Published

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Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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Section A

1 (a) (i) Passenger   **[1]**

       (ii) Quays   **[4]**
            Lighthouse
            Wide channel
            Sheltered harbour / not facing the open sea
            Car park
            Road access

(b) (i) 958 238   **[1]**

       (ii) 9   **[1]**

(c) Starts in Glenicmurrin Lough   **[5]**
     Flows S / SSW / SW
     Starts at 28m
     Gentle gradient / calculated
     Meanders
     Tributaries
     Braiding / island
     Under road / R336
     Turns north-west
     Enters sea in Clynagh Bay

(d) (i) B   **[1]**

       (ii) R336 is 13–16mm from left   **[3]**
            Cashla River is 49–52mm from left
            Third class road is 71–74mm from left

      (iii) The section line does not pass through it   **[1]**

(e) Most within 2km of coast   **[3]**
     Along roads / linear pattern
     Lower land
     Flatter land
     Dispersed / scattered / spread out
     Avoid lough shores and edge of coast

                                                              [Max. 20]

2 (a) (i) Population is decreasing   **[1]**
Death rate is higher than birth rate

(ii) Scattered   **[4]**
Large area in E / SE / bordering Myanmar and India
Areas close to Dhaka / centre of country
Islands in delta / Bay of Bengal
Islands in Brahmaputra
At Ganges and Brahmaputra confluence
Scattered areas in west
Scattered areas in north

(b) X is just north of Dhaka   **[3]**
Y is at extreme SE inland
Z is on NW of eastern projection

       [Max. 8]

3 (a) Point Michel is to the west / vent is to the east   **[2]**
2–2.8km / less than 3km apart

(b) High (risk)   **[4]**
30<u>cm</u>
Volcanic bomb
Volcanic mud flow

(c) (i) Delices   **[1]**

(ii) SE / S   **[1]**

       [Max. 8]

4 (a) Trees   **[4]**
Tall (trees)
Straight trunks
Branching only at top / canopy
Close together / dense
Broad leaf
Palms
Grassy areas / low growing plants
Bushes

(b) Sparse / spread out / few plants [4]
Low growing / smaller
Thorny / waxy
Fleshy / succulent / stems store water
Rapid life cycle
Deep rooted
Cactus / other named
Small leaves
Few leaves

[Max. 8]

5 (a) (i) Africa [1]

(ii) Thailand [1]

(iii) Correct for Brazil [2]
Correct for Paraguay

(b) (i) Water [2]
Air / dust

(ii) Process is more mechanised [2]
Machines need cooling
Machines need cleaning
Processing on a larger scale
Demand has increased / more is produced
Higher standard of processing required

[Max. 8]

6 (a) (i) Correct completion of graph [1]

(ii) 14(%) [1]

(iii) Cycling and golf [1]

(iv) Museums / galleries [1]

(b) (i) Boating [2]
Horse riding

(ii) No – these were not options on the Scottish survey [1]
No – not done by the people who answered the Scottish survey

(iii) Scotland data is percentage [1]
The graph scales are different
The units are different

Section B

7 (a) (i) Area served by a settlement or service
2 ✓ = 0 [1]

(ii) Bigger settlements:
Provide high order services / high order goods
Provide comparison goods / big name shops or example
Have many / larger variety of services / big choice / lots of shops / larger stores / more shops / more services
Provide specialised services / specialised goods
Provide specific functions e.g. administration, business, tourism, university, bank / people go to work there
Have easy access / good road or rail links / good transport links
There are few big settlements
People travel further / long way to buy the goods/infrastructure

[3]

(b) (i) Organise:
When / at what time to do the counts / how long to do each count / start at same time
Number of students per group / students get into groups / decide which students go to each counting point
How many times to do the counts per day / e.g. do it 3 times in the day
Whether to do the counts on more than one day / repeat on a different day
Make a recording sheet / recording table

Carry out:
Use tally method / 'clicker'
Use a watch or timer to time the counts / time when they start counting
Separate tasks in the group e.g. two students do each count / count people going in different directions / one student counts and one students records

Credit ideas in either section and do not ignore ideas if they are in the 'wrong' section.
No reserve mark for either section

If answer refers to a traffic count credit to 3 marks maximum for relevant points

[5]

(ii) Plot bars at 212 for location 3 at Spandau Arcaden and 90 for location 2 at Pichelsdorfer Strasse

Ignore shading   2 @ 1   [2]

(c) (i) Comparison goods are usually more expensive than convenience goods
2 ✓ = 0   [1]

(ii) Completion of pie graph for Pichelsdorfer Strasse
Convenience = 80% and comparison = 20%
1 mark for dividing line, 1 mark for shading   [2]

(iii) Yes/hypothesis is **true** - 1 mark reserve

More people **and** more shops selling comparison goods/shops mainly sell comparison goods at Spandau Arcaden
OR less people **and** less shops selling comparison goods/shops sell mainly convenience goods at Pichelsdorfer Strasse

1 mark for paired data from both centres
76% or 95 comparison shops and 240 pedestrians at Spandau Arcaden and 20% or 14 comparison shops and 75 pedestrians at Pichelsdorfer Strasse
Need all 4 figures to get credit (no tolerance on these figures)

Possible alternatives to these 4 figures are:
3 times more pedestrians **or** 165 more people at Spandau Arcaden
4 times more **or** 56% more comparison shops at Spandau Arcaden
                                                                       [3]

(d) (i) Answer may be too vague/will not provide a distance travelled/may just get the answer 'Berlin'

Question is too intrusive/too personal/too private/people will not give their address/people will not answer <u>because</u> e.g. afraid of burglary
                                                      2 @ 1   [2]

(ii) Shading 4% in Reinickendorf   [1]

(iii) Advantage:
Shows the pattern
Shows similar areas within a category /groups areas together
Can compare areas/compare percentages

Disadvantage:
May hide differences within a borough
Pattern which is displayed may be affected by selection of categories for shading
Not specific/exact values/not accurate numbers are shown

Easy to read/easy to see/shows where people come from/key intervals are too big

1 + 1   [2]

(iv) Hypothesis is **correct** – 1 mark reserve

OR People travel further to Spandau Arcaden than Pichelsdorfer Strasse
Spandau Arcaden has higher percentages coming from boroughs which are further away
Pichelsdorfer Strasse has higher percentages coming from boroughs which are nearby
Spandau Arcaden sphere of influence extends over all Berlin **but** Pichelsdorfer Strasse sphere of influence doesn't
OR Spandau Arcaden sphere of influence extends over all 12 boroughs **and**
Pichelsdorfer Strasse sphere of influence extends over 6 boroughs

Credit paired data to 1 mark maximum (not reserve) for boroughs with 0% shopping at Pichelsdorfer Strasse
e.g. Lichtenberg = 4% at Spandau Arcaden and 0% at Pichelsdorfer Strasse

[4]

(e) (i) Completion of key in the following order
- shops selling convenience goods
- shops selling comparison goods
- entertainment or leisure   [1]

(ii) Buildings shaded as:
Furniture store = comparison
Cinema = entertainment
Bar = entertainment
Photography = comparison
Chemist (drug store) = convenience
General store = convenience

Credit 1 or 2 correct = 1 mark
3 or 4 correct = 2 marks
5 or 6 correct = 3 marks

If key is completed incorrectly in (i) ignore the candidate's key and credit as above.   [3]

[Total 30 marks]

8 **(a)** **(i)** Wind sock/streamer/thread attached to pole/throw grass into the air/wet finger/flag/ribbon.
Use compass **to** see direction (wind is blowing)/NESW

[2]

(ii) Waves approach the beach
2 ✓ = 0 [1]

(iii) Prevailing wind causes waves to approach <u>at an angle</u> to the shore
Swash/waves <u>at an angle</u>/in same direction as prevailing wind
Backwash/waves back out at <u>90°</u>/straight back/perpendicular
Zig zag motion <u>moves material</u> along the beach/along the coast [4]

(b) **(i)** Plot 0.88 m on north side of groyne C [1]

(ii) Do more than one measurement/repeat the measurements at each groyne **and** calculate average
Do measurements at more groynes
Get another student to check measurement

2 @ 1   2

(iii) Hypothesis is **true** – 1 mark reserve (✓HA)
Beach OR sand is higher on south side/lower on north side
OR: Height of groyne above beach is greater on north side/less on south side

Credit paired data for 1 mark
2 statistics from groyne A/B/C or average of all three groynes to compare north and south sides.

Statistics must be in correct context – either height of groyne above beach or height of beach

Groyne	Height of groyne above beach (m)	
	South side	North side
A	0.45	1.03
B	0.64	1.15
C	0.48	0.88
Average	0.52	1.02

Groyne	Height of beach (m)	
	South side	North side
A	1.55	0.97
B	1.36	0.85
C	1.52	1.12
Average	1.48	0.98

[3]

(c) (i) Sandy Bay and Hartley Links [1]

(ii) Newbiggin, South Beach, Collywell Bay (any two) [1]

(iii) Different land uses along coast/in the area (not just examples)
Higher land value in some areas/land is worth more in resort than farmland
Holiday resort needs protecting/ beach encourages tourism
Shops/businesses need protecting
Houses/residential area need protecting
Main road needs protecting/road near coast
Credit these land uses to **2 marks maximum** – must have idea of 'need protecting' or 'have defences'

Caravan site can be moved/is not worth protecting/not valuable land
Farmland is not worth protecting/cattle can be moved/not valuable land
Credit these land uses to **1 mark maximum** – must have the idea of 'not worth protecting' or reason for not protecting them

[4]

(d) (i) If not aware students did not continue with questionnaire/questionnaire is about sea defences/wasting their time/meaningless to ask people who did not know

[1]

(ii) Age/age group
Gender
Date of survey/time of survey
Location of survey

2 @ 1   [2]

(e) (i) Completion of divided bar graph for unsightly coastal defences
No opinion = 18%, disagree = 20%, disagree strongly = 17%
2 marks for dividing lines at 63% and 83%, 1 mark for shading

2 marks maximum if sections in wrong order

[3]

(ii) Evidence such as:
Most or more than half or 88 people agree or say coastal defences are needed/1 person says not needed
Most or more than half or 69 people agree or say beaches have been improved by coastal defences/less than half or 26 people say not improved
45 people say defences are unsightly/37 people say not unsightly/more agree than disagree they are unsightly
Less than half or 15 people say spend money on other things/most or more than half or 71 people say spend money on defences

Credit **1 mark maximum** for evidence about each statement

[3]

(iii) Most/72 people want more defences built **but** few/13 are willing to pay
OR most people want defences but do not want to pay for them
Most/87 people want someone else/EU/government/tourists/local council to pay

[2]

[Total 30 marks]