



GEOGRAPHY
HIGHER LEVEL AND STANDARD LEVEL
PAPER 2

Tuesday 19 November 2002 (afternoon)

2 hours

INSTRUCTIONS TO CANDIDATES

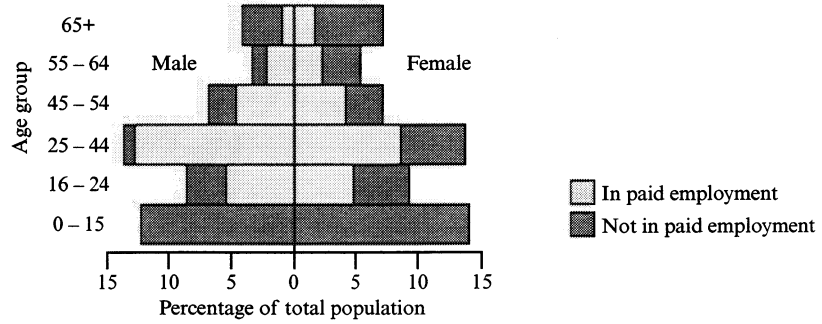
- Do not open this examination paper until instructed to do so.
- Answer three questions.

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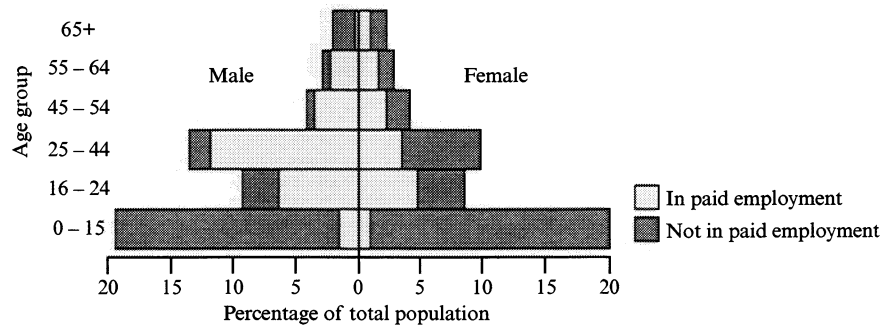
1. The population pyramids below show the demographic and economic contrasts between a more economically developed country (MEDC) and a less economically developed country (LEDC).

Demographic and economic contrasts

MEDC



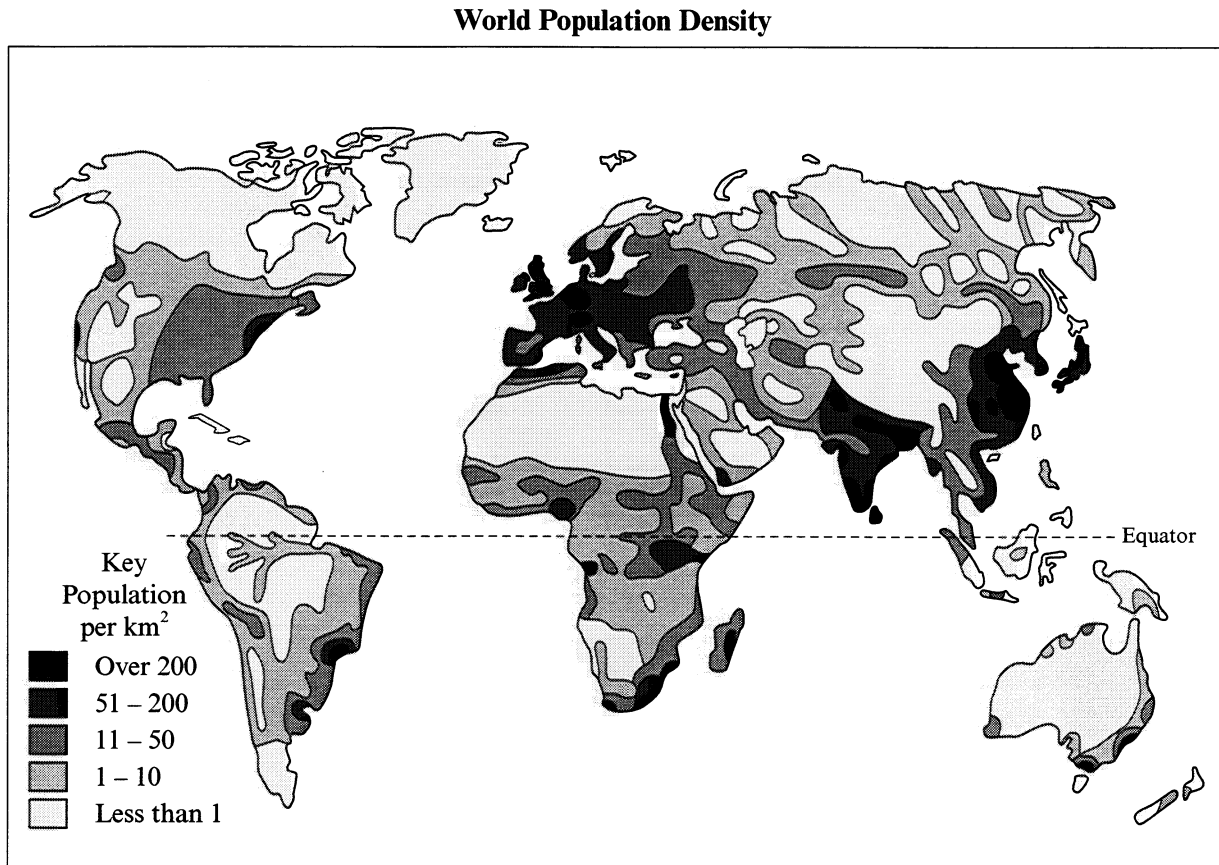
LEDC



[Source: Prosser, Raw and Bishop, *Landmark AS Geography*]

- (a) Describe and explain the differences in population structure between the **two** countries. [6 marks]
- (b) Describe and give reasons for the differences in the level of economic dependence of each population shown. [6 marks]
- (c) With reference to **either** one MEDC **or** one LEDC that you have studied, discuss the ways in which the population structure has changed over time. [8 marks]

2. The map below shows actual population densities around the world.



[Source: Adapted from WE and VM Marsden, *World in Charge*, Longman]

- (a) With reference to **either** a region of low population density **or** a region of high population density, describe at least **three** physical factors that have contributed to this population distribution. [6 marks]

- (b) Define population density and evaluate how useful it is in determining whether a region is overpopulated or underpopulated. [4 marks]

- (c) Briefly outline the ways that governments can control:
 - (i) the growth rate and
 - (ii) the movement of population. [5 marks]

- (d) With reference to the population policy of **one** country that you have studied, explain the need for that policy and evaluate the degree to which it has been a success. [5 marks]

3. The table below shows the farming characteristics of ten selected countries.

Country	Major farming type	A Gross Domestic Product per capita (US dollars)	B Percentage of population engaged in agriculture	C Number of people per tractor
Ethiopia	Nomadic herding	135	77	10 882
Bangladesh	Intensive subsistence	158	82	20 581
China	Centrally planned	218	56	1 247
India	Intensive subsistence	233	60	1 480
Kenya	Nomadic herding/subsistence	279	76	3 006
Uruguay	Extensive commercial ranching	1 331	11	188
Malaysia	Commercial plantation	1 556	45	1 900
Spain	Mediterranean	3 853	14	65
Netherlands	Intensive commercial	7 716	4	77
Canada	Intensive commercial grain	13 034	4	38

[Source: Adapted from David Waugh, *Geography an Integrated Approach*]

- (a) Describe and account for the relationship shown between the **three** variables **A**, **B** and **C** on the table. [6 marks]
- (b) Explain what is meant by each of the following agricultural terms:
- (i) intensive
 - (ii) extensive
 - (iii) subsistence
 - (iv) commercial. [4 marks]
- (c) Examine, with reference to examples, some of the problems that have arisen as a result of recent attempts to increase agricultural output. [10 marks]

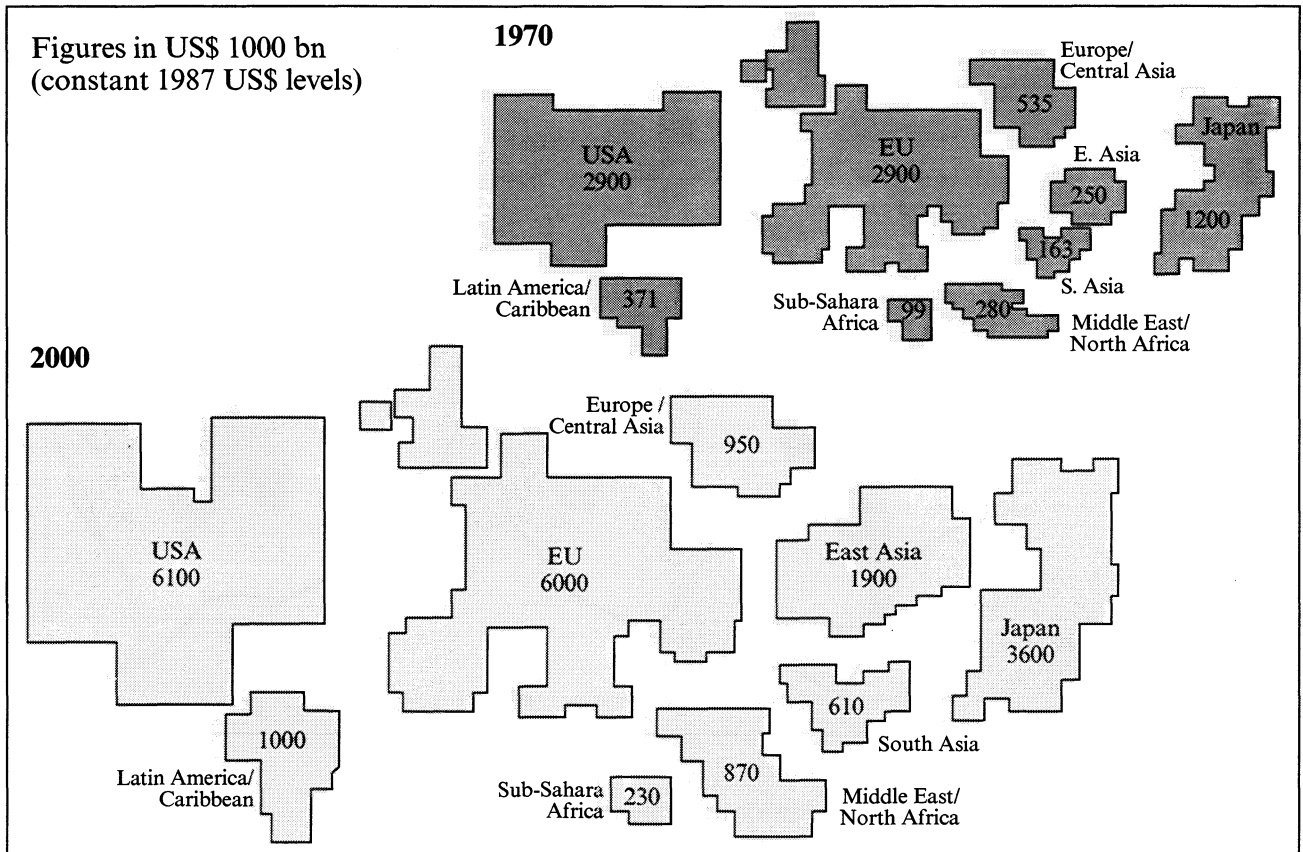
4. The table shows the quality of life for five selected large cities considering three indicators.

City	Murders per 100 000	Percentage of income spent on food	Persons per room
Mexico City	27.8	41	1.9
New York	12.8	16	0.5
Tokyo	1.4	18	0.9
Seoul	1.2	34	2.0
Calcutta	1.1	60	3.0

[Source: Garrett Nagle, *Advanced Geography*]

- (a) How useful is each of the **three** indicators as a measure of quality of life in cities? [6 marks]
- (b) Discuss **two** other indicators which you consider to be useful measures of quality of life in cities. [4 marks]
- (c) With reference to a city **or** large urban area that you have studied, describe and account for the economic, social and environmental problems that exist there. [10 marks]

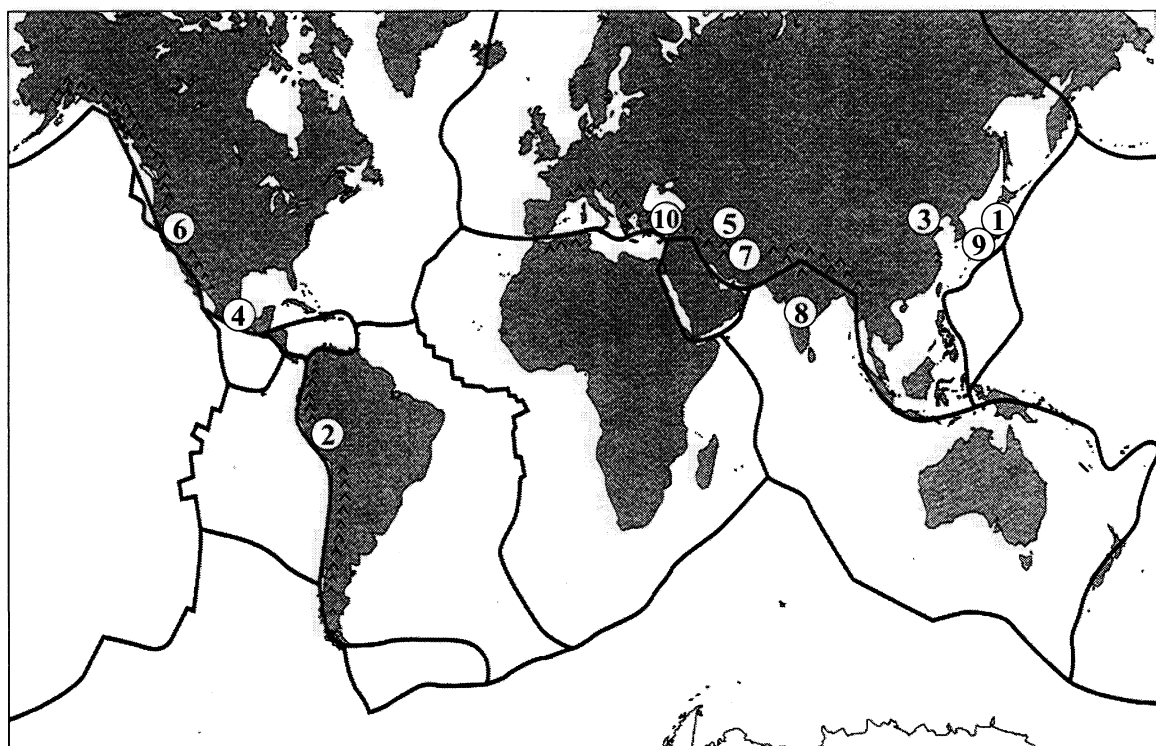
5. The map below shows global Gross Domestic Product (GDP) in 1970 and 2000. The size of each country/region is drawn in proportion to the size of its GDP.



[Source: Financial Times, March 1994]

- (a) Describe the main changes in global GDP that have occurred over the period of 30 years. [4 marks]
- (b) Define and evaluate GDP as a measure of development. [6 marks]
- (c) With reference to **one** country or region of your choice, discuss the external and internal forces responsible for its level and rate of development. [10 marks]

6. The map below shows the global distribution of major earthquakes between 1900 and 1999. The table shows the location (map reference 1-10), the date, the magnitude and the number of people killed by each earthquake event.



Key

^ Fold mountains — Major tectonic plate boundaries

[Source: *Landmark AS Geography*, Harper Collins (2000)]

Map reference	Location	Date	Magnitude (Richter scale)	Number of deaths
1	Tokyo, Japan	1923	8.2	150 000
2	Peru	1970	7.8	66 000
3	Tang Shan, China	1976	7.6	240 000
4	Mexico City	1985	8.1	7 000
5	Armenia	1985	7.0	25 000
6	San Francisco, USA	1989	7.1	63
7	Iran	1990	7.7	50 000
8	Maharashtra, India	1993	6.3	10 000
9	Kobe, Japan	1995	6.9	4 500
10	Turkey	1999	6.7	20 000

(This question continues on the following page)

(Question 6 continued)

- (a) With reference to examples from the map, describe and explain why earthquakes commonly occur close to plate boundaries. You should illustrate your answer with one, or more, labelled diagrams. *[10 marks]*
- (b) With reference to the table, give reasons for the variation in the number of deaths caused by earthquakes occurring globally between 1900 and 1999. *[10 marks]*
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