

GCSE

Edexcel GCSE

Geography A (1312 4H)

Summer 2006

Mark Scheme (Results)

Question 1

a) Study Figure 1a. It is a sketch map of Blandford Forum. Also study Photographs A, B and C in the Map and Photography Booklet.

i) Photograph A shows a flood bank. Why was it built here?

Point mark

- to prevent the houses from being flooded (1)

ii) Photograph B shows an area of land left for the river to flood on to.

- *What is this flood management technique called?*
- *Is this technique hard or soft engineering?*

Point mark

1. washland, flood zone, land use zone, wetlands, overflow area (not overflow channel)
2. soft (2)

iii) The location from which Photograph B was taken is shown on Figure 1a. In which direction was the camera pointing?

Point mark

- south; south west; south south west; S; SW; SSW (1)

iv) Soft engineering techniques are used to manage river floods. What are the advantages of soft engineering techniques?

Point mark

- can be advantages of the two techniques shown or soft engineering in general
- less disruptive to river systems
- more natural looking
- the land can be used in a different way when not flooded eg washlands
- costs less than hard engineering (3)

v) Which industry is being protected to the south of the river?

Point mark

- brewery, breweries, brewing (1)

vi) Study Photograph C and Figure 1a. What type of flood defence technique was the photographer standing on to take Photograph C?

Point mark

- flood bank (1)

Nothing else is acceptable

b) Study Figure 1b. It shows West Bay in Dorset in two different years.

i) Rock groynes have been built at West Bay since 2000. Explain how they help protect West Bay.

Point mark. This is a process question

- they stop longshore drift
- they build up the beach
- this creates more friction between waves and the beach (1) due to shallow water (1)
- waves have less erosive power because they have further to travel up the beach
- waves more likely to deposit material

No marks for protecting tourism or the economy (3)

(ii) Name two other defence techniques that have been built at West Bay since 2000.
Point mark

- beach replenishment or nourishment
- rip rap
- NOT sea wall (1)

(iii) The width of the beach at A has grown since 2000. By how many metres has the beach grown?
Point mark

- 20(m) (1)

(iv) Give reasons why the area to the west of West Pier was defended. Use evidence from Figure 1b in your answer.

Point mark

- there is a housing estate on the cliff (1), property is protected because of its value (1),
 - there are hotels and/or shops behind the beach replenishment area (1) (3)
- Simply listing from map = max 2

Do not credit processes or names of defence techniques.

(v) Cliff recession causes many problems for people who live in coastal areas. Choose a case study of a stretch of coastline or coastal area that is suffering from cliff recession.

Chosen stretch of coastline or coastal area.

Explain the causes and effects of cliff recession in this area.

Levels mark

- Walton case study or other.
- Section 1A of appendix
- Do not credit management

Level 3 5	To reach Level 3 there must be explanation of causes and effects, well linked to a case study.
Level 2 4-3	Specific detail of an example must be included to reach level 2. For top of level there should be explanation of either causes or effects and both should be mentioned
Level 1 2-1	Descriptive comments about causes and/or effects of cliff recession.

(5)

c) Resource exploitation can damage fragile environments. Choose a case study of a fragile environment damaged by resource exploitation. Chosen case study... Describe the causes of the damage to the environment and explain the effects on the environment and on the local people and explain what is being done to manage the problem.

Levels mark

- Agriculture and tourism - max level 1
- Ecuador case study.
- Section 1B of appendix
- People and environment not needed

Level 3 8-7	Causes, effects and management should be explained all within a case study. For top of level geographical terminology is used appropriately. Candidates are expected to spell, punctuate + use rules of grammar with accuracy.
Level 2 6-4	Specific detail of a case study must be included to reach level 2. Top of level both parts of the question need to be specific, causes as well as effects and/or management. There must also be evidence of explanation. For the top there is use of geographical terminology and candidates are expected to spell, punctuate + use rules of grammar with some accuracy
Level 1 3-1	Descriptive comments only about causes effects or management. Likely to be very general. Not related to case study.

(8)

Total for question : 30 marks

Question 2

a) Study Figure 2a. It shows the impact of the Mt St Helens eruption in 1980.

i) A pyroclastic flow moved out of the crater in a northerly direction for 4 km. Draw the pyroclastic flow onto Figure 2a. Use an arrow of the correct length.

Point mark

- must be accurate on the measurement of 4km (1)

ii) What was the approximate area of the blast zone shown in Figure 2a? Circle the correct answer.

Point mark

- 350kmsq (1)

iii) Name two rivers that were affected by mudflows.

Point mark

- North Fork Toutle river
- South Fork Toutle river (1)

iv) Which direction is Spirit Lake from the crater of Mt ST Helens?

Point mark

- north east; north north east; north, north east; NE; NNE; N,NE (1)

v) Name two types of deposit shown in Figure 2a that resulted from the eruption of Mt St Helens.

Point mark

- mud (flow) (deposits)
- avalanche (deposits) (1)

vi) Some responses to the eruption are listed in Figure 2a. Choose two of these responses and give reasons why they were carried out.

Point mark

- must be responses off figure 2a
- reasons could include build levees to protect towns from flooding (1)
- plant 10 million trees because all vegetation destroyed during eruption(1) (4)

b) Study Figure 2b. It is suggestions given to people in Japan to help them prepare for earthquakes.

(i) Choose two of the suggestions. Explain why each of these suggestions is a good idea.

Point mark

- fix heavy furniture so that it doesn't fall on you
- have a plan to avoid panic (2)

ii) Instructions are also given on what to do during an earthquake. Study Figure 2c. An earthquake is happening in each of these cartoons. Circle the person or car driver in each cartoon who is being sensible.

Point mark

- Answer on script
- Not under bridge
- Under bed
- Away from building (3)

iii) An earthquake will usually destroy low buildings but not taller buildings. Annotate Figure 2d to explain why. You may add to the diagram.

Point mark

- Rubber foundations to absorb tremors
 - Counterbalance on roof to restrict swaying
 - Steel framework to allow for swaying
- (3)

iv) People respond to earthquakes in different ways. Choose an earthquake you have studied. Chosen earthquake Explain how people responded in the short term and in the long term.

Levels mark

- Tottori earthquake, Japan.
- Turkey
- Section 2A of appendix

Level 3 5 marks	Clear explanation with reference to specific case study. Both short and long term should be covered in a specific way.
Level 2 3-4 marks.	Specific detail needed for entry to this level. Top of level there should be some explanation.
Level 1 1-2 marks	Simple descriptive comments about responses to earthquakes.

(5)

c) Tropical storms have an impact on people and the environment. Choose a case study of a tropical storm. Name of chosen tropical storm.... Describe the impact (effects) of the storm and explain how the effects of the storm are related to the state of development of the country.

Levels mark

- Can be LEDC or MEDC
- There is no need for balance as this will depend on the case study.
- Bangladesh or Hurricane Floyd
- Section 2B of appendix

Level 3 8-7	A number of impacts should be included with a thorough discussion of the effect of the state of development on the impact of the storm. All in a case study framework. For top of level geographical terminology is used appropriately. Candidates are expected to spell, punctuate + use rules of grammar with accuracy.
Level 2 6-4	Specific detail of a case study must be included to reach level 2. Top of level both parts of the question need to be addressed, impact and effects related to levels of development. For the top there is use of geographical terminology and candidates are expected to spell, punctuate + use rules of grammar with some accuracy
Level 1 3-1	Descriptive comments only about impact / effects and levels of development. Likely to be very general. Not related to case study.

(8)

Total for question: 30 marks

Question 3

a) Study Figure 3a. Also study Photograph D in the Map and Photograph Booklet. These show tourist activities on a beach in Cuba.

i) Active or passive is one way of classifying tourists. Label Figure 3a to show the active and passive tourist activities taking place on this beach.

Point mark

- *Pedalo active*
- Sunbathing passive
- Or arrows which just say active or passive and do not name the activity are also acceptable. (3)

ii) *Duration (length) of their trip and locational preference are also ways of classifying tourists. What do these terms mean? Use examples in your answer.*

Point mark

- **Duration:** Definition - this is the length of the holiday. A holiday might be a short break for the weekend to a European city such as Paris or 2 weeks holiday. An explanation and an example 2 marks
- **Locational preference:** Definition - this is where people want to go on holiday - whether they go to mountains such as the Alps or to the coast. An explanation and an example 2 marks. List not allowed for second mark. (4)

b) Study Figure 3b. It shows climate data for Cuba.

i) Complete the precipitation graph for Cuba. Use the figures in the table below.

Point mark

- Two accurately drawn lines. (1)

ii) Cuba is known as a year-round holiday destination. Give reasons why. Use data from Figure 3b in your answer.

Point mark

- Maximum of 2 with no data
- Rainfall totals fairly constant (1) all being below 90mm (1)
- Anomaly in October (1), 150mm (1)
- The temperature in Cuba is consistently high (1) between 26° and 31° (1)(3)

c) Study Photograph E in the Map and Photography Booklet. It shows a coastal area in Cuba.

i) Use Photograph E to complete the table below. Name three physical attractions and three human attractions.

Point mark

- 1 mark per column
- Physical - (blue) sea, coral, reef, (white) sand, sunny, scenery
- Sea, sand, sun = 3
- Human - sun umbrellas, sun beds, boats, hotels
- Credit something that you can see not what you can do (2)

ii) *What are the economic and environmental impacts of tourism on this coastal area? Use evidence from Photograph E in your answer.*

Point mark

- Max 3 if both environmental and economic not covered
- Max 3 if no evidence
- Comments about human attractions being unattractive with reference to beach
- Extra jobs (4)

iii) *Choose a mountain area that you have studied. Chosen mountain area..... Explain the negative environmental and social impacts (effects) of tourism.*

Levels mark

- Must only credit negative
- Can be LEDC or MEDC
- Section 3A of appendix
- Non mountain area = Level 1 max

Level 3 5	To reach Level 3 there must be clear explanation in a case study framework.
Level 2 4-3	Specific detail of a case study must be included to reach level 2. For top there should be explanation and both parts should be mentioned.
Level 1 2-1	General comments about social and environmental impacts. Not linked to a case study

(5)

d) *Tourism in fragile environments requires sustainable management. Choose a case study you have made of an area in an LEDC. Chosen LEDC case study.... Describe the problems that tourists could cause or have caused in this area. And explain how these problems have been managed.*

Levels mark

Maldives case study

- Section 3B of appendix
- Max level 1 for MEDC

Level 3 8-7	To reach Level 3 there must be clear explanation in a case study framework. For top of level geographical terminology is used appropriately. Candidates are expected to spell, punctuate + use rules of grammar with accuracy.
Level 2 6-4	Specific detail of a case study must be included to reach this level. Both parts of the question should be specific for the top of the level with explanation evident for part ii. For the top there is use of geographical terminology and candidates are expected to spell, punctuate + use rules of grammar with some accuracy
Level 1 3-1	General descriptive comments on problems and management strategies.

(8)

Total for question: 30 marks

Question 4

a) Study Figure 4a and 4b in the Map and Photograph Booklet. Figure 4a shows a plan of Feltham town centre in 1998. Figure 4b shows proposed changes to the town centre by 2006.

i) What is the meaning of the term brownfield site?

Point mark

- An area of the city that is no longer used(1). It may contain old houses or factories(1) or it may have been cleared for redevelopment(1) (2)

ii) Inner city areas can be either redeveloped or renewed. What is the meaning of the term renewal?

Point mark

- This is when old buildings are renovated (1). Bringing them up to date (1). They are not knocked down (1). (2)

iii) Describe the changes that have occurred in the area between 1998 and 2006. Use only evidence from Figure 4a and Figure 4b in your answer.

Point mark

- Only changes shown on fig 4 a and b to be credited.
- More car parking (1000 - 600)
- Public services buildings - library, nursery, etc.
- Tower blocks demolished for apartments
- Parkland rather than waste land
- Highfield road redirected
- Asda supermarket built on old tower block site/wasteland (4)

iv) Choose one of the changes and suggest reasons why it may have occurred.

Point mark

- Tower blocks demolished because they were vandalised (1) people didn't like living in them (1)
- More car parking because of increased car ownership (1). Spaces needed for office workers.
- Highfield road redirected to provide better access (1). To allow more space for the new development. (1) (2)

b) Study Figure 4c. It shows some of the shops which are going to locate in the new centre of Feltham. Complete the bar graph. Use the figures in the table below.

Point mark

- Two accurately drawn lines. (1)

c) Study Photograph F in the Map and Photograph Booklet. It shows Kibera, a shanty town in Nairobi, Kenya.

i) Shanty towns are one feature of rapid growth in LEDCs. Figure 4d is a sketch of Photograph F in the Map and Photograph Booklet. Label the sketch to show the characteristics of a shanty town.

Point mark

- dirt roads
 - houses made from waste materials
 - shop with no proper frontage
 - animals wandering around
 - no layout to the buildings
 - tin roofs
 - no proper windows
 - built on waste land
- (3)

ii) Give reasons why shanty towns like Kibera develop.

Point mark

- Rapid increase in population cities can't build houses fast enough
 - City doesn't have time or money to connect proper facilities
 - People cannot afford the proper building materials
 - Land ownership is not so clear, usually found on wasteland
 - If pull / push factors max 2 marks
- (3)

iii) Choose an urban area in an LEDC that you have studied. Chosen urban area... Explain how the problem of rapid growth has been managed.

Levels mark

- Sao Paulo case study
- Section 4A of appendix

Max level 1 for MEDC

Level 3 5	To reach Level 3 there must be clear explanation in a case study framework
Level 2 4-3	Specific detail of a case study must be included to reach level 2. For top there should be explanation.
Level 1 2-1	General comments about management schemes. Not linked to a case study

(5)

d) Urban areas suffer from air pollution and land-based pollution. Choose an urban area you have studied. Name of chosen urban area..... Describe the effects of air pollution and land-based pollution and explain the policies that have been introduced to reduce the effects of air pollution and land-based pollution.

Levels mark

- Cairo case study
- Section 4B of appendix

Level 3 8-7	Expect 3 out of 4 parts of the question with clear explanation to reach this level. Further development for the top in a case study framework. For top of level geographical terminology is used appropriately. Candidates are expected to spell, punctuate + use rules of grammar with accuracy.
Level 2 6-4	Specific detail of a case study must be included to reach this level. Both parts of the question should be specific for the top of the level and explanation should be evident. For the top there is use of geographical terminology and candidates are expected to spell, punctuate + use rules of grammar with some accuracy
Level 1 3-1	General descriptive comments about air and land based pollution.

(8)

Total for question: 30 marks

Total for paper: 60 marks