#### UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

# MARK SCHEME for the October/November 2010 question paper for the guidance of teachers

#### 9696 GEOGRAPHY

9696/33

Paper 3 (Advanced Human Options), maximum raw mark 50

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Mark schemes must be read in conjunction with the question papers and the report on the examination.

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#### Production, location and change

## (a) Figs 1A and 1B show changes in an agricultural area in France, an MEDC, under the European Union's Common Agricultural Policy (CAP). Describe, and suggest reasons for, the changes shown.

The changes include:

- growth of the village and road network
- increases in woodland and dispersed buildings
- loss of hedgerows, moorland and water-retentive valley bottom land
- introduction of intensive indoor livestock units and reservoir

Candidates suggest reasons from their wider geographical understanding of agricultural change, as the syllabus requires no knowledge of the CAP.

Settlement increases because of natural increase, counterurbanisation, retirement migration and change in family structure. Landscape changes may be explained by the intensification of agriculture under the CAP, for example removing hedgerows and amalgamating fields to use farm machines. Other factors include profit motivation; modernisation of rural life and farming practices; a lack of environmental protection for the moorland; initiatives promoting wildlife and tree-planting subsidies increasing woodland, etc.

Mark on overall quality, not requiring comprehensive responses and bearing in mind the three bands of marks and levels of response: **0–4**, **5–7** and **8–10**.

Descriptive responses not including reasons remain in the lowest band.

### (b) Under what circumstances may irrigation be necessary in agriculture? Support your response with examples. [15]

Irrigation, the addition of water to land artificially, is considered necessary in a number of circumstances: permanently in areas where ppt < crop demand; seasonally in areas which experience a seasonal drought; occasionally, where ppt is unusually low and cultivation is threatened. This may be linked to background factors such as economic potential, capital availability, stability, HEP schemes, climate change, government initiatives, NGOs, etc. Candidates may include forms of irrigation, e.g. drip, boom, borehole, but this is not needed.

#### Candidates will probably:

- L3 Provide a clear, well-structured account of two or more circumstances. Show a high level of conceptual understanding and detailed knowledge using the examples to make effective links to background factors. [12–15]
- L2 Produce a sound response, which may be good in parts, but which is limited in overall detail about circumstances and/or development of background factors. For one circumstance, max.10 [7–11]
- L1 Make one or more simple points in a response which shows basic understanding of irrigation, little knowledge of examples and/or a lack of time. Notes and fragments remain in this level. [0–6]

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#### 2 (a) Outline the operation of functional linkages in relation to manufacturing and related service industry. [10]

Functional linkages are the relationships or links between one industry and another. They take a number of forms:

forward to the industry that consumes the industrial product backward to the industry that provides the raw material/component vertical a raw material goes through several successive processes an industry relies on several/many others for supplies horizontal diagonal an industry makes something which can be used in several linked

industries e.g. bolts

A broader view of linkages includes many services such as information, finance, subcontracting, maintenance, advertising, packaging, transport, etc.

Small labelled or annotated diagrams may assist the response and save time.

Mark on overall quality, bearing in mind the three bands of marks and levels of response: 0-4, 5-7 and 8-10. For a response without examples, either generic or actual, max. 6.

The highest quality responses should include related services.

#### (b) With the help of examples, explain what industrialists might look for as an ideal location for manufacturing in the 21st century. [15]

An open and permissive question to allow candidates to develop their own approach. One approach might be that it depends on the industry. Much industrial location suffers from inertia and represents locational choices based on factors which are out-of-date. So-called "ideal" locations could be maximally profitable ones, well-serviced, secure, easily accessible, with space for expansion, in areas which receive tax breaks or subsidies, in good surroundings to enhance the experience of workers, etc.

Candidates will probably:

- L3 Frame their whole response as an assessment, showing good conceptual understanding of industrial location and change. Draw on detailed knowledge of examples as the basis for an accomplished and well-organised analysis of contemporary location. [12–15]
- L2 Show reasonable to good knowledge and understanding of industrial location and of the chosen example(s), but make an assessment which is partial or limited overall, which may not focus on the "ideal". May be narrow and cover only a few elements. [7-11]
- L1 Offer a response of basic quality which may describe more than explain or simply state the ideal. Write generally about locations, or perhaps, broadly with little or no exemplar detail. Note-form and fragmentary responses remain in this level. [0-6]

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#### **Environmental management**

### Fig. 2 shows power consumption per person and GDP per person for selected countries in 2006. [10]

#### (a) Describe, and suggest reasons for, the relationships shown in Fig. 2.

On the log/log graph, there is a clear linear relationship that power consumption increases with GDP per person. There is however considerable divergence around the mean, for example at US\$2000, power consumption ranges from 5 to approximately 56 kWh per day per person. Countries with low or medium development consume low to middle range amounts of power; countries with high human development in the middle to upper range, with an interesting zone of overlap between US\$5000 and 13000.

In suggesting reasons, reference should be made to different sectors (industrial, domestic, transport, etc.) and to the ways in which direct and indirect demands for power increase with development.

Mark on overall quality, not requiring comprehensive responses and bearing in mind the three bands of marks and levels of response: **0–4**, **5–7** and **8–10**. Descriptive responses, not including reasons, remain in the lowest band.

### (b) Use examples to explain how, as countries continue to develop, their increasing demands for energy may be met. [15]

An open question allowing candidates to develop their own approach and use the examples they have. In terms of the options (non-renewables, renewables and nuclear) and strategies (import/export, energy conservation, fuel efficiency, etc.), much depends on the examples taken. Recognition that it may not be, and that fuel and power shortages may result, is creditable.

#### Candidates will probably:

- L3 Provide a high quality explanation of how demands for energy may be met. Whilst not being comprehensive, show a realistic contemporary understanding of issues surrounding the chosen examples. Demonstrate a grasp of the "big picture" and offer supportive detail.

  [12–15]
- L2 Develop a response of sound quality, which may be good in parts or as far as it goes. The response may be broad and lacking detail, or be specific on a narrower base. For an explanation based on one country, max. 10. [7–11]
- L1 Make a response of basic quality, which at the upper end is just satisfactory. Make one or more simple points about meeting the demand for power. Write generally, hypothetically, or use an example superficially. Notes and fragments remain in this level.

  [0–6]

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#### 4 (a) Explain some of the causes of the degradation of *rural* environments.

[10]

Candidates may develop their own approach depending on the rural environments chosen; causes on a tourist coastline will differ from those in a rural area in an MEDC experiencing counterurbanisation, or in an LEDC experiencing overpopulation. The syllabus lists "e.g. overpopulation, poor agricultural practices, deforestation". Credit may be given to negative reasoning such as the absence of environmental protection or political will/control.

Indicators of quality may include the use of detailed material and a sense of the dynamic and interactive nature of the causes.

Mark on overall quality, bearing in mind three bands of marks and levels of response: **0–4**, **5–7** and **8–10**.

### (b) Is landfill the best way to dispose of solid wastes? With the help of examples, assess different approaches to their disposal. [15]

Solid wastes may be disposed of in a number of ways, such as incineration, landfill, recycling, reusing and composting. Initiatives and attempts may be pursued at personal, community, local authority, national or supranational scales.

Candidates are free to use the material they have in the best way. Material on litter disposal is acceptable, but what happens to the litter after is more pertinent.

Some materials cannot be burned, some cannot be recycled, only biological wastes can be composted, etc. The consumer society produces growing tonnages of metal wastes, from scrap vehicles to drinks cans. There are major questions about plastics, methane from landfill, and growing concerns about the disposal of so-called e-waste, old electronic hardware, e.g. computers.

Candidates will probably:

- L3 Structure their whole response as an assessment, basing it in detailed knowledge of different approaches to waste disposal. Demonstrate strong conceptual understanding of the environmental issues and impress by overall perspective. [12–15]
- L2 Develop a response of sound to good quality. Whilst satisfactory as far as it goes, candidates may have limited knowledge of approaches, partial understanding of the environmental issues involved and/or limited skills in making or expressing assessment.

  [7–11]
- L1 Make a response which is more a description than an assessment. Make a few basic observations about waste disposal, perhaps straying from solid wastes or displaying faulty understanding. Write generally or generically, with little or no use of examples. Notes and fragments remain in this level.

  [0–6]

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#### Global interdependence

#### 5 (a) Outline the causes of the debt crisis and describe recent initiatives for debt relief. [10]

The outline of **causes** is likely to include the key ideas of large-scale lending by the World Bank and the IMF, to newly-independent LEDCs, for economic development, e.g. infrastructure, at a time when their economies were growing, some strongly. The world recession of the 1970s and early 1980s and the increase in oil prices caused countries to start to default on repayments. Once behind, there was little prospect of catching up. In some countries, the financial situation was worsened by instability, the cost of civil wars, corruption, etc. Causes may be seen as including attitudes both to lending and borrowing, power structures in international decision-making and trade, global capitalism, etc.

Debt relief involves the partial or total forgiveness or cancelling of loans, in the recognition that LEDCs cannot repay them in full and that development is impeded by indebtedness. Here **recent initiatives** include:

- World Bank/IMF HIPC (Heavily Indebted Poor Countries) Initiative
- action cancelling debt in Africa after the G8 summit, 2005 (MDRI)

By the end of 2008, an estimated total of US\$102 billion debt relief was in place. Candidates may also use material at the national scale.

Mark on overall quality, scope and detail of examples, bearing in mind three levels of response and the mark bands of **0–4**, **5–7** and **8–10**.

### (b) To what extent do you agree with the view that, for LEDCs, the disadvantages of receiving aid are greater than the benefits? [15]

There is a large literature about the "rights" and "wrongs" of different types of aid and whether aid creates dependency. Candidates are free to develop their own approach, making best use of the material they have. One approach is to consider different types of aid, e.g. tied aid and humanitarian relief aid.

Candidates will probably:

- L3 Demonstrate strong understanding of aid, and, whilst not making a comprehensive response, convince by their 'big picture' perspective, use of examples, argument and quality of assessment. [12–15]
- L2 Develop a satisfactory to good response of overall sound quality. Show fair to good knowledge of the disadvantages and benefits of aid, but make a restrictive response that is limited in overview, use of examples and/or the assessment offered. [7–11]
- L1 Make a few basic points in a response which is more a description of aid than an assessment of its outcomes and which may contain weak or faulty understanding. Write broadly and generally with little or no use of examples. Simply offer fragments or notes.

[0-6]

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- 6 (a) Tourism is important to many small islands. Table 1 shows, for selected islands in 2001, an index of the penetration of tourism and the three variables on which the index is based.
  - (i) Using information from Table 1, compare the extent to which tourism had penetrated the islands of Guam and Malta. [3]

The islands had the same TP1 (0.37) **1**, but differences in the constituent measures **2**. Credit analysis in comparison and use of data.

(ii) Why might variable B, tourist density per 1000 population, be useful in studying the impact of tourism? [2]

**B** gives a sense of presence, cf. psychological carrying capacity, Doxey's "Irridex" indicates that residents become annoyed with tourists at certain densities. Will affect built environment, services. Mark explanation on merit, crediting understanding of the sector. Social needed for 2.

(iii) Give three possible reasons why the development of tourism was limited in the least developed tourist economies in Table 1. [5]

These may be "positive" reasons, e.g. policy, environmental protection or choice of ecotourism, or "negative" reasons, e.g. poverty, remoteness, lack of good beaches, susceptibility to hazards, nature of regime, etc.

Exploration or involvement stages in the life cycle may be cited.

*Note:* Knowledge of the islands is not required; from understanding of the sector, reasons are to be credited, 2 or 1 to the maximum.

(b) Consider the view that economies based on tourism are at risk because tourism is unpredictable. [15]

It is likely that most candidates will supply evidence both of tourism's unpredictability, and of economies being at risk from recent events such as terrorism, hazards, the economic downturn, etc. Some may consider economic diversity (or the lack of it), the tourist multiplier, direct/indirect employment and seasonality. Ways to maintain tourist arrivals include planning, innovation, promotion, ecotourism. Any scale of economy is valid; e.g. resort, island, country.

Candidates will probably:

- L3 Develop a high quality response, offering a consideration which is distinguished by its conceptual basis, contemporary knowledge and overall perspective. [12–15]
- L2 Provide a response of sound to good quality, which is satisfactory as far as it goes, but which remains underdeveloped in detail, scope or in the consideration given.

  For a response on one economy, max. 10.

  [7–11]
- L1 Make a response which is more a description than a consideration, or which may simply agree with the question. Write broadly or generally about unpredictability and/or vulnerability. Offer fragments or notes. [0–6]

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#### **Economic transition**

#### 7 (a) Describe how poverty may affect development.

[10]

Candidates may write about personal poverty, structural poverty or the least economically developed countries. Poverty may be defined as people whose income is US\$1 a day or less (although OECD and World Bank now use \$1.25).

Classically, a 'vicious cycle of poverty' exists and a labelled diagram may assist.

Poverty may be seen as operating in two ways:

- by restricting opportunity, impeding social and economic wellbeing and and, therefore, the potential for improvement
- by attracting attention, initiatives of government and NGOs, etc. and so stimulating development.

Candidates may make other links e.g. to subsistence economies, squatter settlement and slums, debt or power structures within countries. Whilst it is anticipated that most candidates will use LEDC contexts, material on poverty in MEDCs is creditable.

Mark on overall quality, bearing in mind three levels of response and the mark bands of **0–4**, **5–7** and **8–10**. For a response without examples, max. 6.

### (b) Fig. 3 lists the Millennium Development Goals (MDGs), which UN member countries have pledged to achieve by 2015.

#### Why might the MDGs be difficult to achieve? Support your response with examples. [15]

Candidates are free to develop their own approach to the MDGs, which have specific objectives identified in each of the 8 areas, but of which no specific knowledge is required by the syllabus. Whatever the approach, the focus is on difficulties, although achievements clearly have a place. The difficulties may be social/cultural, economic, environmental and political, and at any scale.

Candidates will probably:

- L3 Develop a convincing assessment which does not need to be comprehensive to impress by its global perspective, diverse examples and strength of approach to the topic. [12–15]
- L2 Provide a response of sound quality overall, which may be good in parts, but which remains limited in understanding of development, knowledge of examples, or overview offered. [7–11]
- L1 Make one or more simple observations about development and why it is difficult. Struggle to select and apply their material in response to the question set. Answer generally or broadly, offering few examples. Note-form and fragmentary responses remain in this level. [0–6]

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### 8 (a) Describe and explain the connections between industrialisation in some countries and deindustrialisation in others. [10]

The globalisation of industrial activity involves global shift and the emergence of global patterns of production and markets. These are possible through changes in transport technology, telecoms, banking systems, trade agreements, etc.

TNCs are keen to maximise profit and one way to do this is to benefit from the comparative advantages of LEDCs and NICs in terms of costs of resources, labour and locations. It also allows for the penetration of new and potentially huge markets, e.g. in South America or China. This has meant the structural loss of manufacturing industry (deindustrialisation) in MEDCs, such as the USA and Western Europe, and the progression to a service-based economy (tertiarisation).

At the same time manufacturing industry has been established in NICs and some LEDCs, leading to some industrial growth and a multiplier effect (but also some closure of uncompetitive domestic industries). Further shifts are possible, e.g. from NIC to LEDC as the spatial margins to profitability change.

Mark on overall quality, bearing in mind the three bands of marks and levels of response: **0–4**, **5–7** and **8–10**. For a response without examples, max. 6.

### (b) To what extent is the role of the government the key to the emergence and growth of newly industrialised countries (NICs)? [15]

It is likely that candidates will see the government role as of major importance:

- socially, e.g. investing in education
- economically, e.g. ensuring economic stability, offering incentives
- environmentally, e.g. developing infrastructure
- politically, e.g. entering into trade agreements, good governance

Some candidates may also identify other factors, such as a strategic location or a colonial legacy, creditably. Any NICs are valid, from the Asian Tigers to newer and emergent countries, sometimes called STICs, etc. whose paths differ.

Candidates will probably:

- L3 Develop an effective assessment of the government's role in NICs, based on clear and detailed evidence. Whilst not comprehensive, impress by overall perspective, and the expression of an evaluative response, making reference to other factors. [12–15]
- L2 Provide a sound response which lacks full development but which may be good in parts. Show some knowledge of the government role in NICs but the response remains limited in one or more ways: overall understanding, structure or assessment. For a response about one NIC, max.10. [7–11]
- L1 Make a descriptive response rather than an evaluative one or provide a simple and unsupported assessment. Write loosely or generally about NICs. Note-form and fragmentary responses remain in this level. [0–6]