



2007 Geography

Standard Grade Credit

Finalised Marking Instructions

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2007 Geography

Standard Grade Credit

1 (a) One mark for each correct answer:

- A - Docks
- B - Newport on Tay
- C - Railway Bridge

3 ES

(b) One mark for a simple point, two marks for a developed point.
Max 1 for grid references.

eg The undulating nature of the landscape means that the A914 and A92 need cuttings and embankments (2). The roads have had to avoid the higher steeper ground (1) such as grid square 4126 (1). Most settlement is along the coast where there is low land for building (1) and where there are sandy beaches which may have attracted tourist development (1). There is also a jetty for fishing boats due to coastal location (1). Where there is gently sloping lower ground farming may be arable or mixed (1), whereas on the steeper slopes and higher ground livestock grazing will occur due to the difficulty of using machinery (2). Woodland is either grown on land which is too high and cold for crops such as 415265 (1) or steep slopes like 424254 (1).

4 ES

(c) Need to mention both benefits and problems for full marks. 1 for simple point, 2 for developed point.

Benefits

New industrial estate provides jobs for local people (1). New dual carriageway improves communications/speeds up traffic flow (1). Quarry is now disused so less noise/dust pollution for locals (1). Two new schools enable growing population to be educated (1).

Problems

Increased housing means farmland is lost (1) and the quality of the environment has been spoiled (1). [The lake at 443325 has been drained removing a recreational facility (1).] The new dual carriageway means that there is more traffic and air pollution from this (1). Noise pollution/visual pollution (1).

5 ES

- (d) 1 for simple point, 2 for development point. Accept yes/no answers.

Yes

3930 has very little open space whereas Gauldry is in the countryside (1) with footpaths giving access to nice walks in the woods and on the hills nearby (2). 3930 has 3 A-class roads and many others so will be noisy, whereas Gauldry will be quiet and peaceful with only a few minor roads (2). Also Gauldry will be much less polluted (1).

No

At present he has easy access to work, 1 km approx (1) whereas from Gauldry he has a much longer journey (1). He will have to drive 4km by minor road to reach the A914 and still has another 6 km to drive to work (2). Or, he will have a slow drive through the built-up area of Newport (1). Also he has to pay a toll at the bridge (1). In 3930 he will have easy access to high order services in the CBD, whereas Gauldry only has a few low order services such as a pub and post office (2).

5 ES

- (e) Mark 3:2 or 2:3

Count storeys of buildings (1)

To test theory that building height increases towards centre of town (1)

Pace out lengths of buildings with different functions (1) or record land use on a map (1)

Provides original data (1) which can be used to calculate percentages of land uses in different parts of the transect (1)

Draw field sketches (1) or take photos along the transect (1)

Enables comparisons to be made between buildings in different places (1). They can be annotated to emphasise particular features (1)

Do a traffic count, recording the amount of traffic that passes in a given time (1) and a pedestrian count (1)

To compare how busy it is at different points along the transect (1)

5 ES

Or any other valid techniques and justifications.

- (f) No mark for description.

Close to a dual carriageway providing good access for vehicles carrying parts/raw materials and distributing finished products (1) and also provides good access for the workforce (1). On the edge of the city where land is cheap (1) and there is room for expansion (1). Land slopes gently so is not difficult to build on (1). Close to housing areas so there is a labour force nearby (1). There will be a big market in the city of Dundee (1).

4 KU

- 2 Well annotated diagrams could obtain full marks. For full marks answer must refer to both hanging and main valleys.

Max 1 mark for simple reference to plucking and/or abrasion.

eg A glacier moves down a main valley which it erodes (1) by plucking (1), where the ice freezes on to fragments of rock and pulls them away (1) and abrasion, where rock fragments embedded in the ice scour the landscape (1). The main valley is made deeper and wider (1). A smaller glacier moves down a tributary valley (1) and erodes it less deeply (1), leaving, after the ice has melted a smaller valley whose floor is some height above the floor of the main valley (1).

Credit reference to shapes of valley pre-glaciation (1).

4 KU

- 3 Correct choice is X (1)

Set X shows a lower temperature than set Y, which matches the position of Bristol in the cold sector of the depression (1). The high wind speed in set X fits with the closely spaced isobars at Bristol (1). The alignment of the isobars and the anticlockwise movement of air round a depression suggest that Bristol will have a SW wind as shown in set X (1). The heavy rain in set X is typical of the cold front which is very close to Bristol (1). Fronts also cause extensive cloud cover, matching the 7 oktas in set X (1). Cumulonimbus clouds, as shown in set X, are typical of a cold front where warm air is pushed up rapidly (1).

5 KU

- 4 (a) No marks for choice of physical and human causes. 1 mark for a simple point, 2 marks for a developed point. Must refer to both physical and human causes for full marks. Mark 2:2 1:3 3:1.

eg if 'unreliable rainfall' is chosen from physical:-

Some years are wetter/drier than others (1). If areas have several dry years in succession the crops will not grow (1) there are no roots to hold/bind the soil (1) so it can be blown away by the wind (1) or eroded by people/animals trampling over it (1).

eg if 'population increase' is chosen from human:-

If population increases through a rise in births and immigration more land will be needed for crops (2). Less fallow land as more food is required to feed the people (1) overcultivation occurs and the soil loses fertility (1). Less crops can grow so there is no vegetation cover to bind the soil together so erosion takes place (1) and the desert spreads (1).

Or any other valid point.

4 KU

- 4 (b) 1 mark for a simple point. 2 marks for a developed point.

Irrigation allows crops to be grown (1) the roots bind the soil together preventing it from being washed/blown away (1) wetter soils are heavier and harder to remove (1). Plant more trees as the roots hold the soil together (1) trees can improve soil fertility (1) can provide shelter for crops (1) slow down/divert winds which can damage crops (1). Terraces in hillsides can help to trap water (1) preventing soil being washed away (1) so more crops can be grown holding the soil together (1). Stone lines built along contours on sloping farmland (1) trap water after rain so the soil is not easily washed away (1) soils remain deep behind stones and crops will grow (1).

Or any other valid point.

4 KU

- 5 1 mark for a valid point. 2 marks for a developed point.

Answer must **explain** changes.

Possible answers might include:-

Shopping centres under cover so provide more pleasant shopping environment (1) and easier for shoppers if all shops are in a compact area rather than spread out along a street (1). Shops are closing down due to more out-of-town shopping centres (1) which are more accessible by car and convenient to get to (1). The buildings left are used for other purposes – usually entertainment (1). High parking charges to discourage motorists from taking cars into the CBD (1), so reducing traffic congestion (1). One way streets to allow traffic to flow more freely (1). Pedestrianised areas to increase safety for shoppers and reduce air pollution (2). New buildings are often multi-storey because there is a high demand for land in CBD and no room to expand sideways (2).

5 KU

6

1 mark for a valid point. 2 marks for a developed point.

Human

Human factors create more problems than physical factors in this sort of area because farmers are so dependant on EU subsidies (1) and any changes made to the level of subsidy would have a big impact (1). Inverlocharig and other sheep farms will have been hit by falling livestock prices in recent years (1) as well as rises in fuel prices (1). The farm's activities may be restricted by new conservation regulations for upland areas (1) and there will be difficulties caused by walkers leaving gates open and disturbing sheep particularly at lambing time (2). The relatively long distances involved in sending goods to market will restrict the farm's profits (1).

Physical

Physical factors will have a bigger impact because the steep slopes will prevent the use of machines and so restrict the potential for arable farming (1) and the high levels of rainfall in the mountains will make the ground boggy and difficult to farm (1). In winter the higher slopes will be cold and unsuitable even for sheep and snowfall may well cut the farm off for several days at a time (1). Soils are likely to be thin and infertile making farming tricky (1). It will take the farmer a long time to round up sheep for dipping, shearing etc because of the large size of a hill sheep farm and the mountainous nature of the landscape (2).

Or any other point.

6 ES

7

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

1 mark for a simple point. 2 marks for a developed point.

Answers must be explanatory. Max 1 for straight lifts from the diagram.

Advantages

There are 650 jobs which will help the local economy (1) as the workers will be able to spend money in surrounding businesses (1). Redundant workers from the old china clay industry may now be employed there (1) and the work is mostly permanent, not seasonal like many tourist related jobs (1). The old quarry may have been a blot on the landscape and the Eden Project will have smartened it up (1). Many visitors will need accommodation and this will boost the income of local guest houses and hotels (1). Educational opportunities for local children (1).

Disadvantages

There are 1.8 million visitors each year and most will come by car so this will increase congestion on the roads and exhaust fumes will cause more pollution (2). The Eden Project is not on a motorway or dual carriageway, increasing the pressure of traffic on smaller A-class roads (1). Parking spaces for 5000 vehicles will take up a lot of room and may spoil the look of the area (1). With such a large number of visitors it may encourage other new developments such as hotels and restaurants to mushroom around it which would have a negative effect on the environment (1).

Or any other valid point.

6 ES

- 8 Max 2 for simple descriptive links between population density and physical features eg 'It is sparsely populated in mountains and areas of low rainfall and densely populated where there is coal' (2).

The areas with low rainfall are sparsely populated because water is needed to irrigate crops for domestic use (1). Mountain areas are sparsely populated because they are too cold and the soils are too thin for crops to be grown (2). N Canada is sparsely populated because at these latitudes there are long dark winters and it is too cold to grow crops (2).

The East is densely populated because there is sufficient rainfall for agriculture and for domestic water supplies (1). Also there is coal here providing employment in mining (1). Other industries will use the coal for power and attract people into the area for the jobs they provide (2). In the west there are some densely populated areas close to HEP stations which provide power for industry (1).

6 ES

- 9 (a) 1 mark for a valid point. 2 marks for an expanded point. Max 1 mark for straight lifts.
Accept agree/disagree answers.

Agree

Brings much needed money into ELDC (1), which should improve the standard of living of poor people (1). Will provide jobs for locals (1) which don't require a lot of skills (1). Money can help to support projects like nature reserves (1).

Disagree

Locals can't use the beaches and facilities (1). Employment is only seasonal, during the European winter (1). Prices are low due to competition, which limits the amount of money gained (1). All tourist spending is in the coastal areas so people inland don't benefit (1).

4 ES

- (b) Techniques must be linked to the relevant data. Mark 2:2
Possible answers might include:-

Bar chart for labour force and tourism employment (1) *Comparison can be made between them (1)*

Flow map for European visitors (1) *Thickest line will show where most came from (1)*

Pie chart for GDP figures (1) *Data in percentages and these techniques show proportions (1)*
Divided bar graph for European visitors (1)

Or any other valid techniques/reasons.

4 ES

10

Mark 2:4, 3:3, or 4:2

1 mark for a simple point and 2 marks for a developed point.

eg Primary Employment %

In ELDC's many people are engaged in agriculture needing to grow their own food to survive whereas in EMDC's people buy their food with the money they earn working in secondary and tertiary jobs (2). In EMDC's their wealth is based on the development of industry so more people will be in secondary and tertiary employment (1). In EMDC's extracting raw materials is done mainly by machinery, whereas in ELDC's much of the work is done by hand requiring more workers (2).

6 KU

CREDIT – MARK ALLOCATION

No.	Ka	Kb	Kc	Ea	Eb	Ec	Ed	Ee	Key Idea
1a				3					4
b				4					4
c						5			5/11
d					5				7
e							5		8
f		4							10
2	4								1
3		5							2
4a	4								6
b		4							6
5		5							8/11
6					6				9
7						6			11
8				6					12
9a					4				16/6
b								4	16
10		6							13

Total number of marks:

KU: 32 40%

ES: 48 60%

Total 80

[END OF MARKING INSTRUCTIONS]