 3+1: 2+2: 1+3.  
If both examples chosen are the same type of indicator max 3 marks.  
eg  
**Energy** - energy used gives an idea of the amount of industry in the country (1). The wealth created by industry will make the country more developed (1). Energy use may also be high because of domestic consumption eg fridges, freezers, PC's and these would probably be used more in developed countries (2).  
**GNP** - the GNP gives a measure of the income of the population (1) and a country with a high GNP will probably have high industrial/service industry output (1). The proportions of employment/output in these industries is a good measure of wealth creation (1).  
**Literacy rates** - this gives an indication of the level of education (1) and a country with a low literacy level will be unlikely to be very wealthy (1). This pattern would suggest that the country has little money to invest in education (1).  
**Life expectancy** - if life expectancy is high it suggests that the country has a good health service (1) and this would be a good measure of how much it can afford to spend on health care (1) and training of doctors and nurses (1).
- b** 5 marks  
Mark 2:3 or 3:2 in terms of human/physical factors.  
In North America and Europe living standards are very high and this means that people can afford to buy food (1). In the tropics where the climate is warmer there is less need to consume as much food (1) so calorie intake does not need to be as high (1). These areas are generally poor and people are more likely to be subsistence farmers (1) who do not have such a rich diet (1). In some African countries where there has been serious drought (1) or civil war (1) food production has fallen and dietary intake is low (1).  
or any other relevant point
- c** 3 marks  
Candidates may agree, disagree or give a qualified answer to question - no marks.  
**Yes** - Access to safe water has increased in both Africa and Asia (1) but in Latin America there has been no change (1). However Latin America still has a much greater % than Africa with access to safe water (1).  
**No** - It is difficult to say as percentages don't give the real picture (1). They don't tell you how many extra people now have access to safe water (1). It could be that in Latin America there are far more people and a rapidly growing population and if this is the case they have done well to stand still (2).
- d** 4 marks  
If answer not in the context of an specific area max 3 marks but mark not awarded for naming an area.  
**Malaria** - in Sri Lanka the World Health Organisation has taken over a major role in tackling malaria (1). It has funded the draining of swamps to clear the breeding areas for mosquitoes (1) and it has worked with the government to set up primary health care programmes in all villages (1) so that the population can receive advice about the disease (1).  
**Kwashiorkor** - In Ethiopia Save the Children Fund has provided food aid (1). It has organised relief flights to get food to the areas of greatest need (1). It has also set up education programmes for villagers to encourage them to grow vitamin rich foods (1) to supplement a staple diet of maize (1).

e 4 marks

eg

**Cancer** - HEBS and other organisations have campaigned to increase awareness of the causes of cancer (1) eg, adverts on the television (1). The development of nicotine patches to help people give up smoking has helped to reduce lung cancer (1) and regular screening checks (1) eg for breast cancer (1) have helped to detect the disease in women before it becomes non treatable (1). Increased funding of cancer treatment centres (1) and advances in knowledge about how to treat the disease have all helped (1).

**Heart disease** - increased awareness of the causes of the disease through advertising (1) has encouraged people to alter their lifestyle and/or take more exercise (1). Many companies now give employees regular medicals (1) and this detects heart problems at an early stage (1). Better education through TV programmes like "999" or in "heart start" courses in schools (1) teach people how to deal with heart attacks victims and this saves lives (1). Many of these measures have been possible by increases in government funding (1). Targeting resources on areas such as Drumchapel in Glasgow (1) where heart disease is well above the national average can have a big impact on deaths from heart disease (1).

## Global Issues: Environmental Hazards

- Q6 a** 4 marks  
Earthquakes are caused by the movement of two adjacent continental plates (1). Where they move toward each other pressure builds up (1) and when this reaches a certain level it is released by the sudden shift of the plates (1). As they slide past each other they lock together until the opposing pressures forces the plates to shift (1).  
Volcanoes are caused by the movement of two adjacent continental plates (1). Where they move apart new molten rock forces its way between them (1) and the release of this material causes an eruption (1). Sometimes plates moving toward each other and build up enormous heat because of the friction between them (1). This heat builds up pressure which is eventually released by magma suddenly forcing its way up to the surface (1).  
Where candidate does not refer exclusively to one event max of 3 marks.
- b** 4 marks  
If no place mentioned mark out of three but do not award mark for the name place given. Marks can be awarded for clearly expressed knowledge of the event in question.  
eg Earthquakes.  
In the Turkish earthquake many foreign governments and charities helped. Specialist search teams with trained dogs from Britain went to the area (1) to search for people trapped under the rubble (1). Christian Aid sent tents and heavy clothing (1) to protect people from the extreme cold (1).  
eg Volcanoes.  
In the volcanic eruption of Nyringongo people were forced to leave the town of Gomo and refugee camps were set up (1) by the United Nations (1) across the border in Rwanda (1). When people returned to Gomo bulldozers were used to clear a way through the lava flows (1) so that food, clean water and medicines could be brought in to Gomo (1). Assistance was given to the people to rebuild or replace homes that had been destroyed (1).
- c** 6 marks  
Mark 2 + 4 or 3 + 3, ie max 3 marks for description.  
These occurs over oceans (1) and along the coast (1) within the tropics (1).  
At these latitudes intense low pressure systems form (1) and these suck up warm water from the oceans (1). It is only here that the water is warm enough for this to happen (1). The moist air is blown toward the land by the prevailing winds (1) producing very strong winds and rain (1). When they reach the land their source of moisture is lost and the storms lose their force (1).  
Maximum of 2 for a list.

**d (i)** 3 marks

1998 - 1 mark

There were more serious floods this year (1) and the number of seriously damaged properties was greatest in 1998 (1). As well as serious floods there were more floods in total in 1998 than in the other years (1). There was probably more rainfall in 1998 as well (1). Accurate counting (1).

**(ii)** 3 marks

England and Wales rainfall/drought likely to be less severe so effects not so great (1). More money likely to have been invested in flood prevention/sprinkler systems for agriculture so less damage/crop failure (1). Relief/assistance likely to be quicker and more effective in England and Wales (1) as country has resources to plan for problems (1) or any other valid point.

[END OF MARKING INSTRUCTIONS]