



2011 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) 2/3 correct – 2 marks, 1 correct – 1 mark

Dorset	-	coastal erosion
Yorkshire dales	-	upland limestone
Snowdonia	-	upland glaciation

2 marks

(b) As a river meanders erosion occurs at the outside of the bend (1) and deposition takes place on the inside of the bend (1). Erosion on the outside of the bend causes the meander neck to become narrower (1). Usually at the time of a flood, when the river has more energy (1), the river cuts through the meander neck and makes a new straighter channel (1). The river is now fastest in the middle of the straight channel and so erosion occurs here (1), it is slower at the side of the channel and so deposition occurs here (1). The deposits at the side of the channel build up (1) and so the meander becomes cut off from the new straight channel (1). The meander is left as an ox bow lake (1) and without a supply of water will dry up (1)

Or any other valid point.

Marks should be given for appropriately annotated diagrams.

4 marks

(c) Cliff 0397
Stack 9893
Beach 1299

1 mark for each correct answer

3 marks

(d) Area X attracts tourists because it has many coastal features which visitors will want to see (1), for example cliffs, bays and headlands (1); there are beaches for visitors who want to sunbathe or play on the beach (1), for example The Burrows at Tenby (1); there is a coastal long distance path for walkers (1) and a long distance cycle path for cyclists (1), both of these routes can be used to access areas and features of scenic interest (1). There are historic attractions such as castles (1) and many visitor attractions such as museums and the aquarium (1). There are lots of camp sites and caravan sites which provide accommodation (1) and leisure features such as the golf course (1). The area is easily accessed by main road (A477) (1) and railway (1).

Maximum of 1 mark for grid reference.

Or any other valid point.

4 marks

- (e) (i) For example: Tourism and farming
Tourists may walk through farmer's fields and trample crops (1); they may also have dogs with them which will worry sheep (1), particularly in lambing season (1). Tourists may climb over farmer's stone walls causing them damage (1) which the farmer will have to repair (1). Tourists may also leave litter which can pose a choking hazard for animals such as sheep (1). Tourists may park their cars on grass verges and make it difficult for farmers to pass with machinery (1). Slow tractors can cause frustration for tourists stuck behind them (1)

Or any other valid point.

4 marks

- (ii) National Park Authorities build and repair paths in upland areas (1) to reduce scarring of the landscape (1); this is done using local materials such as stone to reduce the visual impact of the paths (1). National Park Authorities help to educate visitors in issues such as conservation of the landscape (1), this is done through information at visitor centres and through park rangers (1). Signs are put up to encourage visitors to take their litter home (1) and in some areas litter picks are organised (1). In some areas there are local pressure groups such as 'Friends of the Lake District' (1) which work to protect areas that are environmentally sensitive (1).

Or any other valid point.

3 marks

Question 2 – Human Environments

- (a) (i)** Since 1950 both urban and rural population have increased (1). Rural population increase has been slowing down (1) and is now almost stable (1). The rate of urban population increase has been getting faster (1). By 2015 it is expected that urban population will have overtaken rural population (1).
Rural and urban must be mentioned.
Or any other valid point. **2 marks**
- (ii)** Rural areas are losing their population (1), especially the young working age group (1). Rural areas have a very elderly population (1). Rural communities can begin to go into decline (1).

Urban areas become overcrowded (1). Difficulties for people trying to find housing (1). Unemployment (1). Development of shanty towns (1). Pollution (1). Outbreaks of disease (1).
Maximum 1 mark for simple list.
Or any other valid point. **3 marks**
- (b) (i)** All the shops are under one roof or close together (1); it is therefore quicker for people doing their shopping (1). Weather is no longer an issue when shopping (1). Safer especially for young children (1). More pleasant environment for shopping (1). Plenty of space for car parking close by (1). More easily accessible for most people (1).

Accept negative points about town centres.

Or any other valid point. **4 marks**
- (ii)** Many empty shop units in town centres (1). Town centres become run down (1); may result in increase in vandalism (1).

Credit should also be given for good effects eg decrease in traffic congestion, improved air quality etc.

Or any other valid point. **3 marks**
- (c)** Farming becomes more efficient (1). Machines allow work to be done more quickly (1). Machines also make the work easier (1). Increase in the amount of crop produced (1) and also the quality (1). Possibility of growing two crops or more each year (1).

Some farmers cannot afford the new machines etc (1). Increased use of machines may lead to unemployment in rural areas (1); may result in rural depopulation (1). Increased use of fertilisers could ruin the soil in the long term (1); and may also result in river pollution (1).

Or any other valid point.

For full marks, both benefits and problems must be mentioned. **4 marks**

- (d)** Land is cheaper on the edge of town (1). More space is available for building (1). Modern industries prefer to locate in a more pleasant environment (1). New housing areas are usually found on the edge of town, so having new industries close by makes it easier for people to get to work (1). More land is available if firms wish to expand their premises (1). Locations on the edge of town are closer to good transport routes (1). The government is trying to encourage firms to set up in out-of-town locations (1). There may be financial benefits for firms setting up in these locations rather than in the centre of towns and cities (1).

Accept negative points about the inner city.

Or any other valid point.

4 marks

Total 20 marks

Section B

Question 3 – Rural Land Degradation

(a) (i) Brazil

Amerindian tribes practise a traditional form of subsistence farming (1) called shifting cultivation (1). They move to an area of the forest and make a clearing by slash and burn (1). The tree stumps are burned and the ash spread on the soil as fertiliser (1). The clearing is planted with crops such as manioc and yams (1), fruit and berries are gathered from the forest (1). After around 5 years the soil becomes infertile and the tribe move to a new clearing (1), eventually when soil fertility has been restored they may move back to the first clearing (1).

Give credit for reference to other farming systems eg plantations.

Or any other valid point.

3 marks

- (ii) Deforestation has forced native tribes from their land as the area they hunt and farm is destroyed (1). The removal of the trees causes the soil to become infertile (1) and wash into rivers which affects their farming and fishing areas (1). The tribes are forced deeper into the forest (1). Deforestation for HEP dams may create flooding of vast areas which forces tribes to move (1). Mining pollutes the rivers which tribes drink from and fish in, this can affect their health (1). Traditional medicines are lost as plants become extinct (1) and as people move away from the forest traditional customs are lost (1). New developers bring diseases which can kill native people. (1).

Or any other valid point.

3 marks

(b) Deforestation

The loss of tree cover increases soil erosion (1) as there is no protective canopy for the soil (1), there are no tree roots to bind the soil together (1) and it can be easily blown away by the wind (1), during periods of heavy rain it can be washed away (1).

Overgrazing

As the population increases the demand for food increases (1) this leads to more animals being grazed on marginal land (1). If too many animals are grazed then vegetation is lost (1), this leaves the soil exposed and bare (1), the soil becomes susceptible to erosion through wind and heavy rain (1) as there are no roots to bind it together (1).

Or any other valid point.

Mark 3:1, 2:2, 1:3

4 marks

Question 4 – River Basin Management

- (a)** Granite is an impermeable rock (1) which means that very little water will be lost through seepage (1). Granite also provides a solid foundation on which to build a dam (1). Snow-capped hills should allow for a regular supply of water (1). Large valley would allow for storage of a large amount of water (1). Steep drop could allow for the production of HEP (1). Could supply nearby settlement with both water and power (1). Land not being used at present so no disruption to farmland or settlement (1).

Or any other valid point.

4 marks

- (b) (i)** Rapid population increase (1); which means that more electric power will need to be generated (1). This will be needed for increased industrial development (1). More water may also be needed to irrigate farmland (1). There will be an increased demand for domestic water supplies (1). To prevent flooding (1).

Or any other valid point.

3 marks

- (ii)** River could start to dry up in its lower reaches (1); which would mean that other countries would not have enough water (1). Industry and agriculture would also suffer in these other countries (1). Could result in political problems with countries fighting each other for water (1).

Or any other valid point.

3 marks

Total 10 marks

Question 5 – European Environmental Inequalities

- (a) (i) High levels of NO₂ in Northern Italy (1). High levels in Belgium/Holland (1). High levels in South East UK (1). Low levels in northern UK (1) Scandinavia (1).

Or any other relevant answer.

3 marks

- (ii) For full marks at least two of the three factors should be mentioned. High levels of NO₂ are found where there are many factories giving out fumes (1). Low levels are found where there are not many people (1). High levels are also found where there are many people driving in an area (1). Low levels are found in areas of Europe where there are not many factories causing pollution (1). High levels in popular tourist areas (1).

4 marks

- (b) Litter picks are organised (1). Councils try to keep cars away from certain areas (1). Footpaths are repaired (1). Signs are put up to educate people (1). Rangers are employed to help control areas (1).

Or any other relevant answer.

3 marks

Total 10 marks

Question 6 – Development and Health

- (a) A social indicator – birth rate
An economic indicator – GDP/energy consumption
A combined indicator – human development index (HDI)

3 marks

Accept appropriate indicators not shown in table.

- (b) (i) Malaria can be found in Central America (1), in many parts of northern South America (1) eg Brazil (1), most of Africa (1), southern Asia (1), Indonesia (1) and Malaysia (1). Around the Tropics (1) along the equator (1).

3 marks

- (ii) Malaria – spray mosquitoes with insecticide (1), drain breeding grounds (1), use of drugs (1), education (1), use bed nets (1).
Named chemical or drug (1)

Heart disease – don't eat fatty foods (1), benefits of exercise (1), education about diet (1), advertising campaigns (1).

AIDS – use of condoms (1), development of retro drugs (1), sex education (1), advertising campaigns (1).

Or any other relevant answer.

4 marks

Total 10 marks

Question 7 – Environmental Hazards

- (a) Where two plates converge (1), causing melting of plate (1), pressure forces magma up (1). Where two plates move apart (1), allowing magma to move up (1).

Max 1 mark for description.

Or any other valid point.

3 marks

- (b) (i) Formed in sea areas with temperatures of over 26°C (1). Low pressure (1). Humid air (1) of 60% or more (1). Rotation of air due to earth spin (1).

Or any other valid point.

4 marks

- (ii) Rescue workers have to get trapped people out (1). Tents are needed for shelter (1). Food may be in short supply (1). Medical aid may be required (1). Fresh water supplies (1).

Or any other valid point.

3 marks

Total 10 marks

[END OF MARKING INSTRUCTIONS]