CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Ordinary Level

MARK SCHEME for the October/November 2012 series

2217 GEOGRAPHY

2217/22   Paper 2 (Investigation and Skills), maximum raw mark 90

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CAMBRIDGE
International Examinations

1 (a) (i) 8383 [1]

(ii) 827852 or 828852 [1]

(b) (i) Track / cut line / game trail
Staff quarters
Quarry / excavation
Power line [4]

(ii) NE - SW alignment through 7487
Correct at Easting 75 and wide tarred road junction [2]

(c) (i) South-east
Turns south [2]

(ii) 9.6 – 10(km) [1]

(d) High land
Above 1260 / 1300m
Steep(er) slopes
Mainly in S / SW of map
Smaller areas Boganga Hills / Sable Peak / Worm Wood Estates [3]

(e) (i) Bridge
Foot Suspension Bridge
Dam
Ford / through river [1]

(ii) Variable width
Meanders
Tributaries
Flows east
Rapid
Splits and rejoins / braided
1180 – 1140m
Ox bow lake
Gentle gradient [5]

[Max 20]

2 (a) (i) Correct position of line [1]

(ii) West has lower than average flow / below 100% / record low flow
East has higher than average flow / above 100% [2]

(iii) 6 [1]

(b) Depth - decreases (Reserve)
Speed of flow - decreases (Reserve)
Less / slower erosion
(More) deposition
Can only transport smaller material [4]

[Max 8]

3 (a) (i) G
A / E
A / E
F [4]

(ii) 2 [1]

(b) <u>Caravan</u> park
Bay / beach / sand
(Sheltered) harbour
(Small) boats
Beauty / scenery / view (qualified) [3]

[Max 8]

4 (a) (i) Paraguay / Argentina / Uruguay [1]

(ii) USA / Canada / Japan [1]

(b) End points of arrow and direction
Dashed line for arrow [2]

(c) 1950 – 1980 NE to high pop density / urban / SE / Rio / Sao Paulo area
1950 – 1980 NE to Brasilia
1950 – 1980 high pop density / urban / SE / Rio / Sao Paulo area to Brasilia
1950 – 1980 Minas Gerais to high pop density / urban / SE / Rio / Sao Paulo area
1980 – 2010 surroundings to Manaus
1980 – 2010 high pop density / urban / SE / Rio / Sao Paulo area to Amazonas
1980 – 2010 high pop density / urban / SE / Rio / Sao Paulo area to Centre West region
1980 – 2010 high pop density / urban / SE / Rio / Sao Paulo area to Parana

Reserve 1 for each time period [4]

[Max 8]

5 (a) Bar at correct height for 2008
Bar at correct height for 2009 [2]

(b) (i) 27 – 28.5 [1]

(ii) 2.5 – 3.5 [1]

(c) All decreased...
...except Italy stayed the same
Rank order stays the same [2]

(d) Correct division of chart
Correct key [2]

[Max 8]

6 (a) Correct triangle
Accuracy within triangle [2]

(b) Thailand
South Africa [2]

(c) Primary decreases
Secondary increases
.. later decreases
Tertiary increases [4]

[Max 8]

7 (a) Each horizontal pairing = 1 mark. Use ticks/crosses here.

	High pressure	**Low pressure**
Air is	sinking	rising
Weather conditions change	slowly	rapidly
Expected weather is	dry	wet

[3 × 1=3]

(b) (i) Examples: look for two points
Index pointer shows previous recorded value / align both pointers(1)
Arrow / pointer /needle moves on dial (1)
Difference between index pointer and arrow/ pointer needle / shows change (1)
Read value/pressure on dial (1) [1 + 1 =2]

(ii) 1018 (mb) [1]

(iii) Millibars [1]

(iv) <u>Example</u>
To get comparable reading / consistent / fair / reliable
<u>NOT accurate</u> [1]

(v) <u>Examples: look for two points</u>
Cones / cups revolve / spin / turn / rotate /moves (1)
Read speed off meter (1)
Shows reading as km per hour (1)

[1 + 1 = 2]

(c) (i) Plot on scatter graph 13th (<u>1016mb & 12 km per hr</u>) & 19th (<u>1017mb & 7 km per hr</u>) for Manama. <u>1 mark per plot</u>. [1 + 1 = 2]

(ii) Hypothesis is NOT TRUE / as AP increases wind speed does not decrease –

<u>Accept</u> As AP increases, wind speed does slightly / positive relationship (1)
<u>OR</u> No relationship between AP and wind speed (1)

<u>Data evidence:</u>
e.g. at 1019mb speed is 13 km/hr but at 1010mb speed is 6 km/hour (1 max)
e.g. at same AP wind speeds have large extremes (1) at 1016mb there are 4 different speeds /range 3-12 km/hour (1 max) (<u>ALSO ok if use 1012mb/1019 lines</u>)
e,g. at same wind speed AP has large extremes (1) at 4km/hr AP ranges from 1012mb to 1019mb (1 max) (<u>ALSO ok if use 7 km/hr line</u>) [1HA + 3 = 4]

(d) (i) <u>Primary data</u>: using a rain gauge & measuring the speed of river flow (1)
<u>Secondary data</u>: researching on the internet & reading a newspaper report (1)

<u>Mark as 1 correct = 0, 2 or 3 correct = 1, all 4 correct = 2.</u>

[1 + 1 = 2]

(ii) Plot 2 bars for 18th in Manama: July= 999 mb, Jan = 1016 mb [1 + 1 = 2]

(iii) Hypothesis is TRUE

AP has larger differences in Manama / lower differences in Jakarta (1)

<u>Credit data up to 3 max with reserve of 2 marks</u>
In Manama AP varies between 16-23 mb between Jan & July (1) or raw figures (1)
In Jakarta AP varies between 1-3 mb between Jan & July (1) or raw figures (1)
<u>Can compare individual data on any dates</u>
e.g. on 11th January 1018mb at Manama but 11th July 997mb (1)
on 11th January 1012mb at Jakarta and on 11th July 1011mb (1) [1 HA + 3 = 4]

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(e) <u>Two examples required. Looking for weaknesses (Can be improvements)</u>
May not have carried out pilot study (1)
Data only collected for 10 day periods (1)
These days may not be typical conditions (1)
Data collection only done twice a year (1)
How accurate were readings /student errors (1)
Unable to check the results from other school / confidence in other school (1)
Time zone/communication/language difficulties/issues (1)
Should have taken more than just 1 reading (1)   [1 + 1 = 2]

(f) <u>Ideas such as:</u>
Credit for 1 max an acceptable hypothesis regarding temperature (1)

Use thermometer (1)
Where thermometer is located e.g. in the shade / Stevenson screen (1)
Details of readings taken e.g. maximum, minimum temperatures (1)
When readings are made (1)
How readings are recorded (1)   [1 + 1 + 1 + 1 = 4]

8 (a) (i) <u>Only two answers possible; do NOT credit examples of type or initials</u>.

1. Hardware.
2. Professional service.   [1 + 1 = 2]

(ii) <u>Examples</u>
To simplify the map / easier to read / understand / analyse/ can compare (1)
To group <u>similar</u> shops / services together (1)
To show a pattern of shops / services on the map (1)
Easier to carry out fieldwork (1)   [1 + 1 = 2]

(iii) <u>Examples</u>
Around/near the market area (1)
In the market (1)
South and east of market (1)
Away from or west of the main road (1)
NW of cemetery (1)   [1]

(iv) <u>Examples</u>
Along the main road (1)
To the east of the CBD (1)
On the edge of the central area/CBD / out of town (1)
Close to the bus station (1)
Close to petrol station (1)
To east of market (1)   [1]

(v) <u>Examples</u>
W & G located where customers can walk to these shops frequently /daily (1)
Supermarkets are located for travelling shoppers / access for people in vehicles (1)
Supermarket customers may use vehicles so need space for parking / for access for lorries delivering goods (1)
Small shops/stores can afford rent in centre (1)
Supermarkets need more space / where land is cheaper (1)
Supermarkets away from centre as built later / no space in centre (1)   [1 + 1 = 2]

(vi) Evidence does SUPPORT Hypothesis 1 / it is TRUE / commercial centre is near to market –

Shops surround market area / on three roads (1)
High density of small shops in centre (1)
Different types of shops and services in centre (1)
Offices/professional services in centre (1)
Government offices in centre (1)
Bus station in centre (1)   [1HA + 2 = 3]

(b) (i) Examples
Results will not be affected / distorted by people going to work / children going to school /rush hour traffic (1)
10 minutes is long enough to get valid results / not too long to get bored (1)
Working days will give typical pattern of movement in week rather than weekend (1)
Repeating the survey on two days to get an average / check for reliability of results (1)
                                                                          [1 + 1 + 1 = 3]

(ii) Completion of survey sheet – tally and total for bicycles & mopeds
= 18
1 mark for total of 18
                                                                          [1 + 1 = 2]

(c) (i) Completion of 100 pedestrian isoline which must go:
Inside 97 and between 110 and 93 on right (1)
Outside 102 and between 110 and 84 on left (1)
                                                                          [1 + 1 = 2]

(ii) Shading of area over 100 vehicles.   [1]

(iii) Examples
Would separate out two groups of vehicles (1)
Would show when people went to different areas on different transport (1)
Would show where 2/3 wheeled vehicles went compared to 4-wheel vehicles or similar
(1)   [1 + 1 = 2]

(iv) Hypothesis is TRUE / pedestrian flows are highest in commercial centre / vehicle flows are lowest – 1 mark

Pedestrian flows are over 150 in commercial centre (1)
Vehicle flows are between 25 – 50 in commercial centre (1)   [1HA + 2 = 3]

(v) NOTE 1 reserve mark for Pedestrian flow and 1 reserve mark for Vehicle flow

Examples:

Pedestrian flows are highest in area of market because:

People walk to buy food/ household/convenience goods/go to shop (1)
People come from nearby housing areas (1)
Many people may not own vehicles / don't need vehicles (1)
Likely to be more work in centre (1)
Quicker to get round shops than with vehicle (1)

Vehicle flows are highest along main road because:

People travelling between other settlements/ through traffic /commuting (1)
People go to supermarkets to buy in bulk (1)

Vehicles lowest in centre because of narrow roads/lack of parking space (1)

[1R + 1R + 1 = 3]

(d) Question is about this fieldwork investigation being done better in this town.

Ideas include:
Surveys done more frequently during the day (1)
Surveys done on >two working days (1)
More survey points to give greater coverage (1)
Comparison with survey done on a non-work day such as weekend (1)
At least three people doing survey so more checking (1)
Ensure each group has watch / stopwatch (1)
Use of counters / 'clickers' (1)
Carry out pilot study (1)   [1 + 1 + 1 = 3]