

2006 Geography

Standard Grade Credit

Finalised Marking Instructions

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2006 Geography

Standard Grade Credit

1 (a) 1 mark for each correct answer:

- A - Beinn na Caillich
- B - Allt Nathrach
- C - Kinlochleven

3KU

(b) (i) 3 marks for all four correct, 2 marks for three or two correct, 1 mark for one correct.

- arete 057563
- hanging valley 165553
- truncated spur 201556
- corrie 197584

3KU

(ii) 1 mark per valid point. Fully annotated diagrams may gain full marks. Credit references to frost shattering, abrasion, ice plucking and interlocking spurs.

truncated spur – is formed when the slope of a hill is eroded by a glacier (1); as the ice moves down the valley it abrades the sides of hills (1); and ice at the edge of the glacier freezes on to the rock and plucks it away (1). When the ice melts, the slope is left as the steep side of a u-shaped valley (1) and may have crags or cliffs where erosion was greatest (1).

4KU

(c) No marks for choice, 1 mark for each valid supporting reason, 2 marks for developed points. Accept yes/no answers. Maximum 1 mark for grid references.

Possible answers might include:

Yes – it is a good use for an old industrial site as the buildings will not be left derelict (1) and there may be some jobs for the local community (1); it is a good location because all of these sports can be done on the surrounding mountains (1) while the river and loch could also be used for water sports (1); forests such as those in 1762 (1) could be used for orienteering (1); a long distance footpath (West Highland Way) runs through the area and so there are likely to be lots of people interested in the centre (1); mountain rescue teams could use the centre to help with their training (1).

No – there is only one B class road so access is not good and it is a long drive from the nearest main road or the nearest towns (2); the surrounding area is ideal for these sports, so it would be better to have the centre in a place further away, so that people could prepare before they visit mountainous areas (2); Kinlochleven is only a small settlement so there will be few customers and there may not be a big enough pool of labour (2).

6ES

- (d) 1 mark per valid point, 2 for developed statements. Maximum 2 marks for simple statements linking land use to landscape.

Possible answers might include:

the settlement of Glencoe village is on flat land (1) suitable for building (1), it is beside the River Coe and is located here because this is where roads meet (1). The mast is on the hilltop where it receives good reception (1). Forests are found on steep slopes where the soils may be thin (1); sheep are found on steep slopes or high land because the ground is unsuitable for crops (1); there are hotels, caravan and campsites and footpaths to cater for the many tourists visiting the area for the spectacular scenery (2).

5KU

- (e) No marks for choice, 1 mark for each valid supporting reason, 2 marks for developed points. Mark out of **two** if the answer is general and does not refer to the map. Accept yes/no answers. Credit references to helping Scotland reach its target for renewable energy and/or lack of air pollution etc.

Possible answers might include:

Yes – the land is very high and exposed (1011 metres) so it will be a good site to catch the wind (1); there is a main road (A82) close to the site, so access will be easier (1); there are very few houses for miles around so there will be less protests from local residents (1); the turbines could be placed below the summit so there would be less visual intrusion (1); there are no trees which would need to be cut down for the turbines or to create access (1).

Or any other valid point.

No – the land belongs to the National Trust who would be unlikely to let this happen (1); wind turbines on Buachaille Etive Mor would spoil the view from the main road for passing motorists and it would also spoil the scenery in one of Scotland's most popular tourist areas (2); the slopes of the mountain are far too steep and it would be impossible to get heavy machinery on to the top (2); as it is far away from any big settlements it would be expensive to transmit electricity from Buachaille Etive Mor (1); the area is obviously popular for walking as there are car parks (eg 213560) and footpaths (eg 218550) and building a windfarm would cause conflict with hill walkers (2).

Or any other valid point.

6ES

- 2 Marks are awarded for noting and explaining the differences.
Maximum of **one** mark for description of differences.

Possible answers might include:

wind direction at Stockholm is NW whereas at Belfast it is SW (1 mark for description), due to the different alignment of the isobars (1) and the fact that winds circulate in an anticlockwise direction around a depression but clockwise around a centre of high pressure (1). In Stockholm it is dry but in Belfast it is wet (1 descriptive mark) because Stockholm is in a ridge of high pressure whereas Belfast is in a depression (1).

There are 8 oktas of cloud cover in Belfast because it is close to the warm front, whereas Stockholm is not yet affected by the clouds associated with the advancing warm front (1). Stockholm is in a ridge of high pressure, so is experiencing dry conditions, unlike Belfast which is close to the warm front/in the warm sector of a depression (1) Temperatures in Belfast are warmer than in Stockholm as it is in the warm sector of a depression whereas Stockholm is in the cold sector (1).

6KU

- 3 1 mark per valid point, 2 for developed statements. Maximum of **one** mark for basic references to land use or a list.

Possible answers might include:

new roads such as the Trans Amazon Highway (1) are being built to open up the interior (1); trees are being cleared to make way for ranching which gives bigger profits (1); parts of the forest have been flooded by HEP (1) schemes to provide water and electricity (1); logging also destroys the forest (1) but governments can charge companies for logging rights in the rainforests (1) and so bring in money to help with their rapidly expanding populations (1); new settlers are destroying the edges of the rainforest through slash and burn agriculture (1); while mining companies have destroyed areas of forest in order to extract minerals (1) which can be sold abroad and earn much needed foreign currency for the ELDCs (1).

5KU

- 4 (a) No marks for choice; 1 mark per valid point, 2 for developed statements. Accept yes/no answers. Possible answers may include:

Yes – organic food being grown is better for the environment (1) because no chemical fertilisers or pesticides are used (1); mechanisation means that the countryside becomes more productive (1) as the farms are more efficient and produce higher yields (1); set aside land might be allowed between fields to help create a more natural environment (1); the green veins idea would encourage more wildlife (1) and perhaps more ponds and wetlands for birds (1).

No – set aside fields look messy (1) removing hedges spoils the prettiness of the countryside (1) and harms wildlife as their homes/habitats are destroyed (1); mechanisation causes more noise and air pollution (1) and causes job losses which lead to people moving away (1); this can also result in loss of local services/school closures etc (1).

6ES

- (b) Maximum of **two** marks for reference to any one technique. No credit for same justification for different techniques.

Possible:

Techniques:

Bar graph (1), pie chart (1), land use map (1).

Possible:

Explanations:

Bar graph: separate bars would clearly show the amount of land for each category (1); and could be coloured to emphasise the differences (1).

Pie chart: could change the figures into percentages (1) and show the proportion of land used for each crop (1).

Land use map: would show where the crops are grown (1) colour would show the most abundant crops (1); patterns of land use could be identified such as high intensity land uses close to the farmhouse (1).

5ES

- 5 (a) No marks for description; one mark per valid point, two for developed statements. Possible answers may include:

Inner City area: were built close to the original centre of the settlement, near to services, business and industry (1); grid-iron street patterns were used in the inner city to make the best use of space (1); houses are closer to industry in older areas because they were built when people had to walk to work (1); tenement/terraced housing is found in inner cities because this allowed a very large number of people to live in a small area close to industry (1); expensive land in the crowded inner city allowed little room for gardens or open spaces (1); inner city environmental problems are often a result of derelict industrial sites, run-down older housing and traffic congestion(1).

Suburbs area: new housing is further away from the centre because recent development has spread outwards into areas which were not already built up (1); modern planners have used cul-de-sacs to discourage through traffic as a safety measure (1); also a more varied road layout is used to create a more varied/less boring environment (1); new housing can be built further away from the city as people can now commute by car to their work place (1); modern housing allows lower densities of population and room for bigger gardens because of cheaper land on the outskirts (2); this helps create a more pleasant environment where industry and housing areas are usually separated (1).

6KU

- (b) At least two techniques must be described. Maximum of **three** marks if no reasons given, or if reference is made to only one techniques. Mark 2:3 3:2.

Possible answers might include:

Fieldwork based on a land use survey (1) could be used to produce an environmental quality index for each area (1), using the same criteria for each, such as evidence of dereliction, litter, quality of open space and number of empty properties (1); reasons might be that this would allow a comparison to be made (1) based on the use of facts rather than just opinion (1); provides accurate, up-to-date information (1). Photographs of the areas could be taken and displayed side by side (1); these would capture the appearance of the town in greater detail (1); map studies using a variety of maps (1) would show up differences in the amount of open space and/or land use (1); this would allow even widely separated areas to be compared without the need for travel costs/time (1).

5ES

- 6 (a) One mark per comparative point.

Possible answers might include:

Tokyo will have increased from about 17 million in 1970 to 30 million in 2015 whereas Jakarta has gone from 3 million up to 22 million (1); so Jakarta's population has increased by 6 million more people (1); since Tokyo started off with a lot more people than Jakarta in 1970, it is Jakarta that has gone up more in percentage terms (1); in Tokyo the population will have nearly doubled whereas in Jakarta the increase will be over 700% (1). Tokyo's rate of increase is quite slow between 1994 and 2015 while Jakarta is still increasing rapidly between these dates (1).

4ES

- (b) Accept yes/no answers. Answers may include:

No: Jakarta is in a poorer country so more strain on resources from rapid population growth (1); economic development can not keep up with population growth (1); this could lead to lack of food (1) illness/disease because people have a much lower standard of living than in Tokyo (1); there will be a strain on education and health services (1) and a lack of housing (1) causing sprawling shanty town developments (1); Indonesia may need to import more than they export and go into debt (1) as they borrow money from EMDCs and have to pay high interest rates on their loans (1).

Yes: there will be problems of overcrowding in Tokyo (1) which could lead to further environmental difficulty such as increased pollution from vehicles as people commute to work (1); there may be a lack of suitable jobs causing people to become destitute (1) and forcing some to live on the streets as happens in many of the world's major cities (1); there will be a lack of suitable land for building in Tokyo (1) as Japan is already a very densely populated country (1); valuable farmland may have to be sacrificed to build homes for all the extra people (1).

Accept any other valid points.

4ES

7

No marks for choice. Accept answers which refer to both physical and human factors.

Possible answers might include:

Physical factors:

relief: flat land is easier to build on (1) and also to farm because soils are usually more fertile (1) transport is easier in areas of flat land (1) and so more people choose to live in these areas giving higher population density (1).

natural resources: if an area has lots of natural resources such as water, wood, oil, coal, people will want to live there (1) as there will be more job opportunities (1) trade links and industrial development (1) which in turn can create prosperity (1).

Human factors:

government decisions: if the government gives grants or some kind of financial incentive, they can attract employment into an area (1) which leads to better incomes and higher prosperity (1) which will result in more people wanting to live in the area (1).

employment opportunities: in a poor area there will be few jobs (1); if it is inaccessible not many people will live in these areas (1); but if the area is easily reached and has good transport links there is likely to be more work available (1).

6ES

8

One mark per valid point, two for developed statements.

Mark 3:3, 4:2, 2:4.

Accept 1 lift for advantages and 1 lift for disadvantages.

Possible answers may include:

Advantages: the electricity generated will help save China money (1) and this will go towards paying for the dam (1); 10 million people will be safe from the danger of flooding (1); their homes and crops will no longer be at risk (1); HEP is a clean source of power which will reduce pollution at local and global level (2). The new economic development will encourage more foreign investment (1); this will improve the standard of living for millions of Chinese by creating new job opportunities (2); trade links with rich countries can help the Chinese economy to grow (1). If China's economy is booming, benefits trading partners due to more imports (1).

Disadvantages: China could fall into debt (1) which will become a burden on the Chinese economy (1) and cause it to buy less from trading partners as it could end up paying huge amounts of interest on its loans to foreign banks (1); displaced people have had their way of life destroyed (1); many places of historical and archaeological value will be lost forever (1) the dam could be destroyed by an earthquake (1); this could lead to deaths of millions of people due to flooding (1).

6ES

CREDIT – MARK ALLOCATION

No.	Ka	Kb	Kc	Ea	Eb	Ec	Ed	Ee	Key Idea
1a	3								4
b(i)	3								1
(ii)		4							1
c					6				4/11
d		5							4
e					6				5
2		6							2
3		5							6
4a					6				9
b								5	9
5a		6							8
b							5		8
6a				4					14
b					4				14
7					6				12
8						6			16/17

Total number of marks:

KU: 32 40%

ES: 48 60%

Total 80

[END OF MARKING INSTRUCTIONS]