

2005 Geography

Intermediate 2 – Old Arrangements

Finalised Marking Instructions

These Marking Instructions have been prepared by Examination Teams for use by SQA Appointed Markers when marking External Course Assessments.

Geography

Intermediate 2

Old Arrangements

Physical Landscapes and Land Use

Question 1

- (a) Only **one** type to be chosen. If both are answered, choose highest scoring question. **Well annotated** diagrams may be awarded full marks.

Physical weathering – caused by extremes of temperature (1) leading to freeze/thaw action (1). Rocks weaken due to continual temperature changes (1). Pieces of rock eventually break off (1) and fall due to gravity to form scree (1). Wind and rain can remove the top layers of the rock surface (1).

Chemical weathering – rain water is a weak acid (1) which can slowly dissolve alkaline rocks (1) such as limestone (1). Dissolved rock is carried away in solution (1). Lines of weakness in the rock are widened (1).

Or any other valid point.

3 marks

- (b) (i) X = Yorkshire Dales
Y = Peak District

2 marks

- (ii) Water passes through joints and bedding planes in limestone (1). Over time the joints become widened (1) by water erosion and chemical action (1) and a cavern is formed (1). As the cavern becomes bigger the roof becomes more unstable (1) and eventually collapses (1) to form a steep sided limestone gorge (1).
Or any other valid point.

Credit should be given for use of annotated diagrams.

4 marks

- (c) (i) Corrie with tarn 348120
Hanging valley 365085
Arete 280024

2 marks

- (ii) Possible land use choices include: tourism/recreation, forestry, hill farming, settlement, roads.
Clear reference must be made to the map, if not, mark out of 5.
Award max. 1 mark for grid reference.
Award up to 4 marks for any ONE land use.
eg Hill farming – steep slopes (1) and colder, wetter weather (1) unsuitable for arable farming (1). Sheep are better suited to these conditions (1).
Settlement has grown on the flat valley floors (1) eg Ambleside (3704) (1) due to space for expansion (1), nearness to water supplies (1) and easier communication routes (1) etc.

Or any other valid point.

6 marks

- (iii) The area is within the Lake District National Park (2711/2811) (1) (NP centre at 3800) (1) which has landscape conservation as one of its aims (1). Many areas are owned and protected by the National Trust (1) which can limit access to visitors (1). Natural stone steps (1).
Award up to one mark for a relevant grid reference.

Or any other valid point.

3 marks

Landscapes and Tourism

Question 2

- (a) A = Antrim Coast (accept Giant's Causeway) North Coast of Ireland **2 marks**
B = Snowdonia
- (b) (i) Sand is moved along the beach by the process of longshore drift (1). The incoming waves known as swash (1) carry the particles of sand along the beach at an angle (1) and the backwash carries them back directly towards the sea (1) as it runs out of energy (1). Over time the sand becomes extended into open water to form a spit (1).
Credit should be given for relevant diagrams/annotations. **4 marks**
- (ii) Maximum 1 for list.
Wooden barriers (groynes) can be constructed (1) at right angles to the coast (1). These reduce longshore drift and beach erosion (1) as sand piles up next to the barriers (1). Stone filled wire gabions or stone barriers (1) also reduce the effects of wave erosion (1). Regular replacement of beach material eg shingle (1).
Local authorities and organisations such as the National Trust (1) can restrict public access to beach areas (1).
Or any other valid point. **4 marks**
- (c) (i) Accept x or y or both.
These areas are honeypots because they are situated on major routes (1) and have car-parks (1) and will be on coach party itineraries (1). They are surrounded by mountainous scenery for hillwalkers (1) and adjacent to lakes for watersports and fishing (1). They provide accommodation (1) and other tourist facilities such as specialist shops and restaurants (1). There are also places of historical interest (1) such as Galava Roman fort and Dove Cottage (1), (342071) (1), Bridge House (1), Museum (1).
Award up to one mark for appropriate grid reference. If no map evidence used, mark out of 5. **6 marks**
- (ii) Problems – traffic congestion (1) and air/noise/litter pollution (1) in towns such as Ambleside (1). Footpath erosion on hillsides (1). Conflicts on Lake Windermere between fisherman/yachting/canoeing and speedboats/jetskis (1). Tourists lighting fires/barbecues in forest areas (1) – risk of forest fire (1). Damage to walls/gates (1). Dogs worrying sheep (1).
Or any other relevant point.
One mark for each point or two marks for a developed point. **4 marks**

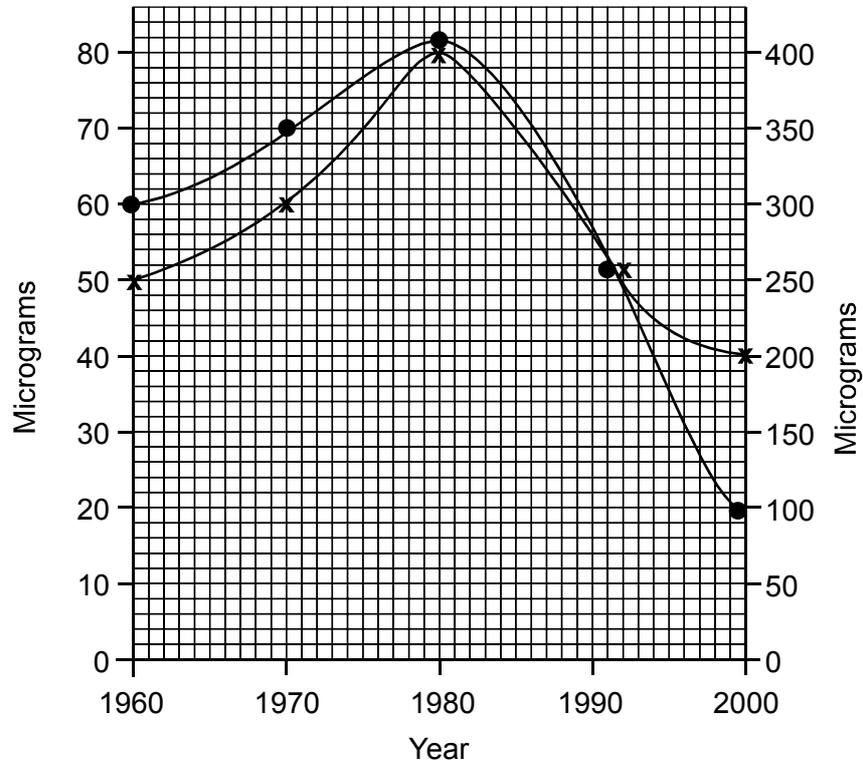
Environmental Issues

Question 3

- (a) (i) Deforestation as a result of logging (1) or the development of tourist resorts and ski runs (1) leads to slopes which are unstable as there are no tree roots to bind the soil (1). Noise from tourists, traffic and skiers can lead to avalanches (1) and wildlife can also become disturbed (1).
- Or any other relevant point. **3 marks**
- (ii) Avalanches can result in towns becoming swamped by snow and many people may die (1). Landslides can also cover buildings, block roads and railways, and prevent access in and out of the area (1). The soil and water which is washed off the mountain ends up in the rivers which leads to flooding (1) killing people, wrecking homes and holiday areas (1). It also leads to the landscape becoming covered in debris and wildlife lost (1). **4 marks**
- (b) (i) 1 mark correct scale each axis
1 mark labelled axis
1 mark accuracy
1 mark key **4 marks**
- (ii) For both metals there has been an increase in the quantities found until they reach a peak in 1980 (1). Nickel starts off at 50 micrograms in 1980 but drops down to below its original level by 2000 (1). Copper increases from 300 micrograms to 400 in 1980 but then drops to well below its original level in 2000 at 100 micrograms (1). Both metals increase, peak and decrease at the same rate (1). **3 marks**
- (c) For full marks both EU and pressure groups should be mentioned – if not mark out of 5.
- The quality of the water in the Rhine has been improved as a result of a group of EU countries which border the Rhine joining together (1) to bring in new strict laws in an attempt to reduce pollution (1). This forces the industry to treat their waste (1). Member countries must also ensure human waste is treated before entering the river (1) by an EU law which means local authorities must improve their sewers (1) and build more sewage treatment plants (1). Environmental groups such as Greenpeace can hold public demonstrations which are captured by the media (1). This can often be very effective as it leads to embarrassment for the companies and countries involved (1) and is more likely to get a public outcry (1).
- Or any other valid points. **6 marks**

Supplementary Sheet

Question 3 (d)



Key
● — ● Copper
x — x Nickel

Population

Question 4

- (a) (i) Europe's population growth increases steadily and slowly (1). It gradually increases as of 1850 (1).
World shows quite a rapid increase particularly from 1950 where it increases sharply (1), making most rapid gains in population growth during this 50 year period (1).

Or any other valid points.

4 marks

- (ii) Life expectancy in Europe has increased due to better medical care and treatments (1). Diagnosis is earlier and more accurate and vaccinations have eliminated many diseases still prevalent in the developing world (1). Diets have improved with more food available and a balanced diet available (1). Jobs are less physically demanding and so place less pressure on the body (1), housing has improved over the years also reducing problems with illness from damp, rats etc (1), living standards in general have improved (1).

Or any other valid point.

4 marks

- (b) Problems in the future of a declining birth rate and lowering of the death rate might include the build up of a top heavy pyramid which reflects a large old age population (1). This would mean less people of working age working to pay taxes (1) which would then go into paying for pensions, old folks homes (1), and even maintaining the general infrastructure (1). Result may be bankruptcy for the country (1). Economy may go into decline if there are not enough skilled workers (1). Immigrants may be encouraged to enter the country to help fill the jobs (1) which may cause unease and racial tension (1). The identity of the country may go into decline (1).

Or any other valid point.

6 marks

- (c) (i) Mark 3:3, 2:4, 4:2
The growth of new towns has occurred in response to increased populations in the cities (1). It is an attempt to reduce urban sprawl into the urban-rural fringe (1) and reduce environmental problems (1). If housing and industry set up together it should encourage people to work and live in the same area (1) thus reducing car pollution and traffic congestion (1). Shops and entertainment can be found in New Towns reducing the need to go into the city (1). Encourage new industries and new talent into the area as a result of improved infrastructure for business and living (1).

- (ii) Road networks may have to be improved and in fact created around the new towns, will use up valuable farmland (1), cause increased pollution in that area (1). If the New Towns increase in size then they might start to create even more problems by sprawling and joining up to other towns (1).

Or any other valid point

6 marks

Global Issues: Development and Health

Question 5

- (a) Accept yes and/or no.
- Yes – Brazil’s birth rate at 26 is higher than Japan and Denmark (1).
- No – although birth rate is high, it is still quite a bit less than India and Bangladesh (1).
- No – death rate is the same as Japan, lower than Denmark (1).
- Yes – infant mortality rate at 57 is a lot higher than Japan and Denmark (1).
- No – infant mortality rate is significantly below that of Bangladesh and India (1).
- No – % of urban dwellers in Brazil is higher than Japan and just lower than Denmark (1).
- No – % of urban dwellers is a lot higher than Bangladesh and India (1).
- No – Brazil has a trade surplus (1) like Japan and Denmark (1).
- Or any other valid point. **4 marks**
- (b) Mark 1:2 or 2:1
- Advantages – GNP provides a good indicator as it gives an idea of how much money there is in a country (1). By comparing countries you can tell which country is better off (1).
- Disadvantages – GNP is only an average figure (1) and gives no indication of the spread of wealth across the population (1). **3 marks**
- (c) (i) The areas with the highest percentage of children are found in large parts of Africa and South America (1) and parts of Asia eg India (1) ie mainly in the Poor World (1). Countries like Canada, China, Finland have fewer children under 15 years (1). Areas with the lowest number of children are USA, UK, France (1) ie countries in the Rich World. **3 marks**
- (ii) For full marks candidates must mention ELDC and EMDC. Otherwise mark out of 3.
- Mark 1:3 or 2:2 or 3:1. A list = maximum of 2 marks.
- Developing countries – not enough food for everyone/danger of starvation (1).
- Lack of money to build schools or train teachers (1) increase in number of illiterate people (1) this makes it hard for country to develop (1).
- Lack of hospitals/doctors/nurses (1) could lead to an increase in disease levels (1).
- Lack of housing causes overcrowding (1) this enables diseases to spread quickly (1).
- Developed countries – not enough workers to fill all the jobs (1) not enough taxes being paid to support care for the elderly (1) or to provide for pensions (1) decline in some jobs eg teachers, midwives (1).
- Or any other valid point. **4 marks**

(d) (i) Mark 2:4 or 3:3 or 4:2

Healthy eating campaigns eg – five a day slogan (1) switch to low fat foods (1) adverts on TV/radio/newspapers (1) telephone helpline (1) targeting school meals (1).

Stop smoking – limits on advertising of cigarettes (1) warnings on tobacco products (1) health education programmes (1) no smoking areas in restaurants/cinemas/buses (1) cigarettes not to be sold to under 16 year olds (1) nicotine patches to help people give up smoking (1).

Or any other relevant point.

(ii) Number of deaths due to heart disease is down (1) but numbers still high (1) especially in the west of Scotland (1). The 5 a day slogan is often too expensive for lower income groups (1). Supermarkets often don't locate in areas of low income (1) so people don't have access to cheaper fruit and vegetables (1). Number of smokers is down (1) but increase in the number of young people smoking (1) especially girls (1) most effective measure is government enforced laws/regulations (1) advertising bans and health warnings are less effective as people smoking already may not want to give up (1).

Or any other relevant point.

6 marks

Global Issues: Environmental Hazards

Question 6

- (a) Earthquakes are caused by the movement of two plates (1) the Eurasian Plate and the Philippines Plate are moving towards each other (1). The Philippines Plate is made up of oceanic crust and is heavier (1) so it sinks underneath the lighter Eurasian Plate (1). The Philippines Plate is destroyed (1) and this movement causes an earthquake (1). **4 marks**
- (b) There are very few warning signs (1) and the earthquake happens very suddenly and only lasts a few minutes (1). Expensive technology is required (1) and is not always readily available (1). **3 marks**
- (c) The heavy weight on top of the building provides a counter movement to the shaking of the building (1). The deep foundations into solid bedrock give the building stability (1). The shock absorbers reduce the effect of shaking (1). Shutters going down to prevent glass shattering onto the ground below (1). Reinforced concrete structures to prevent building collapsing (1).
Or any other valid point. **3 marks**
- (d) Fertile soil from weathered volcanic rock (1). Granite rock can be quarried (1). Geysers and hot springs for recreational purposes (1). Hot water provided to towns/greenhouses (1). Geothermal energy (1). Defensive site (1). Spectacular scenery which attracts tourists (1).
Or any other valid point. **3 marks**
- (e) (i) Snow melting in spring in the Himalayas (1) causes the water level in rivers to rise (1) as most of Bangladesh is low lying the land is easily flooded (1). The heavy rain June, July and August at Dhaka also causes water levels to rise (1). As Bangladesh is a poor country they have little in the way of flood protection methods (1).
Or any other valid point. **3 marks**

(ii) Mark out of 3 if no reference is made to a named example.
Maximum of 2 marks for a list.
Flood – Red Cross could bring in emergency supplies of food (1) and tablets to chlorinate the water (1) to prevent diseases like cholera (1). As people will be homeless tents will be needed (1) and blankets to keep people warm (1). The army could be brought in to deliver sandbags (1) and to help rescue people (1).
Accept any other valid point.

Drought – Red Cross could bring in emergency supplies of food (1) and bottled water (1) and equipment to build emergency wells (1). They could also set up refugee camps (1). Medication would be needed to prevent the spread of disease (1).

Accept any other valid point.

4 marks

[END OF MARKING INSTRUCTIONS]