CAMBRIDGE
INTERNATIONAL EXAMINATIONS

CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the November 2003 question papers

	0460 GEOGRAPHY
0460/01	Paper 1 (Core), maximum mark 75
0460/02	Paper 2 (Extended), maximum mark 75
0460/03	Paper 3, maximum mark 60
0460/05	Paper 5 (Alternative to Coursework), maximum mark 60

These mark schemes are published as an aid to teachers and students, to indicate the requirements of the examination. They show the basis on which Examiners were initially instructed to award marks. They do not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

- CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the November 2003 question papers for most IGCSE and GCE Advanced Level syllabuses.

UNIVERSITY of CAMBRIDGE
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Grade thresholds taken for Syllabus 0460 (Geography) in the November 2003 examination

	maximum mark available	minimum mark required for grade:			
		A	C	E	F
Component 1	75		43	35	27
Component 2	75	45	30	24	
Component 3	60	43	37	23	20
Component 5	60	40	31	23	19

The threshold (minimum mark) for B is set halfway between those for Grades A and C.

The threshold (minimum mark) for D is set halfway between those for Grades C and E.

The threshold (minimum mark) for G is set as many marks below the F threshold as the E threshold is above it.

Grade A* does not exist at the level of an individual component.

CAMBRIDGE
INTERNATIONAL EXAMINATIONS

November 2003

INTERNATIONAL GCSE

MARK SCHEME
MAXIMUM MARK: 75
SYLLABUS/COMPONENT: 0460/01 GEOGRAPHY Core

UNIVERSITY of CAMBRIDGE
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1 (a) (i) **1** high and fluctuating,
2 falling,
3 low,
4 low and fluctuating.

4 at 1 mark [4]

(ii) Stage 2.

[1]

(iii) birth rate still high,
death rate falling steeply/low death rate,
biggest gap between birth rate and death rate.

2 at 1 mark [2]

(iv) where death rate rises above birth rate in Stage 1. [1]

(v) death rate higher than birth rate. [1]

(b) (i) tradition,
religious pressures,
zeal for son - inheritance,
low literacy rate/awareness/lack of education,
difficulties of instituting family planning policies,
size of country/dispersed nature of population,
expense of introducing family planning policies,
lack of/unpopularity of abortion/sterilisation,
pressure in rural areas - need children to work on farms,
large number of children to look after parents in old age,
high infant mortality - hence large families – falling death rate,
polygamy.

4 at 1 mark [4]

(ii) prevent overpopulation/demand on resources,
avoid increase in dependency ratio,
lowering of living standards,
poverty,
shortages - water/land,
high levels of future unemployment,
famine/food shortages,
malnutrition,
decline of infrastructure - e.g. roads,
inadequate housing/squatters,
exhaustion of soil,
inadequate educational facilities,
lack of health facilities,
possible civil unrest.

4 at 1 mark [4]

(iii) better medical facilities,
medicines,
more doctors/hospitals,
more food,
improved diets less malnutrition,
housing improvements,
improved water supplies/sanitation,
development of industries,
improved standard of living,
education on hygiene/diet.

up to 2 marks

4 at 1 mark [4]

(iv) underpopulation/underuse of resources,
ageing population,
increase in dependency ratio,
increased spending on older dependents, max 2 marks
stagnant/declining population growth,
labour shortages, max 2 marks,
lack of defence forces.

4 at 1 mark [4]

2 (a) (i) population in towns/cities.

[1]

(ii) **A** 191,
B 977.

[2]

(iii) Latin America.

[1]

(iv) much higher in the developed regions – 73.3 % +
developing regions lower - 24-37%.

2 at 1 mark [2]

(v) Australia - New Zealand.

[1]

(b) (i) pull-push factors - no repetition/obverse, max 4 marks
high birth rates,
rural-urban migration.

5 at 1 mark [5]

(ii) no planning,
poor building materials - metal sheeting etc.,
lack of open spaces,
no roads,
overcrowding/high density of settlement,
open drains/sewers,
run into river,
waste/garbage/pollution in river,
flat roof,
single storey,
small building/houses,
poles for electricity.

5 at 1 mark [5]

(iii) **A** buildings do not regulate temperatures,
may not be waterproof,
lacking basic facilities - electricity, piped water, sanitation,
overcrowding/high density of settlement,
large numbers per property,
health hazards - disease,
untreated sewage,
lack of social/medical facilities,
unemployment,
high infant mortality,
low life expectation,
inability of squatters to afford better housing,
limited availability of alternative housing,
unemployment/limited/low incomes of squatter dwellers,
social problems – maximum, 1 mark
traffic congestion (credit once in **A** or **B**).

5 at 1 mark [5]

B loss of land for other uses,
pollution,
water - waste/garbage in river,
air,
visual,
social problems (credit once in **A** or **B**),
fire hazard.

3 at 1 mark [3]

3 (a) (i) named parts/areas within
Circum-Pacific zone,
S. Europe - Middle East - S.E. Asia.

2 at 1 mark [2]

(ii) yes. [1]

(iii) plate boundaries,
unstable areas. [1]

(iv) mountains formed by folding of rocks,
areas where most of earth's earthquakes experienced,
volcanoes likely to erupt.

Reserve 1 mark for each

3 at 1 mark [3]

(v) great strength epicentre 7-8/magnitude,
up to 150 km. 6-7,
affected wide area,
including a number of large cities.

2 at 1 mark [2]

(vi) strength,
size of area affected,
population density,
location - rural/urban area,
time of day,
type of buildings,
depth of focus,
emergency services.

2 at 1 mark [2]

(b) (i) **E** higher,
steeper cone,
F covers wider area.

2 at 1 mark [2]

(ii) **F** basic - more fluid/low in silica,
flows quickly,
accept obverse -
E acid - viscous/more silica,
moves slowly/solidifies quickly.

2 at 1 mark [2]

(iii) pressure,
magma reaches surface through a fissure/weakness.

2 at 1 mark [2]

(c) fold mountains -
communications difficulties/isolation,
steep slopes difficult for agriculture,
housing,
low temperatures,
high rainfall,
thin soils,
avalanches.

4 at 1 mark [4]

active volcanoes –
loss of life,
injuries/toxic fumes,
destruction of property,
loss roads/interference with communications,
loss of agricultural land/crops/forests,
evacuation.

4 at 1 mark [4]

4 (a) (i) **A** barograph/aneroid barometer/barometer,
B anemometer,
C wind/weather vane/weather cock.

3 at 1 mark [3]

(ii) metal cylinder (vacuum),
spring contracts/expands - pressure changes, max 1 mark
conveyed to pointer,
rotating drum with paper/barograph,
trace shown.

3 at 1 mark [3]

(iii) **B** - wind speed,
C - wind direction.

2 at 1 mark [2]

(iv) high/on roof/pole,
away from buildings/trees/open area,
to record free flow of wind.

2 at 1 mark [2]

(b) **(i)** west coast of continents and continental location,
around the two Tropics.

2 at 1 mark [2]

(ii) high temperatures,
large annual range,
large daily range/high day – low night.

2 at 1 mark [2]

low rainfall,
infrequent erratic,
unreliable,
heavy/thunderstorms/concentrated.

2 at 1 mark [2]

(iii) many plants dormant for years,
quick growing plants,
shallow roots - short lived rains,
deep roots - underground water,
moisture stored in bulbs,
thick/hairy/waxy leaves/spiky,
thick bark,
storage in trunks.

2 at 1 mark [2]

(c) deflation hollow/sand blown away,
reaches water bearing rock/aquifer,
sloping/dipping (strata),
receives water from rainfall outside the desert,
water at surface in oasis.

3 at 1 mark [3]

(d) **(i)** exfoliation/alternate expansion and contraction/onion weathering.

[1]

(ii) high temperatures in the day/over 40°C,
night falls below 10° C/cools,
rock poor conductor of heat,
rock surface expands during day,
contracts at night,
stress - outer part of rock cracks/joints,
outer layers peel away,
shattered rock fragments fall to floor,
main rock rounded,
process accelerated with slight amount of rain.

2 at 1 mark [2]

(iii) Results.

[1]

5 (a) (i) farmer produces for himself and family,
food crops,
little or no sales.

2 at 1 mark [2]

(ii) ploughing - turning soil, making it ready for sowing crops,
planting - sowing crops,
harvesting - gathering/picking crops/uprooting.

3 at 1 mark [3]

(iii) cost of newer methods,
tradition/culture,
lack of education/understanding/knowledge of newer methods,
only small plots.

2 at 1 mark [2]

(iv) farmer does not have to time activities with rainy season,
given supply of water/reliable,
2 crops/double cropping,
extends growing season.

2 at 1 mark [2]

(v) HYVs/better yielding seeds, up to 2 marks
land reform,
fertilisers,
pesticides,
fungicides, } max 1 mark
modern machinery - e.g. combine harvesters/rice harvesters,
education/training/awareness of new methods,
investment,
terracing,
co-operatives.

4 at 1 mark [4]

(b) (i) **A** for 10 years.

B poverty,
unequal distribution of wealth,
population explosion in developing world.

C there is no food shortage,
population and food supply have increased,
problem - population growth greatest in developing countries which does not feed all its people,
food shortages likely to worsen in the developing world.
For each of A, B and C

Reserve 1 + 1 + 1 mark
5 at 1 mark [5]

(ii) overpopulation,
lack of investment/poverty,
outdated methods of production/lack of fertilizer,
war/political unrest,
natural disasters,
credit examples, e.g. drought - Sahel etc. } max 2 marks

4 at 1 mark [4]

(iii) efficient methods,
large investment,
subsidies,
EU/CAP,
large-scale production,
extensive use of fertilisers,
pesticides,
machinery,
low increase of population,
educated labour force/training/modern methods,
favourable natural inputs,
surplus for export.

3 at 1 mark [3]

6 (a) (i) 62-63%.

[1]

(ii) mechanised agriculture,
primary products imported more cheaply.

[1]

(iii) greater percentage in primary,
less in manufacturing,
less in service sector.

3 at 1 mark [3]

(iv) developed countries –
agriculture more mechanised,
earlier manufacturing – C19-C20,
developing countries going through industrial development,
greater demand for services,
greater amount of skill/educated/trained labour force,
more capital for investments.

3 at 1 mark [3]

(v) provide a service, - reserve 1 mark
teachers,
lawyers,
transport workers etc.

3 at 1 mark [3]

(b) (i) area.

[1]

(ii) labour –
skilled labour,
well educated/universities/technical colleges,
expert management,
different skill levels - subcontracting/division of labour.

transport -
high speed transport - components and products,
proximity to/links to airport,
major road links.

research and development -
research and development/universities,
government support.

siting factors - science parks - planning,
away from congested areas,
possibly low cost land areas.

3 factors 3 at 1 mark [3]

(iii) not tied to location factors, e.g. raw materials,
free location. [1]

(c) (i) greenhouse gases especially CO_2,
traps sun's rays,
burning fossil fuels,
industrial pollution,
increased use of motor vehicles,
burning forests/deforestation,
release from some agricultural activities of greenhouse gases –
wet rice/cattle ranching - methane.
3 at 1 mark [3]

(ii) northern parts of
Europe,
Asia-Northern/Siberia,
N. America/Canada,
Arctic regions.
2 marks [2]

(iii) rise of sea level with increase of temperature,
melting of ice sheets,
loss of low lying areas/river deltas,
many cities - low lying areas - flooding,
flooding of islands,
flooding of coastal installations - storage tanks, piers,
wildlife in salt marshes/coral reefs destroyed,
salination of fresh water supplies,
changes in global climates,
effects on ecosystems,
extinction of some species of animals/plants,
loss in biodiversity,
natural forest fires,
droughts,
crop yields could decline,
present drier areas may experience more rain,
desertification.
4 at 1 mark [4]

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INTERNATIONAL GCSE

MARK SCHEME
MAXIMUM MARK: 75
SYLLABUS/COMPONENT: 0460/02 GEOGRAPHY Extended

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1 (a) (i) **birth rate curve –**
in **1**, high constant,
remains high in **2**,
steep fall in **3**,
low fluctuating in **4**.

[2]

death rate curve –
high fluctuating in **1**,
steep decline in **2**,
steady fall in **3** and **4**.

[2]

(ii) **birth rate -**
birth control measures.

2 at 1 mark [2]

death rate –
improvements in health/medical,
food,
living conditions,
greater affluence.

2 at 1 mark [2]

(iii) slower increase/rate of growth/remains steady,
steeply falling/declining birth rate,
birth control measures/family planning,
death rate remains low. 3 at 1 mark [3]

(b) (i) tradition,
religious pressures,
desire for son - inheritance,
ignorance of large sectors of the population on need to reduce B.R./low literacy rate/awareness/lack of education,
difficulties of instituting family planning policies,
size of country/dispersed nature of population,
expense of introducing family planning policies,
lack of/unpopularity of abortion/sterilisation,
pressure in rural areas - need children to work on farms,
large number of children to look after parents in old age,
high infant mortality - hence large families – falling death rate,
polygamy.

6 at 1 mark [6]

(ii) underpopulation/underuse of resources,
ageing population,
increase in dependency ratio,
increased spending on older dependents,
stagnant/declining population growth,
labour shortages, max 2 marks
armed forces shortages.

5 at 1 mark [5]

(iii) may not experience decline in birth rate,
may not industrialise,
with lower birth rate and death rate.

3 at 1 mark [3]

2 (a) relatively slow rate of growth - developed regions,
rapid increase - developing regions,
greatest increase - Asia,
percentage living in urban areas increased throughout the world,
continued to grow - developed regions,
highest percentage - Australia and New Zealand,
great increase in percentage growth in developing regions,
especially Latin America.

max 3 marks for calculated stats

6 at 1 mark [6]

(b) (i) no planning,
poor building materials - metal sheeting etc.,
lack of open spaces,
no roads,
overcrowding/high density of settlement,
open drains/sewers,
run into river,
waste/garbage/pollution in river,
flatroof,
small building/houses,
poles for electricity,
single storey.

6 at 1 mark [6]

(ii) rapid urbanisation/rural-urban migration,
pull-push factors - no repetition/obverse, max 5 marks
high birth rates,
lack of cash/poverty,
better to squat than to sleep anywhere/rough.

6 at 1 mark [6]

(iii) buildings do not regulate temperatures,
may not be waterproof,
lacking basic facilities - electricity, piped water, sanitation,
overcrowding/high density of settlement,
large numbers per property,
health hazards - disease,
untreated sewage,
lack of social/medical facilities,
unemployment,
high infant mortality,
low life expectation,
inability of squatters to afford better housing,
limited availability of alternative housing,
limited/low incomes of squatter dwellers,
social problems - maximum 1 mark
pollution - maximum 2 marks
water - waste/garbage in river,

visual,
traffic congestion,
fire hazard.

7 at 1 mark [7]

3 (a) (i) plate boundaries,
Circum-Pacific zone,
S. Europe - Middle East - S. E. Asia,
Mid Atlantic,
E. African rift valley.
3 of these/parts of these areas.

3 at 1 mark [3]

(ii) plate boundaries if not given in **(a) (i)**,
destructive plate boundaries/subduction,
constructive plate boundaries/sea floor spreading,
earth movements associated with rift valley formation,
instability/release of pressure,
faulting,
sudden movements,
conservative boundaries.

3 at 1 mark [3]

(b) (i) destructive plate boundary/converging plates,
pressure/compressional forces/subduction,
folding of layers of sediment,
anticlines/synclines,
symmetrical/asymmetrical,
overfolds,
recumbent folds,
overthrusts/nappes,
subduction,
sediment accumulation.

} Max 1 mark

5 at 1 mark [5]

(ii) great strength epicentre 7-8 magnitude,
up to 150 km. 6-7 magnitude,
large number of fatalities,
affected wide area,
including a number of large cities,
others - less strong,
affect a more restricted area,
area with a low population density,
timing of earthquake,
depth of focus.

4 at 1 mark [4]

(iii) basic - more fluid/low in silica, acid- viscous/more silica,
gentle slopes, steeper slopes,
flows quickly, moves slowly/solidifies quickly.

3 at 1 mark [3]

(iv) fertile/infertile soils -
relation to basic/acidic lavas,
mineral deposits, e.g. sulphur,
geothermal energy, Reserve 2 for opportunities
tourist potential, Reserve 2 for problems
volcanic activity,
evacuation,
loss of life,
loss of/damage to property, Max 1 mark for examples
destruction of agricultural land,
loss of communications.

7 at 1 mark [7]

4 (a) latitude,
pressure systems and associated winds,
distance from sea/continentality,
altitude,
ocean currents,
aspect.

4 at 1 mark [4]

(b) (i) area of infrequent, low rainfall,
hot/tropical location.

2 at 1 mark [2]

(ii) **two** of -
latitude - 15° - 30° latitude,
around the two Tropics,
pressure - high pressure/descending air,
offshore trade winds,
distance from sea – west coast of continents and continental location,
away from maritime influence of onshore winds,
ocean currents -
cold currents offshore,
winds blowing over cold currents.

2 at 2 marks [4]

(c) (i) blown sand/particles,
attacks rocks,
especially effective just above ground level.

2 at 1 mark [2]

wind removes loose particles - sand and dust,
blown away.

2 at 1 mark [2]

(ii) **A** weaker layers in rock outcrop,
eroded - abrasion,
most effective just above ground level - undercutting,
resistant rocks eroded more slowly - irregular shapes,
water erosion may play a more dominant role than wind erosion.

3 at 1 mark [3]

B deflation - sand blown away,
hollow created,
deflation reaches downwards to water bearing rocks –
permeable layer/aquifer.

3 at 1 mark [3]

(iii) exfoliation/alternate expansion and contraction/onion weathering,
high temperatures in the day/over 40°C,
night falls below 10° C/cools,
rock poor conductor of heat,
rock surface expands during day,
contracts at night,
stress - outer part of rock cracks/joints,
outer layers peel away,
shattered rock fragments fall to floor/scree,
main rock rounded,
process accelerated with slight amount of rain.
Reserve for results 1 mark
5 at 1 mark [5]

5 (a) (i) ploughing
wooden plough, buffaloes/oxen/draught animals,
planting Reserve 1 mark for each method
sowing - broadcast,
possibly into a nursery field,
some direct seeding in main fields,
transplanting plants by hand.
harvesting
picking/cutting/uprooting,
sickle and other hand tools.
6 at 1 mark [6]

(ii) cost of newer methods,
tradition/culture,
lack of education/understanding/knowledge of newer methods,
small plots.
3 at 1 mark [3]

(iii) farmer does not have to time activities with rainy season,
given supply of water/reliable,
2 crops/double cropping,
extends growing season.
3 at 1 mark [3]

(b) Green Revolution,
HYVs/better yielding seeds,
land reform,
fertilisers,
pesticides,
fungicides, } Max 1 mark
modern machinery - e.g. combine harvesters/rice harvesters,
education/training/awareness of new methods,
investment,
terracing,
co-operative.
6 at 1 mark [6]

(c) (i) there is no food shortage,
population and food supply have increased,
food supplies have gone up faster and will continue to do so for 10 years,
problem - population growth greatest in developing countries which does not feed all its people,
food shortages likely to worsen in the developing world,
main problem – poverty and unequal distribution of wealth,
calorie intake increased.

3 at 1 mark [3]

(ii) overpopulation,
lack of investment/poverty,
outdated methods of production/lack of fertilizer etc,
war,
natural disasters,
credit examples, e.g. drought - Sahel etc. } Max 2 marks

4 at 1 mark [4]

6 (a) skilled labour,
well educated/universities/technical colleges,
expert management,
different skill levels - subcontracting/division of labour.
high speed transport - components and products,
proximity to/links to airport
major road links.

Reserve 1 mark for named location
Max 4 marks for any one factor

research and development/universities
government support.

science parks - planning,
away from congested areas,
possibly low cost land areas.

centre/centres.
allow development of factors listed, e.g. if specific illustrations given.

6 at 1 mark [6]

(b) (i) increase in global temperatures,
average increase 4°C,
some areas over 8°C increase,
greenhouse gases especially CO_2,
traps sun's rays,
burning fossil fuels,
industrial pollution,
increased use of motor vehicles,
burning forests/deforestation,
release from some agricultural activities of greenhouse gases –
wet rice/cattle ranching - methane.

6 at 1 mark [6]

(ii) rise in world temperatures,
rise of sea level,
melting of ice sheets,
loss of low lying areas,
river deltas,
many cities - low lying areas - flooding,
flooding of islands,
flooding of coastal installations - storage tanks, piers,
wildlife in salt marshes/coral reefs destroyed,
salination of fresh water supplies,
changes in global climates,
effects on ecosystems,
extinction of some species of animals/plants,
loss in biodiversity,
natural forest fires,
droughts,
crop yields could decline,
present direr areas may experience more rain,
desertification.

6 at 1 mark [6]

(iii) **A** agreements between nations as to cutting down on CO_2 etc.,
pollution controls, max 2 marks,
control on forest burning,
encouragement of public transport,
alternative sources of energy,
education/awareness.

3 at 1 mark [3]

B cost,
lack of co-operation between nations, up to 2 marks
reluctance to recognise the problem,
difficult to reduce industrial production,
increase in industrialisation - developing countries,
difficult to cut down on traffic,
reliance on fossil fuels,
alternative fuels not really developed,
vested interests,
lack of education/awareness,
population increase.

4 at 1 mark [4]

CAMBRIDGE
INTERNATIONAL EXAMINATIONS

November 2003

INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK: 60

SYLLABUS/COMPONENT: 0460/03

GEOGRAPHY
Paper 3

UNIVERSITY of CAMBRIDGE
Local Examinations Syndicate

1 (a) (i) golf course,
club,
sport's field,
rifle range.

2 at 1 mark [2]

(ii) dam,
reservoir.

2 at 1 mark [2]

(b) (i) wide tarred road.

(ii) south-west/south-south-west.

(iii) 6500-6800.

3 at 1 mark [3]

(c) River – Mwenje,
Bridge – Footbridge,
Railway – cutting.

3 at 1 mark [3]

(d) flat/gentle slope (lowland = 0),
bridge point,
road junction (not just 'road'),
railway,
water supply/wet point,
centre cultivated area/estates (plantation/orchard = 0).

4 at 1 mark [4]

(e) (i) to N/NE,
meander/winding,
island/braided/eyot,
rapids,
variable width,
many tributaries,
gentle gradient/slow flow.

3 at 1 mark [3]

(ii) high/mountainous/hilly,
cols,
steep slopes,
ridge,
lower land in NW,
flatter land in NW,
shallow valleys,
many tributaries/streams/small rivers/small tributaries/many rivers/much surface drainage,
disappearing streams,
drainage to N and S/dendritic/radial,
highest point 1614m (must include units),
dense bush.

3 at 1 mark [3]

2 (a) rain gauge,
anemometer.

2 at 1 mark [2]

(b) (i) Stevenson Screen.

[1]

(ii) hygrometer/wet and dry bulb thermometer (hydrometer = 0),
max. and min. thermometer/six's thermometer,
barometer.

Only mark first two instruments 2 at 1 mark [2]

(iii) legs/stilts/on a stand,
louvres/slatted sides/vents/shutters/slits,
painted white,
sloping roof.

3 at 1 mark [3]

3 (a) Difference between birth rate and death rate = 1
Birth rate – death rate = 2
Birth rate – death rate per 1000 or per 100 = 2
Births – deaths = 1.

[2]

(b) Poland.

[1]

(c) (i) position of line (any direction).

[1]

(ii) Pakistan dot.

[1]

(d) higher life expectancy lower natural increase,
higher life expectancy lower population growth.
Accept inverse/negative relationships.
(Reference to birth rate = 0)

[1]

4 (a) 2 correct divisions at 1 each.

[2]

(b) 40%/40.

[1]

(c) B.

[1]

5 (a) Area A 24%,
Area B 38%.

2 at 1 mark [2]

(b) 51/52/53.

[1]

(c) more rented/less owner occupied,
more houses more than 1 per room/more crowded,
higher dependency ratio/smaller working population,
more houses without bath,
more houses without inside WC, } better sanitation = 1
more without car.

(Allow approach based on B.)
Must compare either by statement or by using figures for both A and B, e.g.

Half own car	80% own a car
47% cannot afford to buy a house	15% do not own a house
12% no bath/WC	1% no bath/WC

3 at 1 mark [3]

6 (a) (i) groyne/breakwater (Walls = 0).

[1]

(ii) plant grass/trees/vegetation/plants.

[1]

(b) east to west/westwards/from the east,
sand piled up on east of groynes/right of groynes.

2 at 1 mark [2]

(c) (i) spit.

[1]

(ii) long/elongated,
low,
flat,
narrow/thin,
hooked/curved/2 points at end/claw end,
attached one end/distal end unattached,
marsh (behind spit),
sand/shingle,
sand dunes.

4 at 1 mark [4]

7 (a) flooding (of lowland by rivers).

[1]

(b) school near Rumpi/Zgambo/furthest west/Mayembe Hills,
near largest population/settlement/many huts/many buildings.

2 at 1 mark [2]

(c) near cultivated area,
near all weather road, } only 1 mark for 'along roads'
along seasonal road, }
dispersed in east/foothills,
absence in hills/in valleys/on lowland,
on flatter land/absent in steep slopes,
many in the east,
many around Rumpi/Chikalamba.

(Scattered, in groups, type of settlement = 0)

4 at 1 mark [4]

CAMBRIDGE
INTERNATIONAL EXAMINATIONS

November 2003

INTERNATIONAL GCSE

MARK SCHEME
MAXIMUM MARK: 60
SYLLABUS/COMPONENT: 0460/05 GEOGRAPHY Alternative to Coursework

UNIVERSITY of CAMBRIDGE
Local Examinations Syndicate

1 (a) (i) Student's opinion/biased; not quantitative/figures/only subjective words; different times of day

2 at 1 mark [2]

(ii) Differences of profit; frequency of purchase; cost; range
Credit examples to max 1

2 at 1 mark [2]

(b) Correct completion of pictogram with Walk = 11 symbols; Bicycle = 9 symbols; Car = 4 symbols; Bus = 1 symbol; Taxi = 0

4 at 1 mark [4]

Mark the number rather than the presentation
1 = 2 correct, 2 = 3 correct, 3 = 4 correct, 4 = 5 correct

(c) Each question must have a descriptive statement to compare A and B shoppers and a possible explanation

2 marks for each question [8]

(d) (i) e.g. 'How long have you spent shopping in Area -?'

3 at 1 mark
- wording of question
- options
- layout

[3]

0-2 hours		2-4 hours		4-8 hours	

(ii) People will spend longer in area A; further from where people live/longer to travel to area; comparison goods take longer to shop, etc.

3 at 1 mark, res. 1 for statement [3]

(e) (i) Rude/get people upset/annoyed/too personal

1 at 1 mark [1]

(ii) To be aware of the range of people asked/biased sample
Should be linked to this investigation

1 at 1 mark [1]

(iii) e.g. Area A most popular age 31-60 with more males than females (27 compared to 23) but Area B has more even spread of ages and more females than males (30 to 20)

4 at 1 mark [4]

No explanation or comparison required just description

(iv) e.g. Students only asked certain people/biased sample; time of the day; day of the week; the weather; student's own observations

2 at 1 mark [2]

Total 30 marks

2 **(a)** Quick to use; easy/simple to use; easy to total
No credit for 'accurate' 2 at 1 mark [2]

(b) Pebble placed between open ends of callipers/callipers opened to measure long axis of pebble; the callipers remain/keep the measurement; a ruler is used to measure the open distance of the callipers

Credit these details on a diagram 3 at 1 mark [3]

(c) Correct plotting for Site X of the 4 categories
Max 2 if incorrect order or no key just text 4 at 1 mark [4]

(d) Size change due to attrition with flood movement;
Shape change during flood movement due to water erosion;
Position change due to flood water bringing material down the valley
No credit for just 'erosion' 3 at 1 mark [3]

(e) **(i)** On graph W: Correct plotting of 4,4,10,2, 0, 0 2 marks for each graph
On graph Z: Correct plotting of 0, 0, 4,6,6,2 [4]

(ii) Cause, e.g. Diurnal/daily changes in temperature;
Process, e.g. different minerals expand/contract; exfoliation; moisture present; salt weathering; chemical weathering/hydration; freeze/thaw weathering
Result, e.g. break down of rock 4 at 1 mark
Credit development
[4]

(f) Hypothesis correct;
Pebble size larger at W and X/smaller at Y and Z; Pebble shape more angular at W and X/rounder at Y and Z
Credit data used to support statements 5 at 1 mark
Max 3 if no data
Max 2 for only use of data
[5]

(g) **(i)** Greater number produces larger range/different sizes/shapes;
random selection method; biased student selection;
Sampling is the key focus
2 at 1 mark [2]

(ii) Regular selection of pebbles along a transect line; fairer system/no student bias; more scientific not chance
An understanding of systematic is the key focus
3 at 1 mark
Reserve mark for description/explanation
[3]

Total 30 marks