



**2008 Geography**

**Intermediate 2**

**Finalised Marking Instructions**

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## Physical Environments

### Question 1

- (a) (i) **Full marks may be awarded for fully annotated diagrams.  
(max one mark for grid reference).**

8279 (cove/bay) – harder rock protecting the coastline (1) is breached by hydraulic wave action (1) and corrosion/abrasion (1). Soft rock behind such as sandstone (1) is worn away more quickly than hard rock (1) creating a bay (1).

7780 (cliff/wave-cut platform) – as waves strike the coast (1) land is eroded and undercut (1) by hydraulic action (1) and corrosion (1)/abrasion (1)/corrosion (1). Physical and chemical weathering affect the cliff face (1). Rock above becomes unstable and collapses (1) forming a cliff (1). Over time the cliff recedes (1) leaving a wave – cut platform at sea level (1).

**Also accept reference to White Nothe headland and headland formation.**

**4 marks**

- (ii) **For full marks reference must be made to the river and its valley.  
(max one mark for grid reference).**

The river flows very slowly (1) in a south east to easterly direction (1). The river is meandering (1) and divides in several places (1) eg at 808892 (1). There is evidence of ox-bow lake formation (1) in square 8387 (1). The river flows in a flat flood plain (1) over 1km wide in places (1). The valley sides are gentle and low (1).

**4 marks**

- (b) (i) A – Farming  
B – Industry  
C – Settlement  
D – Military Training

Four correct                    3 marks  
Two or three correct        2 marks  
One correct                    1 mark

**3 marks**

- (ii) Noise from military training may disrupt livestock (1) or spoil the peace and quiet for tourists (1). Local and tourist traffic may be delayed by military vehicles (1). Walkers can be denied access to rights of way such as the South West Coast Path during training activities (1) eg in square 8580 (1). Local businesses, however, may be boosted by income from military personnel (1). Lower property prices (1).

Or any other valid point.

**4 marks**

- (c) (i) **For full marks candidates must refer to both economic and environmental factors.**  
**Mark 3/3; 4/2; or 2/4.**

eg Hydro-electricity: farmland will be lost when valley is flooded (1). Construction equipment and vehicles will create noise pollution (1) and road congestion (1). The completed dam and pipelines cause visual pollution in the upland environment (1). Jobs will be provided during construction (1) increasing income in the local community (1). There will be a more reliable electricity supply in the area (1). Small businesses may be attracted to the area providing jobs (1).

Or any other valid point.

**6 marks**

- (ii) National Park Authorities can refuse planning permission for developments which may cause conflict (1). Different recreational activities may be zoned (1) such as waterskiing and sailing (1). Park rangers are employed to prevent problems developing (1). NPA visitor centres educate the public about the Countryside Code (1). One-way systems and pedestrianised areas are introduced (1) to reduce the effect of traffic congestion (1). Voluntary bodies such as the National Trust protects areas by buying land and buildings (1), maintaining walls and footpaths (1), and protecting important wildlife habitats (1).

Or any other valid point.

**4 marks**

**Total marks = 25**

## Human Environments

### Question 2

- (a) **Both physical and human factors should be mentioned for full marks.**

**Possible answers may include:**

Few people live where the climate is very cold (1). Few people live where there is very little rainfall (1). Few people live where there are very poor soils (1). Few people live where there are steep mountains ranges (1). Few people live where there are few or no resources (1).

Few people live where transport systems are poor (1). Few people live where it is difficult to grow crops (1). Few people live where there are few employment opportunities (1).

**5 marks**

- (b) (i) 4 countries plotted correctly 2 marks  
2 or 3 countries plotted correctly 1 mark  
0 or 1 country plotted correctly 0 marks

**2 marks**

- (ii) The relationship must be stated for full marks. If not max 3.

The higher the birth rate the lower the life expectancy (1) (or vice versa).

**Possible reasons:**

Areas with high birth rate may include poor level of health care (1). High birth rate may indicate high population growth, resulting in possible food shortage (1). High birth rate may be linked to occurrence of a number of diseases (1). High birth rate may indicate high levels of infant mortality (1). Poverty (1). Example from graph (1).

**4 marks**

- (c) **Possible answers may include:**

Improve the education of females (1). Introduce laws to limit the size of the family (1). Provide male sterilisation programmes (1). Increase the availability of family planning (1). Provide incentives for people to limit the size of their family (1).

**4 marks**

- (d) **Possible answers may include: Maximum of 4 if no named city.**

The authorities sometimes provide the shell of a building with walls and roof (1); a water supply can be provided (1); local authorities sometimes provide toilet facilities (1); shanty town dwellers could develop small industries and businesses (1); schools may be provided in the shanty towns (1); people may be given the legal rights to the land (1); local residents may work together in self-help schemes (1).

**5 marks**

- (e) Regeneration of inner city areas (1); old slum housing pulled down (1); renovation of some tenements (1); new amenities/facilities such as toilets, central heating etc...(1); gentrification of run down areas (1); opening of new shopping centres (1); provision of desirable housing (1); planning restrictions in rural villages and coastal towns (1).

**5 marks**

**Total marks = 25**

## Rural Land Degradation

### Question 3

- (a) (i) Deforestation provides timber for export (1) or clears areas for food production (1) which can contribute to a country's income (1) and improve its balance of trade (1).

Or any other valid point.

People and environment must be mentioned for full marks.

**3 marks**

- (ii) Tribal people may lose their homes due to large scale deforestation (1) and may have to move to other areas (1). As tree cover is reduced wildlife habitats can be lost (1) and there may be increased soil erosion (1). Forest burning can create air pollution (1) and also contribute to global warming as CO<sub>2</sub> levels increase (1). Large scale clearance reduces transpiration (1) and the climate may become drier (1).

Or any other valid point.

**4 marks**

- (b) (i) **Physical**

- prolonged drought over a period of time (1)
- failure of seasonal rains (1)
- lack of cloud cover and higher temperatures (1)
- effects of wind erosion (1).

**Or (not both)**

**Human**

- increasing population/expanding settlement (1)
- increased demand for food (1)
- over-cultivation/monoculture (1)
- vegetation cut down for firewood (1)
- over-grazing speeds up soil erosion (1).

**4 marks**

- (ii) eg in Sahel areas: methods could include:

- stabilisation of dunes with fencing (1) and lines of drought resistant plants such as cactus (1)
- contour ploughing to reduce gully erosion (1)
- 'magic stones' along level lines to prevent surface runoff (1)
- crop rotation and fallowing to retain soil fertility (1).

**4 marks**

**Total marks = 15**

## River Basin Management

### Question 4

- (a) (i) **Possible answers may include:**  
Impermeable rock necessary to prevent loss of water through infiltration (1). Hard rock needed in order to support the weight of the dam (1). Ensure that there are no earthquake zones nearby which could destroy the dam (1). Sufficient precipitation to keep the reservoir full (1). Large catchment area to keep the reservoir full (1). Deep valley behind the dam – small surface area will reduce loss of water through evaporation (1). Narrow point in the valley to make construction of dam easier (1), and to reduce cost (1).
- Or any other relevant point. **4 marks**
- (ii) **Possible answers may include:**  
To reduce the loss of valuable forest areas (1). To prevent the destruction of local people's homes and way of life (1). Building of the dams may result in widespread loss of wildlife (1). Valuable farmland may be lost (1). Destruction of forest may increase global warming (1). 'Money' must be developed (1).
- Or any other relevant point. **4 marks**
- (b) (i) **Possible answers may include:**  
Improved water supply for people living in a desert area (1). Would reduce the risk of drought (1). Water may be used in agriculture for irrigation (1). Might allow the growing of a greater variety of crops (1). Increased water supply may benefit any industries (1). Water could be used for cooling or as a raw material (1).
- Or any other relevant point. **4 marks**
- (ii) Botswana is likely to object to the loss of its water supply (1). The two countries may not agree as to how much water Namibia should take (1). May result in increased drought in Botswana (1). May reduce living standards in Botswana (1). Okavanga River may have much reduced flow by the time it reaches Botswana (1).
- Any other relevant point. **3 marks**

**Total marks = 15**

## European Environmental Inequalities

### Question 5

- (a) (i) There is no need to refer to individual countries for full marks.  
Highest emissions >5000 metric tonnes from Germany, Czech R, Belgium and UK (1). Between 2500 – 5000 emissions from Poland, Slovakia, Italy (1). Lowest emissions from Northern Europe eg Norway (1) and from Southern Europe eg Spain/Portugal (1). **4 marks**
- (ii) Areas with large populations emit more air pollution (1), as there are more car fumes (1) and industrial emissions (1). Germany and UK are two highly industrialised countries with many factories emitting gases (1). Areas with high living standards tend to have higher car ownership and more pollution (1). Some less well off areas have less strict air quality control (1). **4 marks**
- (b) (i) The EU issue legislation to protect river water quality (1). Sewage must be treated (1), companies ignoring legislation can be fined (1), set up cross border co-operation (1), put in place water monitoring stations (1), ban certain chemicals used in agricultural areas (1). **4 marks**
- (ii) Strategies have had some positive effects on certain rivers eg Rhine where there is less pollution (1), but co-operation is difficult and not all countries agree about costs (1), some industries are still causing pollution (1) and there are still accidental discharges into river (1). **3 marks**

**Total marks = 15**

## Development and Health

### Question 6

- (a) North America uses most energy over 10, 000 kg/person (1). Areas using 5000-10000 kg include northern and western Europe (1), Russia (1), Saudi Arabia (1) and Australia/New Zealand (1). The least consumption is in South America or Africa and S.E. Asia (1). Many countries in Africa consume less than 100 kg/person (1) or reference to ELDC/EMDC (1).

**4 marks**

- (b) Candidates do not have to mention all six factors to gain full marks.

Countries with large populations may be able to spend money on improving quality of life (1), they may have to spend money on basics such as food and not on developing industry (1). Countries that are industrialised gain money through exporting products (1), which they can invest in developing roads, schools etc (1). Countries that trade with many partners will gain money (1). Countries that have mainly urban populations tend to be more developed than those with a rural population where wages are low (1). Countries with a good health service have more productive workers (1).

**6 marks**

- (c) Malaria is found where female anopheles mosquito lives (1) – areas of still water for breeding (1), warm humid conditions (1).

Mosquito bites person (1), parasite passed into bloodstream (1), mosquito can also pick up parasite infected human (1) and then pass it on when it bites someone else (1).

#### AIDS

Unprotected sex (1). Use of infected needles (1). Infection from infected blood transfusions (1). Infection passed on during pregnancy (1). Infected breast milk (1). Lack of education (1). Polygamy (1).

**5 marks**

**Total marks = 15**

## Environmental Hazards

### Question 7

- (a) Earth's crust made of plates that move (1). Plates push past each other (1), builds up pressure at plate boundaries (1). Earthquake happens when pressure is released (1). **3 marks**
- (b) In San Francisco the quake had less effect on landscape as buildings are designed to stand quakes (1), people are prepared for quakes (1), emergency services are quick to respond (1). In Pakistan the houses are not built to stand a quake (1), many people killed under fallen buildings (1), happened in remote area with few emergency services (1), people were not prepared for quake (1). **5 marks**
- (c) (i) Tropical Storm – eg Mitch  
Hurricane changed direction frequently so hard to predict landfall (1), warning given to all in Central America so many moved inland (1), but caused jams (1), airforce air lifted people out (1) so saved lives (1). **4 marks**
- (ii) Government troops helped rescue people (1), Red Cross flew water and blankets (1), USA sent helicopters to take supplies to remote areas (1) and to airlift injured out to hospital (1). **3 marks**

**Total marks = 15**

[END OF MARKING INSTRUCTIONS]