Marking Scheme

6th International Geography Olympiad

Brisbane

June 2006

Marking scheme - overview

1 Climate	The dynamics of population: migration	3 Volcano Merapi	4 Economic activity, the business world and Global Shift	5 Fresh water in the Middle East
1a (1m)	1a (2m)	1a (1m)	1 (2m)	1a (1m)
1b (2m) 2a (1m)	1b (3m) 1c (2m)	1b (1m) 2 (2m)	2 (2m) 3 (3m)	1b (2m) 2a (2m)
2b (3m)	1d (4m)	3a (1m)	4a(3m)	2b (2m)
3a (2m) 3b (1m)	2a (2m) 2b (2m)	3b (1m) 3c (1m)	4b (3m) 5a (3m)	3a (1m) 3b (1m)
4 (2m)	2c (2m)	3d (1m	5b (2m)	4 (4m)
5 (2m)	3 (2m)	4 (1m)		5a (2m)
6 (2m)		5 (2m)		5b (3m)
7 (2m)		6a (3m)		6 (2m)
		6b (1m)		
18 marks	19 marks	15 marks	18 marks	20 marks

Section 1 Climate

1a (1m) June, July or August

1b (2m) One of the following:

- the higher temperatures on the Northern Hemisphere
- the prevailing Monsoon in SE Asia.

2a (1m) See satellite image with example.

2b (3m)

The concentration of clouds in a band from West tot East (1m)

The three elements of a correct answer are:

- heating of the earth surface by the sun
- rising of the air
- condensation (forming of clouds)

(3 correct = 2m, 2 correct = 1m, 1 correct = 0m)

- **3a** (1m) See satellite image with examples.
 - (1m) See satellite image with examples.

3b (1m) Air is descending and clouds disappear

- **4** (2m) One of:
- In the Southern Hemisphere there are 3 distinct landmasses where high pressure areas develop.
- In the Northern Hemisphere the land/water pattern is more irregular.
- 5 (1m) A = 3, (1m) B = 1
- **6** (1m) Precipitation is sufficient for trees to grow, seasonal character causes savannah vegetation.
 - (1m) Precipitation is not sufficient for growth of trees.
- 7 (2m) See circles indicating possible areas on worksheet 1.

Total = 18 marks

Section 2 The dynamics of population: migration

- **1a** (2m) + indicate factors that stimulates migration. (1m)
 - indicate factors that restrict migration. (1m)
- **1b** (3m) Three of the following:
 - high costs of travel
 - restrictions to enter countries legally
 - physical barriers
- 1c (2m)

The example should indicate a negative balance between positive factors (+) on the one side and negative factors (-) and intervening obstacles on the other side.

1d (4m)

PULL: when positive factors outweigh the negative factors in the region of destination.

PUSH: when negative factors outweigh the positive factors in the region of origin.

- **2a** (2m) Two of the following factors
 - sexe
 - level of education
 - marital status
 - level of income
 -
- **2b** (2m) One of the following:

Choice for negative: man and woman in the reproductive age are moving out (small age group for 0 to 10)

Choice for positive: elderly people are moving in because of certain advantages of the town or region (special communities for elderly people, favourable climate, special low taxes)

- 2c (2m)
- Elderly migrants have more money to spend. (1m)
- Lower costs for education (1m)
- **3** (2m) Two of the following:
 - language problems
 - segregation
 - lower wages
 - discrimination
 - ...

Section 3 Volcano Merapi

1a (1m) epicentre

1b (1m) hypocentre

2 (2m) Two of the following:

Mountainous area which makes rescue and relief operations very difficult.

- It is a densely populated area.
- Indonesia has "a soft state" character: rescue and relief operations are less efficient.

3a (1m)

See example on worksheet 3.

3b (1m)

See example on worksheet 3.

3c (1m)

See example on worksheet 3.

3d (1m

See example on worksheet 3.

4 (1m)

See example on worksheet 3.

5 (2m) The answer should explain how both phenomena are related to colliding plates.

6a (3m) See the table on worksheet 3

- 5 correct answers = 3m
- 4 or 3 correct answers = 2m
- 2 correct answers = 1m
- 1 correct answer = 0 m

6b (1m) explosive

Total = 15 marks

Section 4 Economic activity, the business world and Global Shift

1 (2m)

Countries on both sides of the Pacific. They include developed countries such as Japan, Canada, USA and the newly industrialised countries (NICs), such as countries of E and SE Asia.

2 (2m)

Use the difference in size of the values to show the more rapid rates of growth in Asia than elsewhere, eg E Asia growth 7/8 times; and S Asia growth almost 4 times; Japan 3 times (from an already big base in 1970). These outpace the increases elsewhere; e.g. in the old developed world US en EU expected to double, thereby establishing the greater relative growth rates of the Pacific Rim.

3(3m)

Three of the following:

- relatively low wages
- extensive labour force
- growing home market / growing purchasing power
- opening of markets / diminishing of tariffs
- favourable investment climate

4a (3m)

Three of the following:

- relative high wages
- automatisation
- economics of scale
- environmental laws

4b (3m)

Three of the following:

- stimulation of alternative employment in services
- state subvention / subsidies
- non-intervention (invisible hand)

5a (3m)

- social: moral obligation or preventing migration (1m)
- economical: creating new markets (1m)
- political: seeking allies in the international political arena (1m)

5b (2m)

Two of the following:

- for productive investments (instead of paying costs for a growing population)
- for creating jobs
- for building infrastructure
- et cetera

Total = 18 marks

Section 5 Fresh water in the Middle East

1a (1m)

Northern summer

1b (2m)

In summer the high pressure zone that usually lies around the Tropic of Cancer moves North. In the descending air masses in a high pressure area water evaporates and clouds disappear.

2a (2m)

Answers should indicate that irrigation water evaporates and dissolved salts remain in the top soil and cause salinisation (high concentration of salts)

2b (2m)

Forms of irrigation that diminish/limit evaporation of water in the soil e.g. trickle irrigation

3a (1m)

sandstone

3b (1m)

sandstone has highest pore volume (volume of the pores between the sandstone particles)

4 (4m) See table.

Principle	Beneficiary country (A)	Disadvantaged country (B)
1. If a larger part of the drainage basin is located in country A, then country A has more rights to the water than country B.	Turkey	Syria or Iraq
2. If a bigger part of the water discharge originates from country A, then country A has more rights to the water than country B.	Turkey	Syria or Iraq
3. If it rains less in country A, then country A has more rights to the water than country B.	Syria or Iraq	Turkey
4. If country A has used more river water in the past, then country A has more rights to the water than country B. (historic rights)	Syria or Iraq	Turkey
5. If country A suffers more economical damage when it gets less water, then country A has more rights to the water than country B. (economic rights)	Syria or Iraq	Turkey
6. If the social needs in country A are stronger (higher), then country A has more rights to the water than country B. (humanitarian rights)	Syria or Iraq	Turkey

7. If country A has less alternative ways to meet its water demands, then country A has more rights to the water than country B. (dependency)	Syria or Iraq	Turkey
8. If country A uses its water in a less efficient way, then country A has less rights to the water than country B. (efficiency)	Iraq	Turkey

8 correct answers = 4 7,6 correct answers = 3 5,4 correct answers = 2 3,2 correct answers = 1

1 correct answers = 0

5a (2m)

- Dry areas of a drainage basin contribute less to the discharge, but give equal rights to water than a wet area.
- Discharge is relative: if a country in a given year contributes less, it will have lesser rights to a share of the water.

5b (3m)

Water is a prerequisite for human life and therefore choice number 6 is non negotiable (3m) For any other principle with plausible explanation the candidate gets a maximum of **2** marks.

6 (2m)

The water can be polluted / contaminated pesticides / herbicides or by nutrients (eutrification).

Total = 20 marks