GCE

Edexcel GCE

Geography A (8214 / 9214)

6462

Summer 2005

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Mark Scheme (Results)

SECTION A

1   Study Figure 1 which shows global variations in population density.

a   With reference to Figure 1:

i   Name: 1
     1. A tropical region with a very low population density;

     Sahara or Amazonia are obvious choices but allow Australia

     2. An island in the Indian Ocean with a high population density.   1

     Madagascar or Sri Lanka are obvious choices but allow others drawn from
     knowledge as opposed to resource (Mauritius, Maldives)

ii   Describe the variations in population density in the equatorial   3
     regions.

     - Low in Amazon except coast
     - Generally densely populated
     - Obvious exception is Amazonia

     Point mark. For 3 marks must address variation

iii
     Suggest reasons why population density often declines with distance   4
     from the coast

     - Coasts are at lower altitude, so longer growing season
     - They are often areas of fertile soils provided by flood plains, so higher
       density
     - Ports and thus ,major cities are located there and attracts migrants
     - Retirement attracts people to the coast for the environmental quality
     - Climate becomes more extreme as one moves inland

4-3	Offers at least two reasons with convincing links to population density
2-1	Offers at least one reason with convincing link to population density or a series of assertions

b   **Explain why an area might experience seasonal variations in:**   **5**

    i   **population density**

    ii   **population structure**

- Density will change with summer tourists, migrant workers or university terms
- Structure will change according to profile of visitors by age, sex, employment etc.

5-4	Explains both.
3-1	Simple statements only or a detailed treatment of one variable

c   **With reference to a named country, describe and explain the impact of a rapidly growing population.**   **6**

- Impact might be negative or positive
- Impacts might be economic, social, cultural or political

6-5	At least two impacts fully described and explained with appropriate linkages established between the growth of population and the resulting effect. Convincing location
4-3	Range of impacts stated or one fully explained. Recognisable location
2-1	A limited description of impacts

Total 20 Marks

2　　　　　　Study Figure 2 which shows changes in the total populations and age structures for selected global regions.

a　　　　With reference to Figure 2:

i　　name which global region:　　　　　　　　　　　　　　　　　　　　2
(1) is predicted to have the largest number of elderly dependents by 2050

Europe

2) experienced the slowest rate of population growth between 1950 and 2000.

Europe

ii　　compare Europe and Northern America in terms of the predicted　　4
changes in the population size and structure.

- Europe's population predicted to fall.
- North America to experience declining rate of increase
- Europe ageing faster than N. America
- Data and/or dates adds detail

| 4-3 | Describes both in detail. Uses comparative language for 4 marks |
| 2-1 | Describes one or other variable in detail or both superficially |

b　　　　Suggest reasons why some rural areas have a higher than average percentage of elderly people.

i　　In MEDCs　　　　　　　　　　　　　　　　　　　　　　　　　　　3

- Retirement to coastal or rural areas
- Out-migration of the young leaving a lag-population of more elderly
- Developed reasons include decline of rural economy, growth in income and ability to choose retirement locations.
- Attraction of cities for young
- Low birth rate of ageing population

A mark for each reason. Further mark for development of either through examples or extension of idea.

ii　　In LEDCs　　　　　　　　　　　　　　　　　　　　　　　　　　3

- Out-migration from the countryside
- Longer life expectancy in some better of regions
- Development might include decline of subsistence agriculture, growth of urban industry and opportunities, role of commercial farming etc.
- Pull of urban employment and services

A mark for each reason but allow to 3 if out-migration is supported by examples (1) and supportive explanation (1 for each))

c   i   **Define the term natural resources.**   **2**

- Material found in nature that is of utility to man that we have the technology and the will to exploit.

Allow one for material found in nature or equivalent, and another for appropriate extension such as renewable/non-renewable

ii   **With the use of examples, explain how the availability of natural resources influences population size.**   **6**

- This is not straightforward. More resources do not necessarily imply higher population
- Many countries that are poorly resources have high population densities and vice versa
- Malthus has a view of carrying capacity
- Boserup offers an alternative view
- Underpopulation/overpopulation ideas

6-5	Recognises the relationship between population and resources may be complex/controversial. Convincing examples
4-3	Begins to qualify the nature of the relationship. Recognisable examples
2-1	Makes a statement about the value of natural resources

Total 20 Marks

3   **Study the Ordnance survey map extracts (1:25,000) which show the same area of Cambridge in 1947 and 1999.**

a   **With reference to the Ordnance survey map extracts:**

    i   **State which of the following grid squares showed the least change in land use**   1

        4356

    ii   **Describe the site of Trumpington;**   2

- 15 metres above sea level
- flat site
- just above flood plain of Cam

Allow one mark for each relevant descriptive point

    iii   **contrast the growth of Trumpington and Grantchester**   3

- Grantchester has experienced less growth than Trumpington
- Grantchester has grown to the west with one large estate
- Trumpinton has grown to the east
- Trumpington has grown along the main roads (north and south)

Allow one mark for each point but reserve third mark for recognition that Trumpington has grown more than Grantchester or similar contrast.

    iv   **Suggest reasons for these contrasts**   4

- Land ownership – Trumpington Hall
- Planning consent – facilitating development
- Transport and link to Cambridge – impact of roads
- Site characteristics –floodplain
- Housing built to follow school

4-3	At least two reasons stated and developed.
2-1	Either two reasons stated or one with some development

b   **Describe the impacts of urban growth on surrounding rural areas.**   4

- Changing land use from agriculture to urban
- Impact on rural communities and life-styles and economies
- Impact of leisure and recreational use of countryside
- Physical impacts eg run-off

Allow a mark for each legitimate impact and a further mark for extension or example

c   **For a named urban area describe and explain the distribution of retail**   **6**
        land use.

- C. B.D will dominate
- Out of town developments will also feature
- Suburban shopping areas may be mentioned .
- Explanation will involve land prices, planning, car-ownership, centrality and bid-rent theory.

6-5	Full description and explanation of at least two aspects. Convincing location
4-3	Describes and explains one aspect of land use or describes two or more with limited explanation. Recognisable location
2-1	A simple descriptive point about one aspect of land use. Limited locational detail.

Total 20 Marks

| 4 | | | Study Figure 4 which shows the components of change in the population of London between 1971 and 1999. | |

| a | | | With reference to Figure 4 | |

i   calculate the change in London's population in 1989   **1**

+55,000 (allow 50,000-60,000)

ii   identify the year in which population loss was greatest   **1**

1973

iii   Describe the changes in net migration.   **3**

- An upward trend in the period shown
- But not consistently so
- Two major downturns '84-'87 and '89-'91
- Data could be used to illustrate the above
- Change from net out-migration to net in-migration since 1980s

One mark each for the first three bullets – allow a second mark for data to support any point.

b   i   Describe and explain two characteristics of a typical Central Business District.   **4**

- Tall buildings because of need to intensify space
- High rents because of need for centrality and high demand bidding up rents
- Dominated by retail and commercial land use because they can afford to pay since they have high income per m^2
- Busy in daytime because of type of usage
- Few residents because few residences since they are out-bid
- Point of maximum accessibility because most cities grow outwards over time along lines of communication
- Oldest part of most cities because of history of growth
- Functional zoning of landuse

Any one factor can be 3 marks if well explained

ii   Distinguish between the characteristics of high-class and low-class residential areas in LEDC cities.   **5**

- Density of housing higher in l-c
- Quality of housing contrast
- Locational contrast – inner h-c, outer l-c
- Service provision varies – low in low class, high in high class
- H-c situated in areas with positive landscape features: l-c frequently not
- Ethnicity eg South Africa

5-4	Explains both nature of housing type and other aerial characteristics for both types
3-1	At least one characteristic adequately addressed or two simply outlined

c **With reference to a named city in an MEDC, describe and explain the pattern of industrial l land use.** 6

- MEDC can be interpreted liberally – allow NICs
- Be aware that industry can legitimately include retail and other service industries
- Explanation is likely to involve physical, human and historic variables.

6-5	Full description with thorough explanation. Locational detail is convincing.
4-3	Either full description with some limited explanation or simple description but with good explanation. Recognisable location
2-1	One or two simple descriptive points. Limited locational detail.

Total 20 marks

5   Study Figure 5 which shows the proportions of US-born and immigrant workers engaged in different forms of employment in the United States.

a   With reference to Figure 5:

i   state which occupational group has: 2
        1. the greatest proportion of US-born workers

        Managers, admin and executives

        2. the lowest proportion of US-born workers

        Farming/Forestry/Fishing

ii   describe the occupational pattern of immigrant workers;   3

        • Dominantly services
        • Second group of professional, skilled blue collar and assemblers.
        • First four categories account for about 64% of total
        • Poorly represented in technical, sales and farming / forestry / fishing

        One mark for each relevant point stated.
        Reserve third mark for moving beyond a list to idea of pattern

iii   Suggest reasons for this pattern   4

        • Migrants may lack skills / language hence service jobs, probably low-paid
        • Discrimination against them
        • Insufficient time yet to learn skills
        • Bring skills with them hence profs.
        • 'Brain drain' / head-hunted hence profs, execs etc.
        • Moving offices within Transnational Corporation (London-New York)
        • Have skills natives lack e.g. foreign languages
        • They are here to fill a specific gap in the labour market (e.g. UK, 1960s)
        • Labour shortages are filled from bottom up

        One mark for each legitimate reason , one mark for linkage to exemplar group x2

b   i   What are intervening obstacles to migration;   2

        Things that are perceived to be barriers to movement by potential migrants.

        Reserve 2nd mark for reference to perception / behavioural slant on migration or extension by example

ii Suggest reasons why migrants sometimes make dangerous journeys. **3**

Likely to be the strength of push & pull factors but be careful to credit answers that focus upon lack of understanding of the dangers or use cost-benefit language

- No choice
- Forced to undertake dangerous journey due to persecution
- Escaping severe physical hazards
- Benefits are perceived to be great
- Joining family
- Don't understand dangers
- Benefits exceed risks

One mark for each legitimate strong push/pull factor. Reserve 3rd mark for comment about lack of understanding of danger or clear statement that potential benefits justify risks

c **Describe and explain the social and demographic consequences of emigration (international out-migration) on the countries of origin.** **6**

Explanation is likely to be incorporated into description of consequences Consequences can be positive or negative.

- Loss of population thus pressure on resources and social stability may be relieved
- Loss of young men and changing family structure because men more likely to migrate
- Social dislocation is a consequence
- Remittances aid social development in sending region (education, etc.)

6-5	At least one social and demographic consequences clearly explained with a clear focus on the country of origin
4-3	At least one consequence fully explained or a limited explanation of two
2-1	One social or demographic consequence described

Total 20 Marks

6 Study Figure 6 which contains extracts from interviews conducted with residents of villages in rural Wales that have experienced recent in-migration from England.

a With reference to Figure 6:

i State one positive social change associated with this migration; **1**

- Keeps school going
- Place would die
- They learn the language

Either for 1

ii State one negative social change associated with this migration; **1**

- Local identity threatened
- Language under pressure
- Community dies as local people forced away by house prices (*must specify social impact*)

Any one

iii describe the economic and demographic consequences of this in-migration for these villages **4**

- Rising house values
- Increased tax revenue
- Multiplier impact of spending
- Maintenance of jobs
- Increase population or arrest decline
- Likely to increase elderly dependents

One mark for each legitimate factor. Allow any factor to 2 if extended
Must have economic and demographic for 4 marks

b **i** Why might some rural areas within a MEDC attract more migrants than others? **4**

- Better pull factors
- Services and facilities
- Internet / broadband / mobile reception
- Transport links
- Key settlements
- Nearer town or city for commuting
- Perception of friendliness / lack of

4-3	Two or more factors with at least one extended by example. For 4 marks compares areas
2-1	One or two factors stated.

ii Suggest why the volume of urban to rural migration in LEDCs is less than in MEDCs.   **4**

- Differences in the rural economies and society
- Differences in the transport systems constraining commuting
- Differences in income and circulation costs
- Differences in attitudes and perception of rural areas as preferred places to live

4-3	Two or more factors with at least one extended or example given. Clear on volume for 4 marks
2-1	One or two factors stated.

c   **Describe and explain the varied effects of migrants on the physical environment**   **6**

Physical environment might be biosphere, hydrosphere, atmosphere or lithosphere
Explanation involves establishing a coherent link between the migratory movement and the impact

- Positive impacts of recovery of abandoned areas. Landscaping of wasteland areas
- Desertification and deforestation
- Introduction of agroecosystems to replace natural ecosystems
- Introduction of new species
- Impact on climate of some of the above
- Management of rivers as people arrive as in US south-west

6-5	Describes and explains at least two impacts. Appropriate and convincing references to the physical environment
4-3	Describes more than one impact Some limited explanation. May provide locational detail.
2-1	Describes an impact. A recognisable location

Total 20 Marks