General Certificate of Education Ordinary Level

2217/02 GEOGRAPHY

Maximum Mark: 90

Mark Scheme

#### **Important Notice**

Mark schemes have been issued on the basis of **one** copy per Assistant Examiner and **two** copies per Team Leader.

### **Confidential**

October/November 2006

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FRAL WARK SCHOOL



# **Section A**

1	(a) 1700 –1900m (b) 100m + or – 20 (c) 880 to 900m 1	
	(d) hotels or motel, airport, caravan park, golf course, casino, rifle or pistorange, chalets  3 x 1	ol
	(e) starts at c 920m /gentle slope/hillocks/medium bush/river Masuwe to south/after 1km cross railway/road/ road embankments/power line /gorge a c 5 km or description of two cliffs or rock slopes/ river Zambezi/medium to accept sparse for 2km/cross river Songwe after further 2 km/ land rises over 900m	oush
	(f) starts at just above 1020m with medium or dense bush/no drainage descends to river Chamahonda/ at c 940m/ sparse bush/ lots of small stream start c 1km south of river or half km after start of route climbs back up to 1000m in c 1km/ becomes medium or dense bush and no drainage crosses plateau/for 2 and half to 3 km/ descends for 2 km/ to between 920m and 940m/ sparse bush / many small	
	streams	6x1
	(g) loop in route because needs to descend from station at c 920 to river at 880 1 mark for referring to descent, 1 mark for details./ crosses river at nar point just below falls./ follows lake after bridge/ max 2	
2	(a) 1 mark each for plotting and naming Australia and Brazil	2
	(b) energy 4000 tonnes per person, CO <sub>2</sub> 9000 tonnes person	1
	(c) 2 marks for referring to direct relationship between the two sets of data ver it is expressed, provided it is clear 1 mark for each of two examples from 1 mark for noticing 'outlier' position of Canada and/or position of Austral	1
	(d) carbon dioxide comes from exhausts of road and rail vehicles and plar om industry/heating and or air conditioning of buildings/ more vehicles and ry therefore gives off more CO <sub>2</sub> /reference to high energy users being MEDO ies. 2x1	or

- 3 (a) 1 mark for getting line in correct place, 1 mark for correct labelling. 2 (b) oil/coal/natural gas 2x1(c) nuclear/hydro/renewables two correct for 1 mark, three correct for 2 marks (d) plenty of strong sunlight/ easy to install/ do not require major building/ can be used on small scale /do not require large scale distribution networks 2x 1 4 (a) tourists need feeding/opportunity to produce and sell more food to feed them. 2x1(b) money from taxes on tourist industry/ demand for facilities/ construction to meet these demands (c) depends on box chosen. Might be reference to food not being grown locally but being brought in from outside/ same could apply to construction companies and their workers/ developments could lead to reduction in land available for growing food./ could be ref to social unrest. 2x15 Spaces awarded 1 mark each. Hurricanes, cyclones, typhoons /Seas or oceans/ several possible source areas. Two must be described with reference to ocean name and relationship to relevant tropic./east or south east. 6 6 1 (a) planting trees or re afforestation or other valid statement. (b) terracing / creating retaining walls to prevent soil from slipping down/creating areas of flat land. (c) Suggestions such as: teenagers will have responsibilities in future for environment/ part of education/ need to create understanding of problems caused by deforestation/ conservation is about ensuring a better environment for future etc 2 either 2x 1 for specific points or 2 for a well explained statement. 7 (a) rural population increased steadily (1 mark) from c 8 million to c 22 in 2000 million. (1 mark)/expected to grow to 25m by 2020/urban population was very low in 1950 (1 mark)/ stayed low until 1975 (1 mark)/ rapid increase after 1980 (1 mark)/ increased to 22 million by 2000/expected to increases to 45m by 2020.
  - 3 x 1

(b) lack of opportunities or facilities in rural areas/ problems re food supply/war or AIDS in rural areas/perception of opportunities of all types in cities 2x1

### **Section B**

8 (a)	(i)	Completion of the diagram to show the upward movement of a pebble at an angle and the downward movement of the pebble perpendicular to the foreshore.	1 @ 1 mark	[1]
	(ii)	Correct positioning of the direction of l.s.d. and direction of prevailing wind  Both correct for mark	1 @ 1 mark	[1]
	(iii)	Ideas should include The pebbles/beach material is pushed up the beach by the swash/waves The pebbles/beach material is dragged down/returns under the force of gravity	2 @ 1 mark	[2]
(b)	(i)	Saves time; cover more sites in the time; all students experience fieldwork/sharing of work	2 @ 1 mark	[2]
	(ii)	Ideas should include  -Use of tape to set out transect line from water's edge to back of beach -Starting at the water's edge the pantometer is placed along the transect line	4 @ 1 mark	[4]
		-The angle of slope change is measured using the protractor -Record the measured angle -Repeat the measurement for the width of the beach/length of the transect		
(c)	(i)	Correct marking of profile at 2m (5°) and 4m (8°) and line	2 @ 1 mark	[2]
	(ii)	Height difference measured from graph as 1.3m. Accept 1.2 – 1.4m	1 @ 1 mark	[1]
	(iii)	2a wider than 2b; 2a steeper gradient than 2b; greater angle change in 2a than 2b	2 @ 1 mark	[2]
(d)	(i)	Correct plotting of bars at 2a (16m) and 2b (6m)	1 @ 1 mark	[1]
	(ii)	60 / 6 = 10m; plotted 10m as line onto bar graph Fig. 5	2 @ 1 mark	[2]
(e)		All b profiles/1b,2b and 3b are all flatter in gradient/slope than a profiles/1a,2a and 3a; All b profiles/1b,2b and 3b change less in gradient/slope than a profiles/1a,2a and 3a; Explanation should include the ideas that -beach material has been moved/transported from site b to site a -beach material is stopped by the groynes	4 @ 1 mark Res 1 mark for des and 3 for exp	[4]
(f)	(i)	Probable height of Beach X is low and probable width of Beach X is narrow.	2 @ 1 mark	[2]
· · · · · · · · · · · · · · · · · · ·	(ii)	Ideas should include  -At the students' beach waves transport material but no material to transport at Beach X;  -Greater erosion by the waves at Beach X;	2 @ 1 mark	[2]
(g)		Conclusion should include for example -Hypothesis correct; -beach always wider closer to the groyne where l.s.d is stopped by groyne; -data quoting the widths of beaches comparing a and b sites -limitations of data collection concerning when data collected; student error; only one beach etc	4 @ 1 mark Res 1 mark for hypothesis decision Max 3 if no data Total 30	[4]

		Wai k Scheme		
9 (a)	(i)	Labelled, working quarry area, vehicle storage and for 2 marks	4 @ 1 mark	[4]
	l	Completed sketch and label to show railway line and local settlement for 2 marks		
(b)	(i)	Ideas for example Advantage – saves time/not collected data yourself/do not need to visit; can be more accurate/collected by professionals; cheaper; Disadvantage – can be wrong/have not seen for yourself/not precise enough/biased	2 @ 1 mark	[2]
	(ii)	Employment	1 @ 1 mark	[1]
	(iii)	Process = heating in furnace Output = the cement; fumes and waste heat 1 mark for both underlining and in correct place on diagram for each answer	3 @ 1 mark	[3]
(c)	(i)	To gain a representative sample/results; no student bias; range of views because not neighbours	2 @ 1 mark	[2]
	(ii)	Complete the pie chart with three correct line, a suitable title and a completed/used key	5 @ 1 mark	[5]
	(iii)	People are most concerned about air pollution; People are least concerned about litter; No credit for lists Credit grouping of issues	2 @ 1 mark	[2]
(d)	Ideas may include -respiratory diseases/breathing problems; -acid rain; -dust/particulate matter over the environment; -global warming/greenhouse gases contributing to warming of the atmosphere		3 @ 1 mark Credit dev	[3]
(e)	Road Raily	1 - (6/50) maybe not near main road/could be included in air pollution way $- (8/50)$ railway line near settlement line $(0/50)$ no impact as underground		[3]
(f)	syste	s such as environmental survey around the area; bi-polar/scoring em; litter survey; pollution discs; it detail suggesting data type, how collected/measured, how recorded	4 @ 1 mark Credit dev	[4]
			Total 30	marks