

GCSE



Edexcel GCSE

Geography B (1313)

Paper 1F

Summer 2005

advancing learning, changing lives

Mark Scheme (Results)

5(a)

Engineering technique	Hard	Soft
<u>Sea wall</u>	√	
Revetments	√	
Beach recharge		√
Groynes	√	

1 or 2 = 1 mark 3 or 4 = 2 marks

2

(b) Sand/further out to sea higher on one side (left) than the other (right) (1)
1

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

(d) i) absorbs wave energy/strength (1) reflects waves/sea (1)
ii) lasts a long time (1) is permanent (1) prevents erosion /flooding (1)
iii) expensive (1) eyesore (1) limited access to the beach (1)
encourages beach scouring (1)
3 x 1 3

(e) i) adding sand to the beach (1)
ii) cheap (1) blends in with environment/ is 'natural' (1) prevents
erosion /flooding (1)
iii) not permanent (1) needs repeating/ constant upgrading (1)
expensive over a long period of time (1)
3 x 1 3

Total 10 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 use

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.
 For each of a i), a ii), (b)

<p>Level 1 1 - 2 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 3 - 4 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 a few 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>

NB In a(i) QWC

12

Total 12 marks

Total for paper = 60 marks