



**2012 Geography**

**Intermediate 1**

**Finalised Marking Instructions**

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## Geography

### Intermediate 1

#### Section A

#### Question 1 – Physical Environments

##### 1 mark for each correct answer

(a) Answers may include:

Pot holes (1); caves (1); disappearing streams (1); limestone pavements (1); shakeholes (1); resurgence (1); gorge (1); swallow hole (1).

Max 1 mark for correct grid reference, either 4 or 6 figure.

**3 marks**

(b) Limestone pavement: limestone formed on sea bed (1); rocks uplifted (1); overlying rocks scraped off by ice (1); chemical weathering of limestone (1); joints in limestone widened frost action (1); or by plant weathering (1); formation of clints and grykes (1).

Stalagmite: water, containing calcium carbonate (1); drips from cavern roof (1); evaporation results in formation of mineral called calcite (1); water drips onto cavern floor (1); calcite deposit builds up (1); thicker and more rounded than stalactite (1) may join with stalactite to form limestone pillar (1).

Cavern: water goes underground through a swallow hole (1); flows along joints and bedding planes (1); dissolves limestone as it goes (1); some of the limestone dissolves more quickly than surrounding rock (1) where joints and bedding planes are close together (1); rock dissolves completely and cavern is formed (1).

**3 marks**

(c) Coniferous woodland      858142  
Leisure and recreation      843155  
Quarrying      853160

**3 marks**

(d) (i) Advantages – provides employment (1); can bring money into the area (1); may prevent people leaving the area (1); provides raw material for industry (1).

Disadvantages – creates noise (1) and air pollution (1). May put tourists off visiting the area (1). Creates a visual scar on the landscape (1). Heavy traffic may result in traffic congestion (1).

Both advantages and disadvantages must be mentioned for full marks.

**4 marks**

(ii) Trees can be planted to screen the quarry (1); this reduces the visual impact (1); the landscape can be restored once quarrying has finished (1); could be landscaped for people to enjoy (1); some can be turned into a watersports facility (1).

**3 marks**

- (e) eg Dorset – Traffic problems – one-way systems introduced (1), bus lanes and cycle lanes in Bournemouth (1), extra car park built (1) summer bus routes (1). Water activities zoned in coastal and harbour area (1), maximum speed limits for boats (1). Restricted access to dune areas (1) to prevent erosion (1). Wooden walkways constructed on dunes (1). Nature reserves created (1). Wildlife protected by RSPB (1), SSSIs set up (1).

Or any other valid point

**4 marks**

**Total 20 marks**

## Question 2 – Human Environments

**(a)** Less developed countries have large families so they have children to work on the farm (1), to look after them in old age (1), because children die young they have more to ensure some survive (1), religious reasons encouraging larger families (1), less access to contraception (1). **3 marks**

**(b) (i)** Under 16's gone down (1). 16 to 64 has stayed the same (1)/gone down slightly (1). Over 65 has gone up (1).  
Credit use of figures from diagram. **3 marks**

**(ii)** There are less people paying tax (1) so Government may have to increase tax on others (1). Government will have to pay more on care for the elderly (1) such as geriatric hospitals (1) and home care (1).

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

**(c)** Lack of proper shelter (1), lack of mains water (1), lack of sanitation (1), possible spread of disease (1), lack of mains electricity (1), lack of public transport (1).

Or any other valid point. (Simple list: max 1 mark). **4 marks**

**(d)** Farmers can set up B&B (1), they can have farm shops (1), they can allow shooting on their land (1), they can apply for grants to set up areas of conservation (1), they can have camp sites which brings in rental money (1).

Or any other valid point. **4 marks**

**(e)** Area may be demolished and cleared (1), less air pollution (1), visually area looks better (1), less traffic on roads (1).

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

**Total 20 marks**

## Section B

### Question 3 – Rural Land Degradation

- (a) People may lose their homes (1); they may be forced to move away (1); loss of farmland (1); people may struggle to get food (1); disease and malnutrition (1); their animals may die (1).

Accept any other valid point.

**3 marks**

- (b) (i) Timber sold abroad (1); for farmland (1); for new settlement (1); Due to increasing population (1); forests cleared for mining (1); new developments eg HEP schemes (1).

Or any other valid point.

**4 marks**

- (ii) Creation of protected reserves (1); replanting programmes (1); limits on timber extraction (1) and mining activities (1); worldwide campaigns eg Greenpeace (1); fines for illegal burning (1).

Or any other valid point.

**3 marks**

**Total 10 marks**

#### Question 4 – River Basin Management

- (a) Rock type is impermeable then water can be stored (1). Permeable rock will allow water to drain away (1). Areas with high rainfall can store more water (1). Areas with surface features like lakes can store water (1). Forests reduce run-off (1).

Or any other valid point.

**3 marks**

- (b) (i) Jobs were made during construction (1). Electricity is available for local people (1). New industry has been attracted (1). Flood danger has been reduced (1). Tourism has increased bringing in money (1).

Or any other valid point.

**4 marks**

- (ii) Increase in malarial still water (1). Damage to environment (1). Risk of loss of wildlife (1). Loss of silt to valuable farmland (1).

Or any other valid point.

**3 marks**

**Total 10 marks**

### Question 5 – European Environmental Inequalities

- (a) Athens has poor air quality because it has a large amount of industry (1). The industry is mostly heavy such as textiles and metal works, these are likely to produce smoke and fumes (1) such as carbon dioxide (1). There are also many roads leading into Athens from all over Greece (1), this will mean large numbers of vehicles which will produce exhaust fumes which will lead to air pollution (1).

Or any other relevant point.

**3 marks**

- (b) For full marks there should be a clear comparison between two contrasting areas.

#### **eg coastal areas**

Environmental problems are greater in the Costa Blanca than the Isle of Harris because there are more tourists in the Costa Blanca than the Isle of Harris due to warmer and drier climate (1), Costa Blanca is more accessible (1). This has resulted in greater tourist developments (1) such as high rise hotels in the Costa Blanca (1) which creates visual pollution (1) and also produces far greater levels of sewage than in Harris (1). There are far greater levels of traffic congestion in the Costa Blanca as it has more visitors than Harris (1) and other pollution problems such as litter (1) and noise (from visitors and vehicles (1)).

#### **eg mountain areas**

The Alps in Switzerland have been developed for ski-ing with chair lifts and tows which cause visual pollution (2). The Kjolen Mountains are more remote and difficult to reach and so have not developed ski-ing to the same extent (1). Ski-ing in the Swiss Alps creates erosion which leads to scarring of the mountain slopes (1), this creates visual pollution on slopes once the snow has melted (1).

Or any other relevant point.

**4 marks**

- (c) Award 1 mark for each improvement strategy for any river. There is now European legislation for sewage treatment (1). There are now international co-operative water management schemes across Europe (1). Areas of river basins have been designated as vulnerable zones (1). Fines are in place for countries caught dumping materials such as heavy metals in rivers (1) as these are now banned (1).

Or any other relevant point

**3 marks**

## Question 6 – Development and Health

- (a) No marks for choice of country.  
Rwanda is the least developed country as it has the lowest average income (1). Rwanda also has the lowest life expectancy at 51 (1). Birth rate is the highest in Rwanda (1). Although not the lowest, adult literacy rates are low. Accept relevant points for Botswana.

**3 marks**

(b) (i) **eg Malaria**

Malaria is spread by the female anopheles mosquito (1) which bites an infected person and then goes on to bite another person (1). The mosquitoes require temperatures above 15°C (1) and still or stagnant water to lay their eggs (1). Vegetation such as trees is needed to provide shade (1) so that mosquitoes can digest their blood meal (1). A human blood reservoir, eg a village is needed for the mosquito to feed (1). Uncovered areas of water such as buckets (1), paddy fields (1) and swampy areas (1) provide ideal breeding grounds. Poor health care (1) and high levels of migration are also contributory factors (1).

**eg AIDs**

AIDs can be spread by sharing needles with an infected person (1) and also by having unprotected sex with an infected person (1). It can be spread to babies who are breast fed if their mother has AIDs (1). The spread of AIDs is prevalent in countries where civil war has broken out (1) due to rape and sexual assault (1). The spread of AIDs is also hastened by lack of education which means many people are unaware of the causes of the disease (1).

Or any other relevant point

**4 marks**

(ii) **eg AIDs**

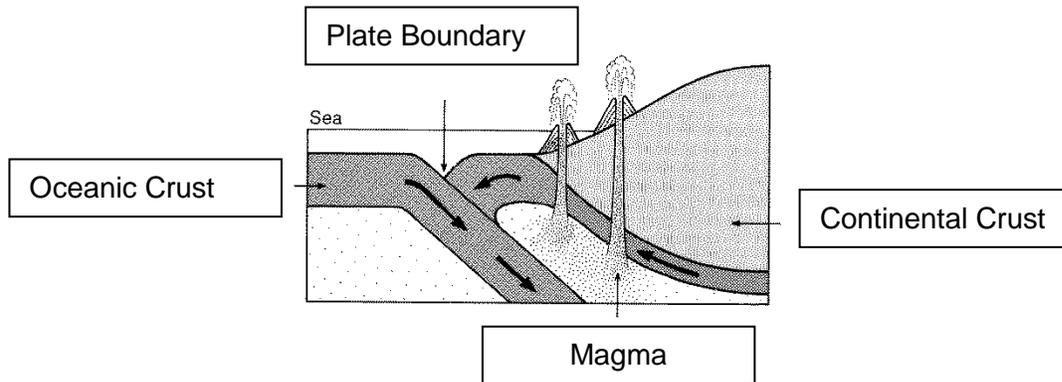
The prevention and treatment of AIDs if is expensive (1), the drugs are expensive and so not available to all sufferers (1). If large amounts of money is spent treating AIDs it may mean that there is less money spent on health care and other diseases (1). Children may be forced to find work if their parents fall ill (1) in order to provide food for the family (1). This takes them out of school and so they can not finish their education (1) and are therefore less likely to get a well paid job in the future (1). If people fall ill they are less likely to work and so do not contribute to the economy (1) or to farm the land for food (1).

Or any other relevant point

**3 marks**

## Question 7 – Environmental Hazards

- (a) Mark: 4 correct 3 marks  
3/2 correct 2 marks  
1 correct 1 mark



3 marks

- (b) (i) A tropical storm can cause widespread flooding (1) which will destroy farmland (1) affecting food production and the economy (1). Trees can be knocked down by strong winds (1) and soil washed away by heavy rains (1). Roads, bridges and power lines can be destroyed (1) and homes can be severely damaged, leaving people homeless (1). Water supplies can be damaged and contaminated with sewage (1), leading to the outbreak of diseases (1) such as cholera (1). It will cost a great deal of money to repair the damage which then impacts upon the economy (1) and can increase the national debt (1).

Or any other relevant point

4 marks

- (ii) Tropical storms can be predicted using satellites (1) which track the course of the storm (1) and send back photographs and infra red images (1). From land the storm can be tracked using radar (1) as it approaches land. Both of these tracking methods allow warnings to be given out via television and radio (1). Special aircraft (eg Hercules (1)) can travel into the storm to take measurements of the storm's intensity (1). This data can be fed into sophisticated computer programmes (1) to predict when and where it will reach land and also intensity (1).

Or any other relevant point

3 marks

[END OF MARKING INSTRUCTIONS]