



**2007 Geography**

**Intermediate 2**

**Finalised Marking Instructions**

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## Question 1

- (a) For full marks both river features and valley must be mentioned.  
Wide river (1), flowing through U-shape valley (1) in a North/North Easterly direction (1), flat floor and steep sides at first (1), meanders slightly (1), tributary joins at 624 662 (1), river meanders more as it flows North (1), island in river at 606 691 (1). Artificially straightened in 6166. Valley sides become lower and more gentle to the North (1).
- Or any relevant point. **4 marks**
- (b) 662 622 = Corrie with tarn, (accept tarn only)  
645 610 = U-shaped valley  
673 653 = Pyramidal peak  
660 605 = Ribbon Lake
- Mark 4 = 3, 3 or 2 = 2, 1 = 1 **3 marks**
- (c) Corrie  
Full marks awarded to diagrams that clearly illustrate/explain formation.  
Snow fills hollow is compressed and turns to ice (1). Ice moves down hill under gravity (1), abrasion of corrie floor (1), plucking at backwall (1), deepens the hollow by erosion (1), lip left as ice loses power (1), freeze thaw at back helps steepen backwall (1).
- Or any other relevant point. **4 marks**
- (d) Answer will depend on land uses chosen. Maximum of 3 for 1 land use.  
eg Quarrying spoils the environment (1) and does not fit in with promoting enjoyment of the area (1). Using up the rock does not promote long term use of a natural resource (1).  
Commercial Forestry is not a natural heritage (1), trees planted in straight lines do not help people enjoy area (1), when felled will spoil the natural environment (1).
- 5 x 1. Accept any relevant points. **5 marks**
- (e) (i) Mark 3:2 or 2:3. Explanation is required for both benefits and problems for full marks.
- Benefits – employment eg hotels, B & Bs, lifeguards (1), money into area (1), social opportunities (1), facilities for locals eg leisure centres (1), beaches cleaned (1).  
Problems – increased traffic congestion (1), water and air pollution (1), second home ownership increases (1), litter on beach (1), sewage from caravan parks (1).
- Or any other relevant points.  
Candidates must refer to both for full marks. Detailed description required. **5 marks**
- (ii) Local authorities fine for litter or dumping (1), restrict access (1), replant marram grass to conserve area (1), comply with EU Blue Flag Scheme (1), Voluntary litter picks (1), National Trust Conservation areas put in place (1), public education (1).
- Or any other valid point.  
Both must be mentioned for full marks. **4 marks**

**Total marks = 25**

## Human Environments

### Question 2

- (a) (i) Rural population has decreased from 72% to 52% (1).  
Urban has increased from 28% to 48% (1).  
Cities of 1 million+ have gone up from 9% to 21% (1).  
If no data quoted, award maximum 1 mark. **3 marks**
- (ii) Decrease in rural – urban migration (1) due to pull factors eg jobs (1) more money available (1) entertainment (1) etc.  
Push factors such as poverty in the countryside (1), drought and famine (1), poor housing/lack of medicine/education (1) etc.  
Maximum 1 mark for simple list of push/pull factors. **4 marks**
- (b) Decreasing birth rate – shortage of trained workers (1), increased tax burden on working population (1), school closures (1).  
Increased life expectancy – large number of older dependants (1), increased health care costs (1), pressure on pension provision (1).  
  
Or any other valid point. **5 marks**
- (c) **If no case study mentioned, mark out of four**  
  
Pedestrianisation to relieve traffic congestion (1), provide a safer environment (1) and to reduce pollution (1). Small independent shops replaced with larger chain stores (1) due to high costs in city centres (1).  
Covered shopping malls built to protect customers from weather (1).  
Accept negative points eg shop closure due to competition from out of town developments (1) etc.  
  
Or any other valid point.  
**Maximum 1 mark for a list of descriptive points only.** **5 marks**
- (d) eg Set-aside land – overproduction and surpluses created (1) due to subsidies and incentives to farmers (1) and changes in customer demand (1). Land set-aside to reduce production levels (1).  
Animal Health Inspection – increase in bovine CJD (1) and outbreaks of foot and mouth disease (1). Prevention of disease spreading from imported animals (1).  
Maintain standards of quality in food supplies (1). **4 marks**
- (e) **If no map evidence, mark out of three. Mark 2:2 1:3 3:1**  
  
Flat land for building (1) and room for expansion (1). Near road and rail links for transport of materials and products (1). Close to urban area for labour supply and customers (1).  
Accept negative points eg surrounded by road/rail/river therefore limited space for expansion (1).  
  
Max 1 mark for Grid Reference. **4 marks**

**Total marks = 25**

## Rural Land Degradation

### Question 3

(a) (i) 5 x 1

Increasing population puts pressure on land (1), forest cleared for farmland (1) and housing (1). Use of trees for firewood (1) and charcoal for industry (1). Exploitation of minerals (1) such as bauxite or iron ore (1). Reference to HEP schemes for electricity (1).

5 marks

Or any other valid point.

(ii) 4 x 1

Create forest reserves (1), award National Park status to forest areas (1) avoid clear felling (1) select timber species for extraction (1), replant with fast growing trees (1).  
Publicity campaigns/demonstrations by voluntary groups (1).

4 marks

Or any other valid point.

(b) 3/3, 2/4, 4/2

For full marks candidates must mention the physical and the human environment.

**Physical** – increased soil erosion due to wind (1), less rainfall due to a reduction in evapo-transpiration (1) as vegetation is lost (1). More frequent sand and dust storms (1).

**Human** – farms/crops destroyed by sand (1) more human pressure on remaining farmland and forest (1), famine and malnutrition (1) forced migration out of affected areas (1).

Or any other valid point.

6 marks

**Total marks = 15**

## River Basin Management

### Question 4

- (a) Size – large river basins will have more water flowing through them (1) and due to size will be able to store more water (1).  
Shape – steep river basins will have a quicker run-off than flatter (1).  
Surface features – urban areas within river basin will have quicker movement of water due to concrete and drainage pipes (1). Rural areas may have slower movement due to vegetation eg forests (1).  
Rock type – impermeable rock reduces infiltration (1) but may allow for more storage (1). Permeable rock will allow water to move through (1).  
Rainfall distribution – mountain areas within the river basin tend to have higher rainfall and more water flow (1). **6 marks**

- (b) 4 x 1. All processes for full marks. Simple list 1 mark only.

A – Transpiration – plants give off moisture (1) which evaporates into the air (1).  
B – Evaporation – sun heating water which turns to water vapour (1).  
C – Precipitation – no more moisture can be absorbed, clouds saturated (1) rain falls (1).  
Accept ‘infiltration’

Or any other valid point.

**4 marks**

- (c) Explanation needed for full marks. People and environment must be included for full marks. At least two benefits included for full marks.  
5 x 1 for each relevant point.

Irrigation – farmers can use water to grow more crops (1) and make more money (1).  
Flood Control – towns have control over previous natural hazard (1), prevents loss of life (1) and damage to environment (1).  
HEP – provides electricity for industrial development (1), brings new jobs (1), enhances environment with recreational facilities (1).  
Tourism – increased numbers of people visiting area (1), increase in income for local business (1), wildlife attracted (1).

**5 marks**

**Total marks = 15**

## European Environmental Inequalities

### Question 5

- (a) (i) Only 1 example needed for a mark.  
High levels are found in Southern Poland and bordering Germany, Slovakia and the Czech Republic. (1).  
Medium levels are found in Poland, Germany, Sweden, Finland and north-east England. (1).  
Low levels are found mainly in Germany and eastern Poland. (1).  
Other parts of Europe do not appear to be affected by acid rain (1). **3 marks**

- (ii) Both economic and climate required for full marks.  
Lot of industrial activity in west-central Europe eg NE France, Belgium, Germany and the UK. (1).  
Large centres of population in these same areas (1). Increased pollutants from traffic (1).  
Prevailing south-westerly winds (1); moisture picked up in the Atlantic Ocean (1).  
Mark 1:3 2:2 3:1 **4 marks**

- (b) Less developed coastal areas eg Camargue: – higher quality areas may be protected areas (1); may not be as suitable for development (1); may be in more isolated location (1).  
More developed coastal areas eg Magaluf: – lower quality areas due to too much development (1); developments may include tourism or industry (1); resultant pollution problems (1); visual pollution (1).  
Less developed mountain areas eg Cairngorms: – little development (1); explanation might include factors such as climate, location etc.  
More developed mountain areas eg Zermatt: – highly developed ski resort (1); dependable snow cover (1).

Maximum 2 marks for description. **4 marks**

- (c) Organisations such as the International Commission for the Protection of the Rhine established (1), by bordering countries such as France, Germany, Netherlands and Switzerland (1). Monitoring of fish stocks and water quality (1). Environmental pressure groups protest against dumping of toxic waste (1). This makes the public more aware (1). Improved sewage treatment (1). Limits set on dumping of dangerous chemicals (1). Companies which continue to pollute rivers are fined (1). Companies forced to build waste purification plants (1).

Maximum 3 marks if no specific examples. **4 marks**

**Total marks = 15**

## Development and Health

### Question 6

- (a) Indicators show only average figures (1) which hide wide variations within a country (1). The figure for one indicator may not be typical of the country's level of development (1) eg Saudi Arabia has a high GNP per capita, but the country is poorly developed in some areas (1). One indicator may hide wide variations between rich and poor (1) and also differences between areas within a country eg north-south divide (1) or between urban and rural areas (1). Certain indicators irrelevant to the real quality of life (1).

Accept negative points concerning single indicators eg a country might score well in one but badly in another (1); combined indicators give a balance of both social and economic indicators (1); allows direct comparisons to be made between countries (1).

Credit should also be given for specific examples.

**5 marks**

- (b) Mostly found in the developing world (1); Central America (1); Brazil and Columbia (1); Central Africa (1); south of the Sahara and north of South Africa (1); India and Pakistan (1); south-east Asia (1).

**3 marks**

- (c) (i) eg Malaria – use of insecticides (1) such as Malathion (1). Blood parasites treated with anti-malarial drugs (1) such as Chloroquine (1). Water released from dams to drown immature larvae (1). Genetic engineering of sterile male mosquitoes (1). Draining of breeding sites (1). Planting of eucalyptus trees to soak up moisture (1). Use of small fish to eat larvae (1). Mustard seeds to drag larvae below surface to drown them (1). Health education (1).

AIDS – Large-scale projects such as the Global AIDS initiative (1) and national treatment in South Africa (1). Increased funding to tackle the disease (1) from sources such as the World Bank (1). Drug therapy programmes (1). Attempts to develop AIDS vaccine (1). AIDS – awareness education (1). Tackling the disease through increased development of countries (1). Education campaigns advising of the risks of unprotected sex (1). Distribution of condoms (1). Encourage young people to abstain from sex until marriage (1).

**4 marks**

- (ii) eg Malaria – Over 400 million people still suffer from the disease (1). Some insecticides eg Malathion, expensive to produce (1); unpopular as it leaves a nasty yellow colour (1) and has an unpleasant smell (1). Mosquitos have become resistant to some insecticides and anti-malarial drugs (1). Increased development in some areas has led to a return of malaria (1). Some insecticides harmful to the environment (1). Migration and growth of shanty towns has led to a return of the disease (1).

AIDS – still not enough funding (1); countries have other priorities (1); significant increases in funding in the last ten years (1). Drug therapy can produce serious side effects (1). Medication, so far, not very effective (1).

**3 marks**

**Total marks = 15**

## Environmental Hazards

### Question 7

- (a) Maximum 2 for descriptive points only.  
Formed over warm seas with temperatures over 27°C (1). Due to hotter temperatures between the tropics (1). Areas of extreme low pressure with rising air (1) and moist humid conditions (1). At least 5° North or South of the equator where the earth's rotation has more effect (1). **4 marks**

- (b) (i) Reference should be made to casualties (1); inhabitants being made homeless (1); lack of food (1); destruction of buildings (1); damage by fire (1); disruption of telephone and electricity power lines (1); lack of water supplies (1); outbreak of disease (1).

For full marks, reference should be made to a specific example, and to both people and the surrounding landscape. **4 marks**

- (ii) Short-term aid: – temporary shelter required for local people (1); emergency first aid will be required (1); more serious victims may need to be air lifted out of the area (1); supplies of blood, bandages etc... will be required (1); people may need to be provided with clothing (1); people will need immediate supplies of food and water (1).  
Long-term aid: – transport routes will need to be repaired (1); homes and other buildings will need to be rebuilt (1); power and communication lines will need to be re-instated (1). **4 marks**

- (iii) Some attempt should be made to describe success or otherwise of the rescue operations.  
eg Huge loss of life after 2004 Tsunami (1). But tourist industry back up and running only a few months later (1).

Difficulty in reaching victims of Pakistan earthquake due to remoteness and poor weather (1)

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

**Total marks = 15**

[END OF MARKING INSTRUCTIONS]