



2011 Geography

Intermediate 2

Finalised Marking Instructions

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Geography

Intermediate 2

Section A

Question 1 – Physical Environments

1 mark for each correct answer

(a) (i) Thames

(ii) Cairngorms/Grampian Mountains

(iii) The Burren

3 marks

(b) Headlands and bays are most likely to be found in areas where there are bands of alternating soft and hard rock (1) which meet the coast at right angles (1); the softer rock, for example clay (1) will erode more quickly forming bays (1) which may have sandy beaches (1); whilst the harder rock, for example chalk (1) will erode more slowly forming headlands (1) which jut out into the sea (1).

Credit specific erosion process – hydraulic action, abrasion, etc.

Or any other valid point.

Credit should be given for appropriate annotated diagrams.

4 marks

(c) (i) A A4139
B Railway
C Cycle Path
D Forestry

One mark for each correct answer.

4 marks

(ii) The route is easily accessible by road (1) and there are many car parks for parking (1); there are many features of scenic interest along the route (1) for example cliffs (1); there are also features of historic interest (1) such as castles (1); camp sites along the route provide a place for walkers to stay (1) and there are services within the settlements for walkers to rest and eat (1); the area is part of a national park and so will have many landscape features, vegetation and animals of interest (1).

Or any other valid point.

Maximum of 1 mark for grid references.

4 marks

- (d)** For full marks the candidate must refer to both environmental and economic impact, otherwise mark out of 5.

(i) Leisure and recreation

Economic

Visitors to the area for recreational purposes may hire equipment such as skis in the local area (1) this brings money to the local economy (1) and provides jobs for local people (1) although these are likely to be seasonal in the case of winter sports (1); it is likely that recreational visitors such as those for winter sports will spend a few days in the area and therefore require accommodation in the local area (1); many services will be provided for recreational visitors, for example specialist equipment shops (1) but this may be at the expense of services for local residents (1), goods sold in these shops may also be at higher prices (1).

Environmental

Recreational visitors may cause footpath erosion in upland areas (1) and also those undertaking winter sports create scars on the landscape as vegetation and soil is trampled during the winter season (1). Equipment erected for winter sports is unsightly eg chairlifts (1); recreational visitors may drop litter in the upland area which is unsightly (1) and can cause harm to animals (1); they may also leave farmer's gates open which can cause animals to escape from fields (1); walker's dogs may worry sheep (1); visitors using the area for recreation may park their cars at the side of the road causing erosion to the grass verges (1) and also traffic congestion on narrow country roads (1).

Or any other valid point.

6 marks

(ii) For example, industry stone extraction

Quarries and cement works can be filled in and landscaped once they have closed (1). Vegetation and trees can be used to shield the quarry from view (1); quarries can be turned into water features (1) and these can be used for recreational purposes (1); levy schemes have been introduced to reduce the impact on communities (1); these include the provision of safe play areas (1) and insulation and double glazing for local housing (1); government money has been given to organisations such as English Heritage to repair monuments etc which have been damaged by stone extraction (1); environmentally friendly methods of transportation such as nets on lorries are also used (1). Industrial buildings are made from local materials and are low level (1) this helps them to blend in with the surrounding landscape (1).

Or any other valid point.

4 marks

Total 25 marks

Question 2 – Human Environments

- (a) Some areas may be too steeply sloping for building on (1). In some areas there may be fertile soils (1); which allows people to grow enough food to feed themselves (1). Some areas may be too high for people to live comfortably (1). Temperate climate would make for a suitable place to live (1). Lack of water may prevent people from living in certain areas (1). High humidity could be a problem (1). Other areas may be too cold (1). Areas with many natural resources are usually attractive places for people to live (1).

Areas with good transport links usually attract people (1); such areas usually attract industry, thus giving employment opportunities (1). Remote/isolated areas do not usually attract many people (1).

Or any other valid point.

Both physical **and** human factors must be mentioned for full marks, otherwise mark out of 4.

5 marks

- (b) Few children are being born which could result in a shortage of working adults in years to come (1). This will result in fewer people paying tax which could affect the nation's economy (1). Jobs could be lost in nurseries, schools etc (1). The country will start to develop an ageing population (1). More money will need to be spent on pensions (1). The cost of health care for the elderly will rise (1). More demand for care services such as meals on wheels (1). More demand for sheltered housing and old people's homes (1).

Or any other valid point.

5 marks

- (c) Cost of car parking has been made very expensive (1). In some cases there is now no free parking (1). Some cities have introduced congestion charges (1). A lot of investment has been put into public transport systems (1). Fares have been reduced in order to encourage greater use by the public (1). Bus lanes have been introduced to try to speed up the service (1). Some cities have invested heavily in underground rail systems.

Or any other valid point.

For full marks there must be some sort of statement indicating the success of the methods. (Maximum of 5 marks for either part, but accept evaluative points mentioned in part (i) ie mark holistically).

6 marks

(d) Benefits Increase in local employment (1). Local farming and fishing has benefitted from an increased market (1). Local handicraft industries have also benefitted (1). An increase in money going into the economy (1). Local people can therefore benefit from improved provision of services (1).

Problems Farming has lost land to tourist development (1). Fishermen have lost coastal sites to hotels (1). Traditional village occupations are decreasing (1). Water shortages can be a problem (1). Beaches can become contaminated with sewage (1). Local wildlife could be under threat (1).

Or any other valid point.

Both benefits and problems must be mentioned (otherwise mark out of 4). **5 marks**

(e) Visual appearance of the environment has improved (1); spoil heaps have disappeared (1) or been landscaped (1); tall chimneys have been removed (1). Waterways and rivers have been cleaned up (1). There has been a reduction in air pollution (1) and noise pollution (1). New industrial areas are usually landscaped with gardens, trees and water (1).

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

Total 25 marks

Section B

Question 3 – Rural Land Degradation

- (a) To find fresh pasture (1). However, overgrazing in an area can leave the soil vulnerable to soil erosion (1) as the lack of vegetation no longer provides protection for the soil (1), if the rains fail then sufficient vegetation doesn't grow and this can lead to overgrazing (1). The animals also compact the soil by trampling (1) which reduces the amount of infiltration (1) and so increase soil run off and erosion (1). This results in nomads farming marginal areas leading to land degradation (1). As arable farmers are forced to increase yields for growing populations (1) there is less fallow time (resting time for soils) (1) which reduces the amount of nutrients in the soil (1). With unreliable rainfall crops fail and the soil becomes susceptible to erosion and degradation (1).

Or any other valid point.

6 marks

- (b) (i) Deforestation can lead to the loss of resources (1) from the forest, for example the loss of hardwood timber, rare plants, animals, birds and insects (1). Animal and plant habitats will be lost (1) and this could damage the ecosystem of the rainforest (1). The loss of plants could jeopardise future possible cures for diseases such as cancer (1). The native peoples of the rainforest will be displaced from their homes (1) and may end up living in reserves or forced out of the rainforest altogether (1). Indigenous people could also fall ill from diseases and infections brought in by the fellers (1), this could lead to death (1). Traditional customs and cultures could be lost (1).

Or any other valid point.

5 marks

- (ii) The consequence of deforestation can be reduced in many ways. For example, selective tree felling allows only trees which have matured fully to be cut down (1), this means that rather than a whole area being felled only single trees are felled and so young trees survive (1). Afforestation of areas which have been felled helps to replace trees which have been cut down (1). Reservations have been created in protected areas of forest, tree felling is banned (1) and these provide a safe place for native peoples to live (1). Crops can be grown amongst forested areas to prevent soil erosion through clear felling for agriculture (1) this is known as agroforestry (1). Fines can be placed on those who fell areas which are protected (1) and education helps to make people aware of the consequences of clear felling (1).

Or any other valid point.

4 marks

Total 15 marks

Question 4 – River Basin Management

- (a) Water is evaporated from the sea (1). Condensation takes place turning the water vapour into clouds (1). Winds blow clouds inland towards the mountains (1). Here, they are forced to rise causing further condensation (1); which results in precipitation (1). Some of this water is stored in the mountains as snow and ice (1). Water flows into streams to make its way back to the sea (1). Some infiltration into the ground (1); this may result in some underground flow back to the sea (1). Some water may be stored in the vegetation (1); which may lead to transpiration from trees through their leaves (1). Some water may also be stored in inland lakes (1). There may be some evaporation from these lakes (1).

Or any other valid point.

5 marks

- (b) Impermeable rock could increase the amount of water which can be stored as very little would be lost through seepage (1); steep ground could increase surface run-off (1). Lack of vegetation cover would increase surface run-off (1). Forested areas would increase the amount of water which would be stored (1). A large drainage basin would obviously increase the amount of water which could be stored (1). Areas with high rainfall have more water in the river basin (1).

Or any other valid point.

5 marks

- (c) Possible answers may include:
Large forested areas may have been flooded or cut down (1). Animal habitats may be destroyed (1). Rare plant or animal species may be endangered (1). Less water may now reach the river estuary (1); this could affect the number of fish in the river (1). Particularly fragile areas eg caves may be destroyed (1).

Or any other valid point.

5 marks

Total 15 marks

Question 5 – European Environmental Inequalities

- (a) Northern Italy high air pollution as major industrial centres here (1). Coastal areas have moderate pollution as lower population density (1). Low air pollution in southern toe of Italy with low population density (1). Alps block polluted air (1). Moderate density at large cities (1).

Or any other relevant point.

4 marks

- (b) For full marks at least two of the factors must be mentioned.

Areas with dense population produce more rubbish (1). Transport like ships can spill oil (1) or discharge materials into the sea (1). Areas with high living standards will clean up pollution (1) and not discharge sewage into the sea (1). Areas with lots of industrial activity near the coast can pollute it (1).

Or any other relevant point.

5 marks

- (c) Some candidates may answer both (i) and (ii) together.

Mark 4/2, 2/4 or 3/3

- (i) Councils can fine polluters (1). River clean ups organised by volunteers (1). Monitoring river pollution (1). Joint control schemes where river runs through different countries (1). EU introduced laws on environment (1).
- (ii) Many rivers now cleaner (1). EU regulations have helped improve quality control (1). Some rivers still receive pollution (1). Difficulty of political agreement (1) where river crosses several countries (1).

Or any other relevant point.

6 marks

Total 15 marks

Question 6 – Development and Health

- (a) If both human and physical not mentioned mark out of 5.

Countries with an educated workforce make more money (1), countries with a good health service are more developed as less money drained from economy (1), countries with many industries have more people in employment (1) and generate more wealth (1).

Countries with difficult climate can find development hindered (1). Countries with limited natural resources have less money to spend on development (1).

Or any other relevant point.

6 marks

- (b) Aids – sharing dirty needles (1), unprotected sex with infected person (1), babies drinking breast milk of infected mother (1), sharing body fluids (1) infected blood transfusions (1).

Heart disease – lack of exercise (1), overeating/drinking (1), lifestyle/stress (1), hereditary (1), eating foods high in fat (1).

4 marks

- (c) Loss of workforce (1). Hinders development leading to fewer jobs (1). Costs of hospital treatment increase (1). Less wealth in country (1). Death rate increases (1). Emotional impact on relatives and friends (1). Loss of tourist revenue (1).

Or any other relevant point.

5 marks

Total 15 marks

Question 7 – Environmental Hazards

- (a) Plates move apart (1) and magma can come up (1). Plates moving under each other (1) can cause friction (1) which results in liquid rock being forced up (1). Credit for explanations of destructive (1) and constructive (1) boundaries.

5 marks

- (b) Methods will include laser monitoring (1), motion detectors (1), scientists monitoring (1), gas analysis (1), information from previous events (1), animal movements (1).

Or any other relevant point.

4 marks

- (c) Both types of aid must be mentioned for full marks.

Mark 3/3, 4/2 or 2/4

Long term may include:

Roads will need rebuilt after being washed away (1) to help transport improve (1), flood prevention measures put in place (1) to help control future events (1), evacuation procedures improved (1).

Short term may include:

Shelter for homeless (1), food and water (1), medical aid for injured (1), voluntary workers (1).

(Should be explanatory points – maximum 2 for simple descriptive points.)

Or any other relevant point.

6 marks

Total 15 marks

[END OF MARKING INSTRUCTIONS]