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CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the May/June 2015 series

0460 GEOGRAPHY

0460/41 Paper 4 (Alternative to Coursework), maximum raw mark 60

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1 (a) Hyderabad less primary / India more primary
Hyderabad more secondary / India less secondary
Hyderabad more tertiary / India less tertiary
Hyderabad most / over half in tertiary **but** India most / over half in primary
Hyderabad over half in tertiary and secondary **but** India over half in primary
Hyderabad least in primary **but** India least in secondary

Need comparison
Credit 'only' for comparison and ignore stats 2 @ 1 [2]

(b) Systematic sampling
Ask every tenth person / regular intervals
OR
Random sampling
Use random numbers / ask next person they meet / ask anybody / any order / no specific order
OR
Stratified sampling
Ask appropriate age / gender balance/ in proportion to population / put into groups

1 mark for name, 1 mark for method
If name of method is wrong, give description mark for description of one method
If name and description don't match credit 1 mark [2]

(c) (i) To find out if they are residents (visitors) or migrants / to find if they live there
Students only want to ask people who have moved into area / targeting the right people
Some people they approach will always have lived there / not be a migrant
No need to continue if not a migrant / not waste people's / student's time / save time / to see if they are worth interviewing
Results will be unreliable / inaccurate / / not valid / wrong information
if local people are included
So that answers are relevant to hypothesis [2]

(ii) Map completion:
10 people from Europe to Jayabheri
Need correct width and correct shading for 1 mark [1]

(iii) Map completion:
5 people to Begumpet from Tamil Nadu
Need shaded circles [1]

(iv) Shows overall pattern of distribution / compares areas / shows where migrants come from / clear visual impact / easy OR simple OR quick **to** interpret / easy **to** read / easy **to** see results / easy **to** count
[1]

(v) Complete divided bar graph for Begumpet:
2–4 years =11, more than 4 years = 27
1 mark for dividing line at 23, 1 mark for shading both sections [2]

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(vi) Completion of graph – Find work in the city
Jayabheri = 4 (cross), Begumpet =21(square) 2 @ 1 [2]

(vii) Results **do** support hypothesis / hypothesis is **true** – 1 mark reserve

WHERE (for example)
Most to Jayabheri come from outside India, most to Begumpet come from within India
More to Jayabheri from USA
OR Indian migrants to Jayabheri only come from 1 state, Indian migrants to Begumpet come from 6 states

WHEN (for example)
Migrants to Jayabheri have lived there less time than migrants to Begumpet
More newcomers to Jayabheri

WHY (for example)
Migrants to Jayabheri were mostly transferred by their company **but** migrants to Begumpet mainly moved to find work / better home
More migrants to Jayabheri were transferred by their company

Credit 1 mark for each of where, when and why

Credit 1 mark max for stats (accept percentages)
Paired stats – accept tolerance of 1
e.g. 34 migrants to Jayabheri from USA and 5 to Begumpet
9 migrants have lived in Jayabheri for less than 6 months and 2 in Begumpet
43 migrants to Jayabheri were transferred by the company and 3 in Begumpet
43 migrants to Jayabheri were transferred by the company and 21 moved to Begumpet to find work

[5]

(d) (i) Completion of bars for Begumpet:
Benefit of affordable apartment = 30, problem of traffic congestion = 26 2 @ 1 [2]

(ii) 1. Easy access to the airport
2. A secure housing area for the family to live in
3. Traffic congestion caused by local industries 3 @ 1 [3]

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(iii) More support for **Jayabheri** – 1 mark reserve

Jayabheri has more benefits / fewer problems than Begumpet or vice versa
Jayabheri has more benefits than problems **but** Begumpet has more problems than benefits
Jayabherei has more **types** of benefits suggested or vice versa
Jayabheri has fewer **types** of problems suggested or vice versa

Credit paired data (locations and **total** numbers) to **1 mark max**
e.g. Jayabheri has 147 benefits and Begumpet has 77 benefits
Jayabheri has 6 types of benefits and Begumpet has 4 types of benefits
NO credit for reference to people in stats.

Hypothesis conclusion is more support for Begumpet = 0 (XHA)
If no decision ^HA and credit evidence [3]

(e) Talk to people who live in squatter settlement / interview them / ask question
Take photos (of different houses / services to show varying conditions)
Collect secondary data from internet / local government records / census
Make a blog to get peoples' opinions about housing / services
Make a podcast / video to show housing / services
Draw field sketches (of houses / services) and label them to show conditions
Do a housing quality survey / bi-polar survey
Draw a land use map of services / do a land use survey
Count / tally different types of services / record different services
Count / tally number of big houses / brick-built houses
Observe / look at / make notes on / write a description of / walk round **something** e.g. housing conditions

Credit development of ideas related to various methods [4]

[Total 30 marks]

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2 (a) Must relate to safety
1. See when the sea would be safe to take measurements in / not get cut off by the tide / less dangerous to go at low tide / dangerous at high tide
2. To take appropriate clothing or example / to see if it is is safe to work / not work if storm is forecast / take sunblock
3. Would be able to communicate / call if they got into difficulty / got separated / call in an emergency

3 @ 1 [3]

(b) (i) Wind sock / streamer / material held up or attached to pole / throw grass into the air / wet finger / kite /observe features blown by the wind
Use compass (to see direction wind is blowing)
Check every day for a month / check over period of time

[2]

(ii) Wave crests approaching the beach [1]

(iii) Wind drive waves / wave move in direction of wind
Pebbles / waves / swash come to the beach **at an angle** / oblique
Backwash / waves takes material **back down** the beach / at right angles / perpendicular
Process is repeated / moves in zig-zag along beach

[4]

(c) (i) Plot 11.2, 10.8 at site 5 2 @ 1 [2]

(ii) Hypothesis is **correct** – 1 mark reserve
Distance travelled is greater on unprotected coast / orange travels further on unprotected coast – or vice versa on protected coast
Distance travelled increases away from area of protection
Every distance on unprotected coast was greater than on protected coast
Least distance on unprotected coast was more than greatest distance on protected coast

Credit paired data (sites and distances) to **2 mark max**
Only credit **average** stats not individual tests
e.g. site 1 average distance moved is 7.3m and site 4 average distance is 9.8m
Average distance moved on protected coast (sites 1,2,3) is 7.6m and on unprotected coast (sites 4,5,6) is 11.0 or 11.1m or 11.06m
On protected coast distance varies from 7.3–8.2m and on unprotected coast from 9.8–12.4m
On protected coast distance is less than 9m and on unprotected coast distance is more than 9m / 7–9m on protected coast and 9–13m on unprotected coast
Only credit exact figures shown above

[4]

(iii) Wind direction:
If wind is from a different direction results could change / if wind blows from same direction results stay the same
Waves may be approaching the coast from a different direction OR
Waves move floats / oranges in a different direction

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Strength of wind:
If wind is stronger / weaker results could change / if wind is same strength results stay the same
Waves may be less / more powerful to move floats / oranges OR
Waves move floats / oranges further or less distance / it affects distance moved
NB: If wind is stronger oranges move further = 2 marks

2 + 2 [4]

(d) (i) Plot Groyne D on bar graph:
South side = 1.03m above beach
north side = 2.56m above beach 2@ 1 [2]

(ii) Beach is higher / more material on south side of groynes or vice versa on north side [1]

(iii) The groynes trap material which is moved by longshore drift / from south to north / material collects or builds up on south side [1]

(iv) Make more measurements / more than 3 measurements along each groyne
Repeat the investigation at different times of the year
Get other students to check accuracy of measurements 2 @ 1 [2]

(e) Lay tape measure on beach to create a transect / perpendicular to beach or up the beach
Poles put at break of slope / at equal / set / certain distances apart
Measure distance between poles
Poles must be vertical
Read angle from lower pole (nearer to sea) to upper pole (further from sea)
Student holds clinometer at top / at same height on ranging pole
Read / measure / record angle
Move poles up beach / along profile to next site

Need annotations on diagram not just labels

[4]

[Total 30 marks]

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