

2006 Geography

Intermediate 1

Finalised Marking Instructions

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Geography

Intermediate 1

Physical Environments

Question 1

- (a) River Thames C
River Clyde A
River Tees B

three correct – 2 marks
two or one correct – 1 mark

2 marks

- (b) **2 marks – 1 mark for feature and its Grid Reference.**

eg potholes, swallow holes, cave, scar, shake holes with appropriate grid references

2 marks

- (c) No mark for grid reference.

Large areas of steep land – only suitable for sheep (1).
Poor quality grass which is more suited to rough pasture (1).
The land is high, so temperatures will be low which sheep can tolerate (2).

Negative points also accepted.

eg

The land is too steep to use machinery (1).
The land is too high for other livestock, eg dairy cattle (1).
Lots of bare rock with thin soils so would be unsuitable for growing crops (2).

3 marks

- (d) Village A Ingleton
Lane B Oddies Lane
River C Twiss
Scar D Twistleton

four correct – 3 marks
three or two correct – 2 marks
one correct – 1 mark

3 marks

- (e) NB: Answer should relate to the impact on the physical environment.

Lots of tourists using the same path causes erosion (1). Consequently, heavy rain may cause a mudslide (1). Tourists may drop litter which causes visual pollution (1). Many tourists travel to the area by car, so more car parks will have to be built (1). Grass verges can be worn away by tourists parking on them (1). Camp fires could destroy trees (1).

3 marks

(f) **(i)** A spit is a feature of coastal deposition (1). Waves break on beach at an angle (1). The swash carries material up the beach (1) and the backwash returns material down the beach at a right angle (1). Over time, longshore drift transports material (1). Drift material is deposited as a spit where the coastline changes direction (1).

3 marks

(ii) No marks for naming area.

Build groynes at right angles to the beach (1) to prevent longshore drift (1). Environmentally sensitive areas could be fenced off (1). Sea walls can be built to protect the coastline from erosion (1).

Or any other valid point.

4 marks

Human Environments

Question 2

- (a) (i) Some areas are more heavily populated because there is fertile soil for farming (1), plentiful resources, eg coal, oil for industry (1), access to jobs and services and therefore income (1), good access to trade, eg along the coast (1).

Areas which are less densely populated tend to be too mountainous (1) and so are difficult to farm on or build on (1), the temperatures are either too hot or too cold (1) leading to shortages of water or very unpleasant living conditions (1).

Accept references to birth and death rates.

Credit can be given for reference to a specific area – maximum 1 mark
Or any relevant point.

4 marks

- (ii) Scotland might have a shortage of workers in the future (1) and so have less people paying taxes (1) which may put services such as schools and hospitals at risk (1). Less people being born means fewer people to have children and declining population (1). A large older population could become a financial burden (1) as more pensions will be required (1) and old people's homes will need to be built (1).

Or any other relevant point.

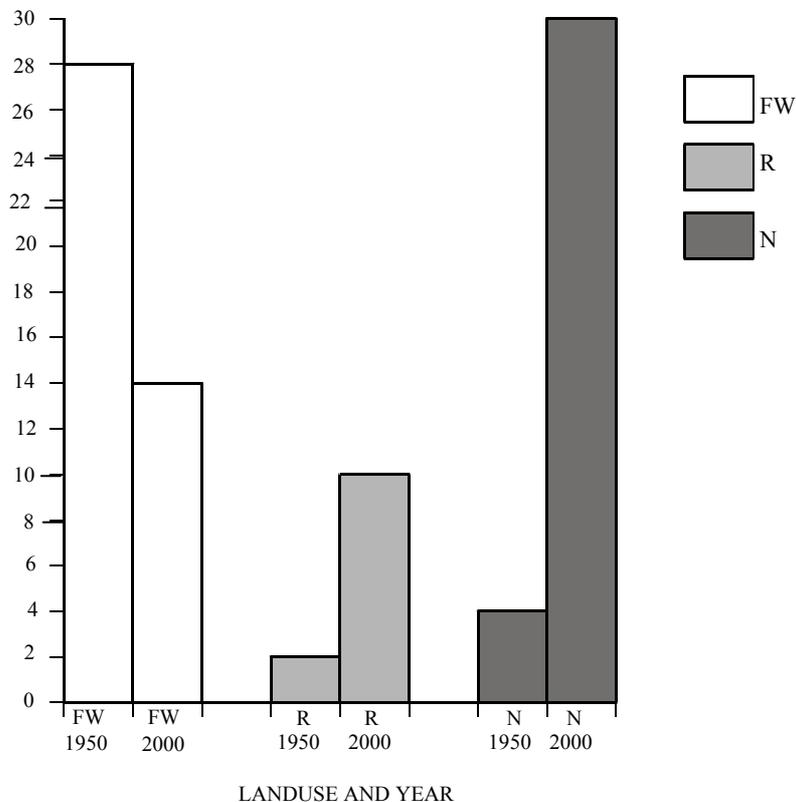
3 marks

- (b) An increase in the size of an urban area can lead to pressures on housing, causing overcrowding (1), problems with traffic congestion (1), an increase in noise and air pollution (1), loss of green space and parks for people to relax in (1), pressure on sewage and sanitation systems (1), demand for drinking water increases (1), loss of wildlife and natural environments (1).

Or any other relevant point.

4 marks

- (c) (i) **2 marks** – 3 bars drawn correctly
1 mark – 1 or 2 bars drawn correctly



2 marks

- (ii) 1 mark for description.

The size has increased due to building of new housing areas (1), the traditional character is changing (1), and more roads are being built for commuters (1) so noise and pollution builds up (1). Fewer local shops as people shop in cities (1). More people work in the city than in the village (1), house prices have gone up as city people are willing to pay more (1). There is less green space due to house building (1).

Or any relevant point.

4 marks

- (d) Measures taken might include: government grants (1), rent free use of buildings for a certain number of years (1), ready made buildings to move straight into (1), tax incentives (1). Subsidised re-training schemes (1).

Or any relevant point.

3 marks

Environmental Interactions

Rural Land Degradation

Question 3

- (a) (i) Maximum 1 mark for simple list

Next to areas of hot desert (1)
West side of North and South America (1)
On or near the two tropics (1)
Large areas of central Asia (1)

3 marks

- (ii) **Mark 3:1, 2:2, 1:3**

Physical – lack of rainfall (1)
lack of cloud cover and higher temperatures (1)
effects of wind erosion (1)

Human – Increasing population/expanding settlement (1)
Vegetation cut down for firewood (1)
Overgrazing (1)

Or any other relevant point.

4 marks

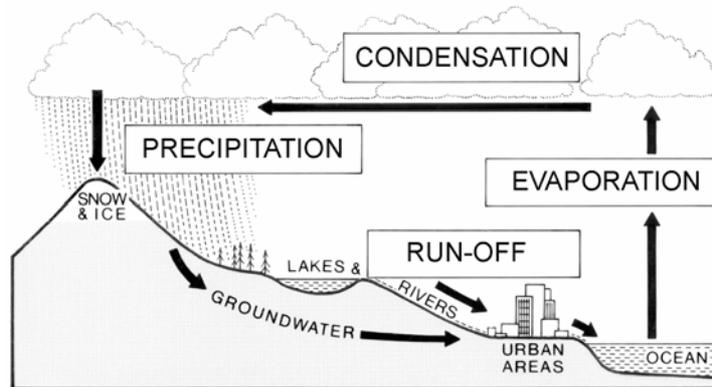
- (b) Creation of protected reserves (1)
Replanting programmes (1)
Limits on timber extraction and mining activities (1)
Worldwide campaigns, eg Greenpeace (1)
Government fines for illegal ranching/burning (1)

3 marks

River Basin Management

Question 4

(a)



four correct – 3 marks
three or two correct – 2 marks
one correct – 1 mark

3 marks

(b) Dams have increased around the world to provide water for a rapidly growing population (1). There are increased demands for drinking water (1). Irrigation is required for agriculture to help increase crop yields (1). Certain manufacturing industries require water as part of the manufacturing process (1). Industries may need it for cooling purposes (1). Fast growing towns and cities need adequate sewage and sanitation facilities (1). Certain leisure activities require large supplies of water, eg golf courses (1).

Or any relevant point.
No marks for naming of project

3 marks

(c) In some places, it has meant crop yields have increased due to a regular water supply (1). It has evened out the water supply for the whole year (1) reducing flood and drought risks (1). It has reduced unemployment as factories are built (1) due to the production of HEP (1). It has attracted industry into the area due to the power supply (1). It has improved the overall standard of living of people (1).

However, non-benefits can be mentioned.

Water management projects can result in people becoming displaced from their homes (1) and losing their livelihoods and traditional way of life (1). Wildlife gradually disappears as breeding grounds are lost (1), or water supplies dry up down river of the dam (1).

Or any relevant point

4 marks

European Environmental Inequalities

Question 5

- (a) (i) Large areas affected by acid rain are to be found in central Europe, eg Germany (1) and mountainous areas like the Alps (1). The south of Norway and Sweden are also badly affected (1), as are small areas in the United Kingdom (1). There are no areas affected by acid rain in the south of Europe, eg Spain, Portugal (1). **3 marks**

- (ii) Acid rain is caused by air pollution (1). Power stations, factories and cars release gases into the atmosphere (1), eg sulphur dioxide and nitrogen oxide (1). These gases mix with water vapour in the atmosphere (1) causing the gases to change to acids, which then fall as acid rain (1). **3 marks**

- (b) No marks for naming area
Maximum of 3 marks for only describing/explaining.

Sea/coastal areas The north-west coast of Scotland is quiet with very few people whereas Rimini is busy (1). In north-west Scotland, there has been very little alteration to the natural landscape, whereas in Rimini there have been a lot of developments (1). Rimini is more attractive to tourists because of the hot, dry summers (1). North-west Scotland is more remote from the rest of Europe (1) and has poorer communications so is less attractive to tourists (1).

Mountainous areas The Cairngorm Mountains have been developed by man unlike the Kjolen Mountains (1). The ski developments cause visual pollution (1) and skiing can prevent the growth of grass (1) causing the landscape to be scarred in summer (1). The Kjolen Mountains are less developed as they are more remote from the main areas of population in Norway (1).

Accept any other valid points **4 marks**

Development and Health

Question 6

(a) (i) 2 x 1 mark

Most – SPAIN
Least – ZAMBIA **2 marks**

(ii) Spain – eg Highest life expectancy (1)
Highest income (1)
Zambia – Lowest life expectancy (1)
Highest people per doctor (1)
Lowest income (1) **2 marks**

(b) (i) No marks for choice of disease

eg
malaria – stagnant water (1), high temperatures/rainfall (1), breeding areas for
mosquitoes (1), malaria parasites in human bloodstream (1). **3 marks**

(ii) For the chosen disease, three clear control methods should be described.
One mark for each method identified.

eg
(malaria) – drug treatment, draining swamps, insecticides
(heart disease) – improved diet, drug treatment, exercise
(aids) – sex education, use of condoms, reduction in drug
abuse/shared needles

Or any other relevant point. **3 marks**

Environmental Hazards

Question 7

- (a) Tropical storms originate between the Tropics (1)
where sea temperature is over 27 °C (1).

Credit named areas, eg Western Pacific/North Australia/Indian Ocean/
Caribbean Sea (1 mark for each)

3 marks

- (b) Tectonic plates collide (1) causing friction (1) which melts rocks (1). Magma
makes its way to the surface through weaknesses in the crust (1) to create
volcanic eruptions (1).

Also credit explanations regarding divergent plates.

3 marks

- (c) Buildings damaged or destroyed (1) with large-scale loss of life (1). Roads
and bridges destroyed (1), outbreaks of fire (1), people made homeless (1),
lack of water (1) and medical facilities (1), disease breaks out (1), etc.
Farmland ruined by lava or ash (1).

Or any other relevant point.

4 marks

[END OF MARKING INSTRUCTIONS]