

MARK SCHEME for the October/November 2013 series

0460 GEOGRAPHY

0460/43

Paper 4 (Alternative to Coursework), maximum raw mark 60

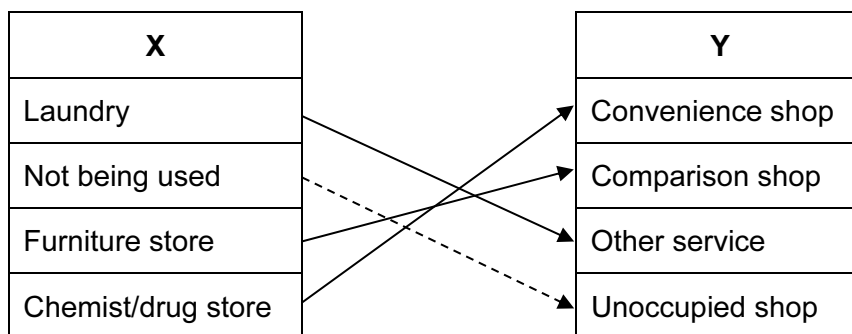
This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

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

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

1 (a) (i)



All 3 correct = 2 marks, 1 or 2 correct = 1 mark [2]

- (ii) Shop owners losing money/bankrupt/went out of business
 Competition from other shopping centres/too many shops selling same goods
 High rents
 Decrease in number of customers/not enough customers/lack of demand
 New shopping centre/still looking for new business
 Undergoing renovation 2 @ 1 [2]

- (iii) People travel further to buy comparison goods than convenience (low order) goods
 Comparison goods usually cost more than convenience goods
 If more than 2 answers deduct 1 mark for each incorrect answer 2 @ 1 [2]

- (b) (i) Work in pairs, not alone
 Don't block pavement/entrance to shops
 Be polite to interviewees
 Accept that people won't want to answer questions/too busy/in a hurry
 Ask a range of people/get a representative sample of age or gender/distribute at random
 Choose a time when there are plenty of people shopping
 Ask people leaving different shops 2 @ 1 [2]

- (ii) Hypothesis is **true/partially true** people buy different types of goods – 1 mark reserve
 CBD contains more comparison shops/local shopping centre contains more convenience shops. Allow 'only' with figures
 People go to CBD for comparison goods/to local shopping centre for convenience goods OR individual purchases. Allow 'only' with figures

People buy some goods in both centres e.g. food/convenience goods

Credit use of paired data which compares the types of shops (Table 1) or goods purchased (Table 2) to 2 marks max
 e.g. convenience goods – 15 bought in CBD, 27 bought in local shops
 47 comparison shops in CBD & 3 in local shopping centre

Hypothesis conclusion is incorrect/false no credit [4]

- (c) (i) Completion of histogram – less than 10 minutes (21 – Larco Ave and 25 – Enrique Palacios).
 Ignore shading 2 @ 1 [2]

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- (ii) Completion of pie chart – between 2 and 6 days = 50%, between 1 and 4 weeks = 22%
 1 mark for correct position of line, 1 mark for shading
 No mark for line if plotted wrong way round, but credit shading if correct [2]

- (iii) Overall hypothesis is **not true/partially true** – 1 mark reserve
 'Longer' hypothesis is partially true/not true
 'Frequency' hypothesis is not true
 If answer as two separate sections consider each hypothesis separately and credit 1 max for hypothesis. If both hypothesis conclusions agree with mark scheme go to 4 marks max. If one conclusion agrees with mark scheme but the other conclusion does not agree with mark scheme go to 2 marks max.

Most people do not take longer to get to Larco Ave/CBD/little difference

People go more frequently to Enrique Palacios/local shopping centre/
 people go less frequently to CBD

Credit use of paired % data which compares the two centres to
 1 mark maximum

Hypothesis conclusion is true/correct no credit [4]

- (d) (i) More/larger percentage walked to Enrique Palacios/local shopping
 Centre OR two correct statistics (28 and 8)
 More/larger percentage went by car to Larco Avenue/CBD OR two correct statistics
 (22 and 36)

More go by car than walk to CBD OR two stats (36 and 8)
 More walk than go by car to local shops (28 and 22) [2]

- (ii) Would not change the conclusion/conclusion would still be valid/hypothesis would still be
 false
 Helps to provide an explanation e.g. such as quicker to travel by car than walk/takes
 longer to walk than go by car/method of transport will affect time taken [2]

- (iii) Distance to travel/how long it will take to travel to shopping centre
 Likely duration of visit/how long shoppers stay
 What/how much they are buying/what they are buying/type of shop they visit
 Availability of regular bus service/public transport/taxi
 Availability/cost of car parking
 Weather conditions/weather forecast/more likely to travel by car if raining
 Level of car ownership/do shoppers own a car/can shoppers afford car/car sharing/can
 shopper afford petrol or bus fare
 Traffic congestion/amount of traffic
 How much time they have
 Risk of crime/safer to drive/no pavements to walk on 3 @ 1 [3]

- (e) Choropleth map/pictogram
 Divide city/draw map to show different districts/show where groups of people live
 Devise categories for choropleth shading/symbols
 Shade different districts according to key
 Include a key of categories [3]

[Total: 30]

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- 2 (a) Keep away from base of cliff/overhang
 Don't stand on edge of cliff
 Check tide times before setting off/watch for incoming tide/do fieldwork at low tide
 Avoid slippery rocks/sharp rocks
 Measure waves from safe position/don't go into sea
 Take mobile/cell phone/whistle
 Work in groups/pairs/not alone
 Tell teacher/adult where you are going
 Suitable clothes/protective clothes/footwear/sunblock 3 @ 1 [3]
- (b) (i) Place marker poles along rope/transect line
 Put poles at each break of slope
 Ensure they are vertical
 Same length of pole above surface at each point
 Use a clinometer to measure angle/read angle
 Hold clinometer next to top/at agreed height on marker pole/eye level
 Sight other marker pole at top/agreed height
 Repeat along transect/different places up beach
 Measure distance between marker poles [4]
- (ii) Cala Bassa (sandy) is wider or longer or larger/Cala Blanca (pebbles) is narrower or shorter or smaller
 Cala Bassa is 35 m and Cala Blanca is 17 m [1]
- (iii) Hypothesis is **true**/pebble beach (Cala Blanca) has steeper profile
 1 mark reserve
- Cala Blanca is narrower beach than Cala Bassa but both go to same height (elevation)/
 Blanca goes to greater height (elevation)
- Cala Blanca increases 5–5.5 m in 16.9–17 m and Cala Bassa increases 5 m in 34.5–35 m
- 1 mark for paired gradient measurements (Blanca 1 in 3, Bassa 1 in 7)
- 1 mark for paired angle measurements, these could be at individual points or average for the beach
- Hypothesis conclusion is false no credit [4]
- (c) (i) Put quadrat on ground/beach/throw quadrat
 Count the number of squares with different types of beach material
 Do more than one measurement and calculate average
 Do task in each section of beach profile [3]
- (ii) Classification as sand, shingle, pebbles or cobble is subjective/may be classified differently at different sites
 Some types of material look similar
 Estimating the percentages may lead to inaccuracy/inconsistency
 Measuring individual beach material would take a lot of time
 May be boulder/bare rock/seaweed/driftwood/litter in quadrat [1]

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- (iii) Completion of divided bar graph: shingle – 48, pebble – 40, cobble – 12
 2 marks for dividing lines
 1 mark for shading – must be in correct order [3]

- (iv) Hypothesis is **true** for **Cala Blanca** beach/larger beach material away from sea – 1 mark reserve

1 mark for data which refers to pebbles or cobbles or compares two profiles – need two percentages and locations
 e.g. cobble increases from A – B 0% to H – I 20% OR across whole beach

Hypothesis conclusion is false/partially true no credit

Hypothesis is **not true** for **Cala Bassa** beach – 1 mark reserve

1 mark for data which refers to sand or shingle or compares two profiles – need percentages and locations
 e.g. over 80% sand in all sections
 only sand/100% sand in A–B and E–F

Hypothesis conclusion is true/partially true no credit 2 + 2 [4]

- (v) Powerful swash throws all material up the beach/material thrown up beach during storms
 Less powerful backwash can only carry the smaller material down the beach
 Material from cliff at back of beach is larger [2]

- (d) (i) Possible hypothesis:
 Lighter beach material is moved more quickly by longshore drift
 Groynes on the beach interrupt the movement of longshore drift
 Rate of longshore drift is affected by wave height/wave frequency
 More longshore drift on a sandy beach/Cala Bassa than a pebble beach/Cala Blanca or vice versa
 Where more longshore drift takes place there is smaller material
 Longshore drift occurs in direction of prevailing wind

Must include 'longshore drift'
 Can be evidence that longshore drift has taken place [1]

- (ii) Description must link to chosen hypothesis. If chosen hypothesis is not credited in (b)(i) go to 2 marks max if linked to longshore drift.

Possible method first hypothesis:
 Paint 50 pebbles of varying sizes
 Group them in the wave swash/backwash zone
 Leave them for period of time
 Find the pebbles and measure distance from starting point
 Measure long axis of pebble

Credit other ways to measure longshore drift, if appropriate. [4]

[Total: 30]