

GCSE

Edexcel GCSE

Geography B (1313)

Paper 3H

Summer 2005

advancing learning, changing lives

Mark Scheme (Results)

Mark Scheme 1313 3H 2005

1.

- (a) i) 10,000 ii) 135,000/136,000/137,000 (1) 2
- (b) 2 railways/railway to Liverpool St /Fenchurch St (1) and main (A127) road (1)
opened to London (1) which allowed commuters to settle (1)
as short / 1 hour or less journey time (1)/makes S'end more accessible (1)
4
Total 6 marks

2.

- (a) Worth £63m per year (1) 3 million day visitors per year (1)
Southend is the closest resort to London (1) so large number of
tourists likely / large catchment (1) provides employment (1)
longest pier in the world (1) 3
- (b) Conservation area (1) historical attraction (1) old 18th Century cottages (1)
provide pleasant/ interesting environment/ living conditions (1)
Cockle sheds(1) provide jobs/ income/ more tourists (1) 2
- (c) pleasant/attractive (coastal) environment (1)
(pleasant) climate (1) for retirement (1) Low house prices/ availability of
housing (1) People who moved to S'end in or up to 1940 are now over 60 (1)
2
- (d) close to / 40 - 60 minutes to London (1) where jobs are/where they work(1)
easy access/good road /rail links (1) cheaper housing than where they
work/London or any specific advantage over London such as education(1)
Lack of pollution/more fresh air (1) 2
Total 9 marks

3.

- (a) i) Breakdown of rocks (in situ) (1) action of weather/or any two types, eg
rain, sun, frost/temperature changes on rocks (1)
reference to erosion 0 marks
ii) eg expansion/contraction (1)
due to temp changes (1) solution (1) due to action of acid rainwater (1)
splitting/breakdown of rocks by roots (1)
Credit specific weathering types eg freeze thaw, onion skin 2
- (b) Importance of slope angle (1) cliffs are steep (1) Sand + Gravel is
permeable (1) absorbs water (1) but Clay is impermeable (1) so Sand+Gravel
slides/slips over clay beneath (1) Water acts as lubricant (1) and adds
weight (1) Southend is one of the warmest/sunniest areas in Britain (1)
so cliffs dry out/contract (1) as they face South (1) bandstand will
collapse/fall (1) due to mass movement (1)

Allow 1 mark for types: creep/slides/slips/slumps, flows, rotational
movement, free fall/avalanche

NB No marks just for repeating labels from Fig. 5; Max 3 marks if not annotations/ labels 4

- (c) No marks for terms hydraulic action or corrasion (as given in resource);
 Hydraulic action: air trapped in cracks (1) compressed (1) and shatters rocks/explosive effect (1)
 Abrasion(1)/Corrasion: sand/shingle/pebbles carried/picked up by waves (1) thrown at cliff (1) and scour/grind the rocks (1)
 Corrosion/solution (1); slightly acidic seawater (1) dissolves rocks (1) such as chalk/limestone (1)
 Attrition (1): force of waves causes pebbles to hit each other (1) rounding them (1)reducing their size (1) 4
 1+3 or 2+2 or 3+1

Total 11 marks

4. (a) (i) Beaches (1) 1

(ii) 50% of tourists visit or 51% or just over 50%
 2

(b)

High Street Shops	√
The Pier	√
Adventure Island Theme Park	√
Amusement Arcades	√
Kursaal Bowling Alley	√
Sea Life Centre	√
Leigh Old Town	
Cliffs Pavilion Theatre	
Museum	

1 or 2 correct = 1 mark If all ticked = 2 marks

3 or 4 correct = 2 marks

5 or 6 correct = 3 marks 3

(c)

Level 1 1 mark	Mentions one or two simple conflicts e.g. tourists cause litter / noise, annoying residents
Level 2 2 - 3 marks	Explains one or two conflicts; e.g. tourists cause litter/ noise/ parking problems, adversely affecting residents; but tourists provide jobs/ money
Level 3 4 - 5 marks	Explains one or two conflicts in detail; e.g. tourists cause litter/ noise/ parking problems, adversely affecting residents; council has to invest in extra cleaning of seafront etc., which raises taxes for residents. But tourists provide jobs/ money, allowing more investment in facilities/ transport, which benefits local population.

NB candidates do not need to cover both negative and positive aspects. 5

Total 10 marks

5.(a)

Engineering technique	Hard	Soft
Sea wall	√	
Revetments	√	
Beach recharge		√
Groynes	√	

4 correct = 2 marks

3 correct = 1 mark

2 or less correct = 0 mark

2

(b) Shows that groynes prevent sand movement along the beach (1)/ thus retaining it (1) For second mark must have:- sand higher/further out to sea on one side (left) than the other (right) (1)

2

(c) tar covering is being undercut (1) removed in foreground (1) and beach is being exposed (1) vegetation shows it is breaking down (1)

2

(d)

Level 1	1-2 marks	Simple explanations - 'stops erosion', and only one advantage/disadvantage given.
Level 2	3-4 marks	Developed explanations - refers to absorption of energy / prevention of LSD; Includes both advantages + disadvantages.
Level 3	5-6 marks	Well developed explanations - refers to absorption of energy and prevention of LSD; Includes 2 or more advantages + disadvantages of each example.

If only one technique covered limit to half marks at each level
eg L1 - 1 mark, L2 - 2 marks, L3 - 3 marks

6

Total 12 marks

6. Reasons for choosing projects:

Project A: Open Beach recharge scheme:

Fills gaps in existing concrete block defences
Recharges beach with 210,000 cu m of sand / fine shingle
Uses material of similar size and colour to existing beach

More cost effective than building timber groynes
Saving of estimated £1.5million
Reduces need for hardwood timber - therefore environmentally friendly
Adds to amenity of beaches for tourist use

Project B: Coastal defence scheme:

Several strategies used instead of just one
(involves offshore breakwaters/rock armour/sea wall/timber groynes/beach recharge)
Long term advantages in dealing with coastal erosion
Enhances sea front environment
Protects sailing, fishing, commercial and tourist activities
Preserves inter-tidal mudflats and their associated wildlife
Sympathetic materials and methods used

Project C: Pier Regeneration scheme:

Improves Pier structure / life / safety
Enhances Pier appearance
Ensures the future of tourism in Southend (Pier is a major attraction)
Range of features - new sun deck, Lifeboat Station, animated illuminations
New sewerage disposal, fire and water systems
New Pier Entrance, shop, information centre
Refurbished shelters, kiosks, toilets, signs
New security CCTV and public address system

Project D: Cliffs Restoration scheme:

Integrates tourism and retailing by linking sea front and High Street
Landscaping, trees and greenery
Footpath access and new Grand Staircase
New bridge and Glass Lift
New street furniture, seating, fountain, pavilion
New restaurants/cafes, and viewing platforms with spectacular sea views
Possible solution to deal with recent (2003) cliff slumping

Reasons for rejecting projects:

Project A: Open Beach recharge scheme:

Annual maintenance / repeat of work required
Use of dredgers/pumps/excavators/bulldozers is expensive/noisy/environmentally unfriendly
Dredging sand from offshore adversely affects fishing/marine wildlife
Beach will still move, and erosion will still continue

Project B: Coastal defence scheme:

Conflicts arising from the wide range of strategies
e.g. offshore breakwaters may adversely affect fishing/marine wildlife
Some aspects involve high capital investment e.g. rock armour
Minimum or no activity in parts of scheme mean erosion will continue
Hard defences will be an eyesore and deter tourists

Project C: Pier Regeneration scheme:

Original character of Pier is modified/changed
Improvements may adversely affect other attractions as tourists focus on Pier
Increased numbers of tourists means new facilities may be inadequate
CCTV infringes privacy
Expense

Project D: Cliffs Restoration scheme:

High Street shops may not want problems associated with large numbers of tourists
-
noise, litter, shoplifting, vandalism etc.
If the recent (2003) cliff slumping is included, scheme may be prohibitively expensive

NB No marks for identification of actual projects chosen/ rejected.

<p>Level 1 1 - 3 marks</p>	<p>Only mentions a few simple reasons for selection of chosen projects /rejection of chosen projects. Information probably rather general/obvious or quoted directly from resources eg facts from figs 7 - 10; Eg beach recharge is cheap/provides tourist facility. Eg cliffs restoration scheme gives a link between high street and sea front; provides good views/pleasant environment.</p>
<p>Level 2 4 - 8 marks</p>	<p>Considers a number of reasons for selection of chosen projects/rejection of chosen projects, and includes at least one developed one; ie elaborate with detail or explanation, or make comparisons. May link back to resource material other than figs. 7 - 10. Eg coastal defence scheme involves all of breakwaters, rock armour, sea wall, timber groynes, beach recharge, and produces many benefits - from prevention of erosion to enhancing the environment to protecting economic activities such as fishing, sailing and other tourist activities. Makes several developed points to reach the top mark at this level. To reach the top mark at this level candidates must write in sentences with a clear and structured style; they must spell, punctuate and use the rules of grammar with considerable accuracy.</p>
<p>Level 3 9 - 12 marks</p>	<p>Considers a wide range of arguments for selection of chosen projects/rejection of chosen projects, and includes several developed ones; ie elaborates with detail or explanation, and makes comparisons. Probably links back to resource material other than figs. 7 -10. May acknowledge some problems associated with chosen schemes, and/or some benefits of rejected schemes. Eg coastal defence scheme involves all of breakwaters, rock armour, sea wall, timber groynes, beach recharge, although some of these are more cost effective than others; and produces many benefits - from prevention of erosion to enhancing the sea front environment whilst using environmentally friendly materials and methods; also protects economic activities such as fishing, sailing and other tourist activities, as well as local wildlife and inter-tidal mudflat environment; whereas the open beach recharge scheme has a more limited effect, and although environmentally friendly, it is not a long term solution. Makes a number of well developed points in a thoroughly argued, balanced answer to reach the top mark at this level. To reach the top mark at this level candidates must write in sentences which are clear, structured and coherent. They must spell, punctuate and use the rules of grammar with few errors and should use specialist terms appropriately and with precision.</p>

Total 12 marks

Total for Paper=60 marks