1 (a) (i) 60/61 years,
39/38 years.

2 at 1 mark [2]

(ii) **X** birth rate well above death rate,
Y as above but then reduction in growth,
increased death rate/declining birth rate,
Z birth rate above death rate, then decline/BR similar to DR.

3 at 1 mark [3]

(b) (i) tradition,
religious pressures,
zeal for son - inheritance,
ignorance of large sectors of the population on need to reduce B.R/
low literacy rate/awareness,
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.

4 at 1 mark [4]

(ii) **prevent** overpopulation,
avoid increase in dependency ratio,
lowering of living standards,
poverty,
shortages - water/land,
reduce risk of
greatly increased demand on resources,
high levels of 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,
more food,
improved diets less malnutrition,
housing improvements,
improvements to water/sanitation,
more spending on older people,
education/awareness of need to look after the body/exercise etc.

4 at 1 mark [4]

(c) (i) 5-9 years [1]

(ii) depend economically on the 15-64 years/working population. [1]

(iii) broad based pyramid - progressive,
large percentage below 15 years,
small population over 65,
0-4 narrower than 5-9,
credit reference to the shape of the pyramid,
no credit for references to birth rate/death rate.

3 at 1 mark [3]

(iv) narrowing/reduction in youngest age groups –
lowering of birth rate,
increase in over 65s -
increase in life expectancy/reduction of death rate,
increase in 15-64 year olds -
reduction in young age groups.

3 at 1 mark [3]

2 (a) (i) CBD or rural-urban fringe. [1]

(ii) land too expensive in CBD,
planning control in rural-urban fringe/urban area not grown out this far yet. [1]

(iii) superstore - 1,
district shopping centre - 2,
row of shops - 5,
small shops - 8/9. [1]

(iv) size,
sphere of influence/threshold differences,
order of services - convenience/durable goods.

2 at 1 mark [2]

(v) out-of-town/not surrounded by residential areas,
larger,
has area around store - parking,
near major road junction,
higher order shop/needs large threshold/sphere of influence,
room for expansion.

3 at 1 mark [3]

(vi) large area,
spacious layout/large car parking area,
away from congestion,
possibly room to expand,
possibly cheaper land,
near road junction - outer ring road and road from CBD,
proximity to large residential area.

3 at 1 mark [3]

(vii) **Z** - more main roads,
grid-iron/rectangular pattern. [1]

(viii) older,
less planning in area **Z**. [1]

(b) For each choice:
description 1+1mark
reason 2+2 marks [3,3]

(c) **(i)** *shortage of land in the CBD*
limited space,
great demand for location in the CBD –
shops/offices,
centre of city – convergence of routes,
large number of workers,
rush hours.

housing shortages
large population,
urbanisation/large numbers of migrants,
building programmes cannot keep pace with demand.

traffic congestion
increase in urban population,
preference for private transport,
commuting,
rush hours.

For the chosen problem 2 at 1 mark [2]

(ii) *shortage of land in the CBD*
encourage activities to locate away from city centre,
skyscrapers,
reclamation,
urban renewal.

housing shortages
build more houses,
develop new towns/satellite towns,
encourage movement away from city.

traffic congestion
encourage traffic away from city centres/by-pass roads,
promote public transport,
new public transport developments – mass rapid transport systems,
stagger working hours,
urban motorways/freeways,
encourage out of town parking,
charges for entry to city centre,
roundabouts NOT traffic lights.
Credit reference to actual examples to illustrate MAX. 1 mark
4 at 1 mark [4]

3 **(a)** **(i)** material carried by river – sand, stones, mud etc. [1]

(ii) **three** of:
suspension,
solution,
saltation,
traction load.
3 at 1 mark [3]

(iii) loss of energy,
insufficient water/small volume,
especially during dry season, shallowing of channel/braiding,
inner/convex bank of meander,
river enters still water of lake/sea,
decrease in velocity,
lessening of gradient –
below waterfall,
river carries more load than it can transport. [1]

(b) **(i)** straighten its course. [1]

(ii) **Q**
cliff at **A**, slip-off slope at **B**,
opposite at **R**,
symmetrical channel at **P**.
4 at 1 mark [4]

(iii) **outer/concave bank** – more volume, greater velocity,
more erosion – undercutting, bank collapse – steep slope.
inner/convex bank – less volume, less velocity,
deposition – slip-off slope.
2 at 1 mark [2]

(c) **(i)** west/NW/WNW. [1]

(ii) 2 km. [1]

(iii) **three** of:
waterfall – resistant rock/cap rock,
level topped,
high,
river splits over waterfall,
river shallow above waterfall,
deposition above the waterfall/islands with vegetation,
turbulence,
gorge/very steep sides/cliff,
gorge meanders,
deposited rock fragments – side of gorge,
gullies.
3 at 1 mark [3]

(iv) interruption of river transport – waterfall,
problem of bridging the gorge,
road bridge carrying main road from settlement of Victoria Falls,
tourism – hotels,
employment,
contributed to growth of settlement,
hydro-electric power.
3 at 1 mark [3]

(d) **(i)** resistant cap rock,
underlying softer rock eroded,
eddying/plunge pool,
undercutting,
by splashback.

3 at 1 mark [3]

(ii) unsupported,
collapse,
retreat leaving gorge

2 at 1 mark [2]

4 **(a)** **(i)** **temperatures**:
high temperatures all year/every month 20° C - 30° C,
low annual range 6° C,
highest temperature - May 29° C.

2 at 1 mark [2]

rainfall:
high annual rainfall,
highest Dec. 270-280mm,
lowest rainfall Feb, May and Sept. about 180 mm,
no dry season.

2 at 1 mark [2]

(ii) **A** emergents/upper layer,
B canopy layer,
C lianas,
D buttress roots/undergrowth/shrubs.

4 at 1 mark [4]

(iii) lack of sunlight. [1]

(iv) **three of:**
tall trees compete for sunlight,
little undergrowth – lack of sunlight,
heavy rainfall/high temperatures – prolific growth,
evergreen – no seasonal rhythm,
drip tips/waxy leaves/allow water to flow off quickly,
shallow roots – high rainfall – water in top layer of soil.

3 at 1 mark [3]

(b) **(i)** 14% [1]

(ii) timber,
farming/cattle ranching,
roads.

2 at 1 mark [2]

(iii) no – marks for **two** reasons
trees gone,
empty fields,
pasture overgrown,
decline in cattle rearing,
farming unprofitable.

2 at 1 mark [2]

(iv) increased run-off,
rivers – more volume – flooding
nutrient cycle broken/interrupted,
no roots to absorb nutrients from soil,
no replacement of nutrients with leaf fall and decay,
loss of nutrients to soil,
leaching by heavy rainfall,
higher rate of surface run-off with loss of nutrients,
loss of species,
animals die – loss of habitats,
may become extinct,
burning – contributes to global warming.

4 at 1 mark [4]

(c) **n.b.** other natural environments acceptable as well as tropical rain forest,
with economic developments natural areas becoming less,
preserve the ecosystem,
prevent loss of species – plant and animal,
tourist potential,
control problems –
flooding,
soil erosion,
global warming etc.

4 at 1 mark [4]

5 (a) (i) **A** 9/8%,
B 60%.

2 at 1 mark [2]

(ii) **X** more in tertiary,
more in secondary/manufacturing,
less in primary.

3 at 1 mark [3]

(iii) **X** developed countries – **Y** developing,
Y greater dependence upon agriculture,
agriculture in **X** more mechanised,
X developed manufacturing C19-C20, **Y** developing manufacturing,
X more developed economies – greater demand for services,
X greater amount of skill/educated/trained labour force,
X more capital for investments.

3 at 1 mark [3]

(b) (i) vehicle constructed by adding components on an assembly line,
inputs – what goes into assembly
- components and raw materials, labour etc.

2 at 1 mark [2]

(ii) **A** cheaper production/skilled labour. [1]

B reduce transport costs. [1]

C assembly line/mass production,
storage of raw materials,
finished vehicles,
parking for workers,
room for possible expansion.
2 at 1 mark [2]

D mass production,
some skilled labour - component production,
semi-skilled/unskilled - assembly work,
office work,
transport.
2 at 1 mark [2]

(c) **(i)** named example - crop/system. [1]

(ii) for each of **three** of transport, capital, labour, markets
Reserve 1 + 1 + 1 marks
additional marks 2 marks [5]

(iii) processes - e.g. sowing, transplanting seedlings etc.
3 at 1 mark [3]
n.b. for a general account allow 3 MAX for processes ONLY

6 **(a)** **(i)** 20% [1]

(ii) coal. [1]

(iii) less pollution,
both are renewable sources of energy.
2 at 1 mark [2]

(iv) **A** wind not constant,
noise.
1 mark

B sun's energy varies,
difficult to store. 1 mark [2]
allow cost/visual pollution in either **A** or **B**

(v) high cost,
oil/natural gas provide more energy,
competition with renewable forms of energy,
declining reserves,
non renewable,
pollution - allow development up to 2 marks
3 at 1 mark [3]

(b) plentiful supply,
transportable –
supertankers/pipelines.
2 at 1 mark [2]

(c) **advantages**
less pollution than coal,
large reserves of uranium,
low running cost.

Reserve 2 marks

problems
concerns over safety/possible accidents,
Chernobyl,
radio-activity - health problems,
difficulty of storing/disposing of nuclear waste,
nuclear power stations take a long time to build,
expensive to dismantle,
competition with renewables.

Reserve 2 marks

additional mark for either 1 mark [5]

(d) **(i)** named region/country - reference only (no marks for name)
income,
employment directly,
other related employment - building, transport etc.,
diversifies economy,
preservation of cultural heritage,
improved standard of living,
better cultural understanding,
preserves natural environment,
tourist facilities can be used by local people,
prestige for country.

5 at 1 mark [5]

(ii) **A** area (allow national parks in general) [1]

B publicity,
education/awareness,
planning control,
develop nature tours,
encourage activities which are compatible with nature – bird watching, jungle trekking, rafting etc.
establish national parks/forest parks etc.

3 at 1 mark [3]

1 (a) (i) steep rise in population up to 1999,
constant/steady growth,
almost trebled 1950-99,
varied estimates over the next 50 years,
high estimate will almost double again,
low estimate will level out at about 7 billions from 2020.

3 at 1 mark [3]

(ii) **X** birth rate well above death rate,
continues to grow rapidly.
Y as above but then reduction in growth,
increased death rate/declining birth rate.

2 at 1 mark [2]

(iii) **Z** birth rate above death rate,
then decline - lowering of birth rate,
reasons for low birth rate.

2 at 1 mark [2]

(b) (i) **A** reduction in birth rate –
birth control/contraceptives,
abortion,
sterilisation,
education about family planning/awareness/advertisements,
reward examples e.g.
China's one-child policy,
salary bonus - 10%,
priority in education/health facilities/employment/housing,
fines - 2nd child/annual tax, MAX 1 mark details - one child policy,
death rate higher than birth rate in some countries,
emancipation of women etc.
fall in birth rate - ageing population.
credit references made to rise in birth rate also.

B fall in death rate –
better medical facilities,
more food,
improved diets less malnutrition,
housing improvements,
more spending on older people,
education/awareness of need to look after the body/exercise etc.
increase in death rate in some countries -
aids etc.,

For each of **A** and **B** Reserve 3 + 3 marks
Additional mark for either 1 mark [7]

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

5 at 1 mark [5]

(c) broad/wide based pyramid - progressive,
large percentage below 15 years,
small population over 65,
0-4 narrower than 5-9,
reference to shape,
high dependency ratio.

Reserve 2 marks

high birth rate,
low life expectancy/high death rate,
lowering of birth rate.

Reserve 2 marks

MAX reference to reasons for high BR and high DR 1 mark
additional marks 2 marks [6]

2 (a) (i) **A** large area,
spacious layout/large car parking area,
away from congestion,
possibly room to expand,
possibly cheaper land,
near road junction - outer ring road and road from CBD,
proximity to large residential area.

4 at 1 mark [4]

B junction of roads,
in large residential area,
away from CBD.

3 at 1 mark [3]

(ii) more local stores - convenience goods,
small sphere of influence/low threshold,
fewer district shopping centres - competition,
need larger threshold,
most of local shops - in older residential areas.

3 at 1 mark [3]

(iii) Area **Z** older,
grid-iron/rectangular layout,
less planning.

2 at 1 mark [2]

(b) description/location — Reserve 1 mark
reasons — Reserve 2 marks
additional mark — 1 mark
For each choice — 4 + 4 marks [4]

(c) to prevent urban sprawl,
protect agricultural land,
provide open space around town/city - recreation,
prevent joining up of neighbouring towns/cities,
formation of conurbations,
credit reference made to measures such as green belts,
towns/cities in developing countries - prevent development of squatter settlements.
no credit for examples.

5 at 1 mark [5]

3 (a) (i) description of –
suspension,
solution,
saltation,
traction load.
2 names only without description — 1 mark

4 at 1 mark [4]

(ii) loss of energy,
insufficient water/small volume,
especially during dry season,
shallowing of channel/braiding,
inner/convex bank of meander,
river enters still water of lake/sea,
decrease in velocity,
lessening of gradient –
below waterfall.
river carries more load than it can transport,

4 at 1 mark [4]

(b) (i) waterfall - resistant rock/cap rock,
level topped,
high,
river splits over waterfall,
river shallow above waterfall,
deposition above the waterfall/islands with vegetation,
turbulence,
rapids,
gorge/very steep sides/cliff,
gorge meanders,
deposited rock fragments - side of gorge,
gullies.

6 at 1 mark [6]

(ii) interruption of river transport - waterfall,
problem of bridging the gorge,
road bridge carrying main road from settlement of Victoria Falls,
tourism - hotels,
employment,
contributed to growth of settlement,
hydro-electric power.

5 at 1 mark [5]

(c) resistant cap rock,
underlying softer rock eroded,
eddying/plunge pool,
undercutting,
erosopnal processes MAX 1 mark
by splashback,
unsupported,
collapse,
retreat leaving gorge.

6 at 1 mark [6]

4 (a) (i) high temperatures all year/every month 20° C - 30° C,
low annual range 6° C,
highest temperature - April 29° C,
high annual rainfall,
highest Dec. 270-280 mm,
lowest rainfall Feb, May and Sept. about 180 mm,
no dry season.

4 at 1 mark [4]

(ii) emergents 40-45m,
canopy layer 30m +,
crowns interlock,
lianas,
epiphytes attached to branches/trunks,
tall trees,
straight trunks,
first storey 15-20m,
bark smooth,
little leaf litter/undergrowth,
trees close together,
buttress roots,
ferns, herbs and low growing plants, fungi,
trees have broad leaves,
drip tips,
waxy/leathery leaves,
shallow roots,
evergreen forest.

5 at 1 mark [5]

(iii) tall trees compete for sunlight,
little undergrowth - lack of sunlight,
heavy rainfall/high temperatures - prolific growth,
evergreen - no seasonal rhythm,
drip tips/waxy leaves/allow water to flow off quickly,
shallow roots - high rainfall - water in top layer of soil.

4 at 1 mark [4]

(b) **(i)** **A** loss of forest,
14% Amazonia last 10 years, usable timber trees gone,
empty fields,
pasture overgrown,
decline in cattle rearing,
farming unprofitable.

3 at 1 mark [3]

B less interception,
more percolation,
increases flow into rivers by throughflow,
increased run-off,
rivers - more volume – flooding,
nutrient cycle broken/interrupted,
no roots to absorb nutrients from soil,
no replacement of nutrients with leaf fall and decay,
loss of nutrients to soil,
leaching by heavy rainfall,
higher rate of surface run-off with loss of nutrients,
loss of species,
animals die - loss of habitats, may become extinct,
burning - contributes to global warming.

4 at 1 mark [4]

(ii) **n.b.** other natural environments acceptable as well as tropical rain forest.
with economic developments becoming less,
preserve the ecosystem,
prevent loss of species - plant and animal,
tourist potential,
control problems -
flooding,
soil erosion,
desertification,
global warming etc.

5 at 1 mark [5]

5 **(a)** **Y** greater dependence upon agriculture,
X developed countries, **Y** developing countries,
agriculture in **X** more mechanised,
X developed manufacturing C19-C20, **Y** developing manufacturing,
X more developed economies - greater demand for services,
X greater amount of skill/educated/trained labour force,
X more capital for investments.

5 at 1 mark [5]

(b) **labour** - large labour force required,
assembly line,
skilled/semi-skilled,
components - large number,
central location - assembling from many subsidiary factories,
raw materials - availability of sheet steel etc,
siting factors - large area –
large factory, storage, parking,
level land,
capital - large-scale production,
factory,
purchase/storage large quantities of components/raw materials,
large labour force – salaries,
transport -
bringing components,
vehicles - markets,
assembling of large number of workers,
markets -
home/regional,
export details.
named location 1 mark
for each of 4+ factors 9 at 1 mark [10]

(c) credit crop names/locations if given, RES and MAX 1 mark
for each of natural inputs, human inputs, outputs/markets,
processes, capital. Reserve 2 + 2 + 2 marks
crops/outputs MAX 3 marks [10]

6 (a) (i) cost,
concerns over safety/radio-activity,
difficulty of storing/disposing of nuclear waste,
nuclear power stations take a long time to build,
expensive to dismantle,
limited life of power stations,
competition with renewables.
4 at 1 mark [4]

(ii) decline in reserves,
competition with oil/natural gas,
competition with alternative sources of energy,
high cost,
pollution - if developed up to 2 marks.
5 at 1 mark [5]

(iii) renewable,
little pollution,
lower running costs,
improved technology,
security of supply - countries do not rely on others,
some units small scale serve local areas - cut down on transport costs,
short construction times,
countries may cut down on costly oil imports.
4 at 1 mark [4]

(b) **(i)** named natural area — 1 mark
natural attractions — 3 at 1 mark
other reasons e.g. accessibility — MAX 2 marks [4]

(ii) help control: loss of natural landscape, natural attractions of area, — up to 2 marks
prevent over-development of infrastructure - roads, airports, hotels etc., — up to 2 marks
cut loss of natural habitats,
check pollution — up to 2 marks
general benefits e.g. employment — MAX 2 marks
4 at 1 mark [4]

(iii) publicity,
education/awareness,
planning control,
develop nature tours,
encourage activities which are compatible with nature – bird watching, jungle trekking, rafting etc.
establish national parks/forest parks etc.
4 at 1 mark [4]

1	(a)	(i)	(estate) office.			= 1
		(ii)	187376 or 186376.	(Reversed or wrong square = 0)		= 1
	(b)	(i)	north-east.			= 1
		(ii)	2650 – 2800.			= 1
	(c)		forest, low forest/woodland, scrub, palms.		4 at 1	= 4
	(d)		banana and coconut.			= 1
	(e)		forest, narrow/deep valleys, highland/hilly/mountains, steep slopes, no flat land/all slopes/lack of flat, no/lack of roads/few, scrub/low forest/woodland.		4 at 1	= 4
	(f)		hospital/health, school/education, church/religion, post (office), police (station)/law, cemetery, public works department, water.	2 services = 1 mark	3 at 1	= 3
	(g)		mud/sand/beach, peninsula/point/headland, bay/cove, island/stack, cliffs, river mouth, wave cut platform, blow hole, (extract from place names).		4 at 1	= 4
2	(a)		P – mercury/alcohol, Q – muslin/gauze, R – wick/string/cord, S – water/reservoir/jar/bottle.	2 correct for 1 mark	2 at 1	= 2
	(b)		4°C,		= 1	
			dry bulb temp. minus wet bulb (temp)/25(°C) minus 21(°C).		= 1	= 2
	(c)		70%.			= 1

	(d)		amount of water (vapour) in air expressed (as a %) of what the air could hold (at a given temperature).			= 1
3	**(a)**		A = 4 B = 1		2 at 1	= 2
	(b)	**(i)**	low birth rate low death rate, even shaped pyramid, few young many old.			= 1
		(ii)	high birth rate high death rate, wide base narrow top, many young few old, progressive.			= 1
	(c)		Stage 1/Stage 4, death rate higher than birth rate, more die than are born.		Stage and reason	= 1
	(d)		2, biggest difference between birth and death rate.		Both answers	= 1
4	**(a)**		2 correctly positioned lines.		2 at 1	= 2
	(b)		70(%).			= 1
	(c)		B		= 1	
			more primary/high, less secondary/few/smaller, less tertiary/few.		2 at 1 = 2	= 3
5	**(a)**		enlarged in size/more buildings/added riding stables.			= 1
	(b)		commuters.			= 1
	(c)		school, shop, post office, bus stop.	(2 services for 1 mark)	2 x 1	= 2
	(d)		riding stables, restaurant, car park.		3 at 1	= 3
6	**(a)**	**(i)**	section/part of earth's crust/surface layer part of earth floating on mantle.			= 1
		(ii)	Nazca, South American, Antarctic.	Any 2		= 1

		(iii)	pulling apart/diverging /separating/spreading.		= 1
	(b)	(i)	epicentre.		= 1
		(ii)	city, greatest intensity/nearest epicentre/above origin.	2 at 1	= 2
		(iii)	bursting of dam/loss of water supply/damage, flooding, tidal waves, break in communications/motorway, damage to boats/port, landslides, damage to bridge.	2 at 1	= 2
7	(a)		by-pass/motorway, (outer) ring road.	2 at 1	= 2
	(b)		bus lanes.		= 1
	(c)		(light/electric) railway/trains, park and ride, limited access/no private cars, pedestrianised streets, (inner) ring road, multi-storey, car parks.	4 at 1	= 4

1	(a)		Name of student/group; date; time; weather; site number/location of recording	3 at 1 mark	[3]
	(b)		e.g. SW Path and NE Path becomes narrower overall; (1.9 – 0.3m) (1.9 – 0.2) – no comparison required	2 at 1 mark	[2]
	(c)	(i)	Detailed discussion/comparison based on site distance from Information Centre with reference to both paths; comment on the changes across the path	Single point marking Res mark for across site/distance from IC. Max 4 if no data	[6]
		(ii)	Unrepresentative site location; student inaccuracy in measuring/recognising bare ground; location of the centre of the path; no relief detail known	2 at 1 mark	[2]
	(d)	(i)	The number of visitors will change during the day; to gain a representative sample	1 at 1 mark	[1]
		(ii)	Tally counts	1 at 1 mark	[1]
		(iii)	400 m; total result highest at 400 m; over 400 m numbers rapidly decline	3 at 1 mark res 1 mark for distance credit data	[3]
	(e)	(i)	Trampling by feet; reduction in growth; removal of vegetation/plants/roots; roots no longer hold the soil together; susceptible to soil erosion by wind and water	5 at 1 mark	[5]
		(ii)	Information Centre – 400 m SW centre of path; use alternative routes to let plants recover; fence off area; put down wooden boards/tarmac	3 at 1 mark res 1 mark for suggestion	[3]
	(f)		At each 200 m site; design recording sheet; design environmental survey with scoring system; plenty of litter = high score/little little – low score	4 at 1 mark res 1 mark for location of survey	[4]

Total 30 marks

2	**(a)**	**(i)**	The order of settlement;	1 mark	[1 mark]
		(ii)	No of services/traffic volume increases/decreases; Population increases; area increases	3 at 1 mark res 1 mark des/exp	[3]
	(b)	**(i)**	Data which the candidate did not collect/not primary first-hand collected data but collected by someone else e.g. map/census/weather station data	1 mark definition 1 mark example	[2]
		(ii)	e.g. Settlement A has basic services of Church, Postal Agency, School; Settlement B and C have different services in addition to the basic services	2 at 1 mark	[2]
	(c)	**(i)**	Correct plotting of data on scattergraph: A = 4, 38 B = 7, 76 C = 14, 210	3 at 1 mark for correct plotting	[3]
		(ii)	As transparency best fit Line	2 marks if accurate 1 mark if within 2 mm	[2]
	(d)	**(i)**	Appropriate route way; appropriate extent of settlement	2 marks for each settlement type Max 1 if no diagram	[4]
		(ii)	Not to miss traffic; reference to linear or nucleated settlement patterns	1 mark for simple credit development	[2]
		(iii)	Different day; different time; different weather; representative sample/true picture/accurate/different traffic volume	2 at 1 mark res 1 mark for when and 1 mark for why	[2]
	(e)		Correct construction and completion of bar graph Axis number/divisions; labelling of both axes; Title appropriate; correct bars (i.e. 2, 10, 56);	5 at 1 mark	[5]
	(f)		Hypothesis true/correct; Comment in support using both traffic and services data concerning Settlements A, B and C focusing on the size of settlements and the number of services not type	4 at 1 mark res 1 mark for decision res 1 mark for traffic and services comment Max 3 mark if no ref to data	[4]

Total 30 marks

Grade thresholds taken for Syllabus 0460 (Geography) in the June 2003 examination

	maximum mark available	minimum mark required for grade:			
		A	C	E	F
Component 1	75		39	30	20
Component 2	75	50	28	17	
Component 3	60	46	35	27	22
Component 5	60	43	33	19	15

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.