UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

MARK SCHEME for the May/June 2009 question paper

for the guidance of teachers

9696 GEOGRAPHY

9696/03 Paper 3 (Human Options), maximum raw mark 50

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

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UNIVERSITY of CAMBRIDGE
International Examinations

1 For *one* named agricultural system (arable, pastoral or mixed) which you have studied:

An open and permissive question to enable the use of any case. The syllabus lists arable and pastoral, but mixed is included both for reality and to be in the candidates' interests.

(a) describe and explain the intensity of agricultural production in terms of the relationships between inputs and outputs.

Intensity is explained as the relationship between inputs and outputs. Candidates may draw a simple diagram, for example to show "large" labour + "small" land = "high" output. Basic accounts may identify inputs and outputs broadly and generally, but in better accounts some consideration of the nature of labour supply, for example, the quality of an output or of the importance of 'other factors' is likely. Labour-intensive, capital-intensive and extensive systems may be identified, although these terms often cause some confusion.

Suggest that **describe** and **explain** be marked together. If a candidate considers more than one system, credit only the better or best. It may help to bear in mind the following mark bands in relation to overall quality: **0–4, 5–7** and **8–10**. [10]

(b) Assess the importance of different factors in causing changes to your chosen agricultural system.

All systems are likely to change, although the **changes** here may be in the (recent) past, the present or the near future. Any **changes** and **factors** are acceptable (physical, social, economic, political). Indications of quality may include contemporary detail, a sense of dynamism and an assessment which is relative and real about what has changed, is changing or will change (or not).

Candidates will probably:

L3 Provide an effective assessment which shows the relative importance of different factors (probably in two or more dimensions) in causing changes to the chosen agricultural system. Show detailed knowledge, good conceptual understanding of agricultural production and organise the account well. [12–15]

L2 Make an account which is sound to good in quality, although perhaps uneven. Develop a suitable but limited assessment which is restricted in factors covered and/or changes considered and/or language/skills. May offer a narrative with some evaluative comments e.g. to 'top' and 'tail'. For a response about one change, max. 10, if done well. [7–11]

L1 Offer an account of basic quality, perhaps struggling to use the chosen case in the required manner. Make a response which is descriptive in character with little or no assessment content. Note-form and fragmentary responses remain in this level. [0–6]

[Total: 25]

2 Land is a factor of production for both agriculture and manufacturing industry. The factors of production are shown in Fig. 1.

A crossover question relating to both topics within this option.

(a) (i) Give the meaning of the term *land tenure* in agriculture. Explain briefly how *two* different types of land tenure may affect agricultural production.

the organisation of landholding/the ownership of land **1**

Tenure affects agricultural production through factors such as motivation and incentives, availability of labour and capital and decision-making, e.g. for owner occupiers, tenants, communal systems, the state. **4**

Please show in text **/1** and **/4** [5]

(ii) How may land influence the location of manufacturing?

In a number of ways including
- cost and availability
- source of raw materials (and energy)
- positive and negative site* characteristics for factories
- situation* e.g. rural/urban; central/peripheral; congestion
- other

* Classically *site* is the actual land built on, *situation* the overall location. Suggest that a full answer explores at least two of the above. [5]

(b) With the help of one or more examples, assess the factors that might affect either **the extension of cultivation in agriculture** or **the expansion of manufacturing industry.**

Here **factors** (social, economic, political, environmental or physical) is permissive to allow candidates to use the examples they have. However, if a candidate tackles both agriculture and manufacturing, credit only the better.

Candidates will probably:

L3 Structure their whole response as an assessment, integrating content and comment. Show detailed knowledge of the chosen example(s) and good conceptual understanding of factors in at least two dimensions. [12–15]

L2 Provide a response of satisfactory quality overall, which may contain some good elements, but which remains restricted in the example(s) used, understanding shown and/or assessment offered. [7–11]

L1 Have a few basic points to make and may struggle to direct their material to the question set. Show simple or faulty conceptual understanding. Make a descriptive response with little or no assessment. Notes and fragments remain in this level. [0–6]

[Total: 25]

3 (a) Fig. 2 shows the percentage of total energy consumption from different sources for world regions in 2006.

Describe and briefly explain the varying contribution of *fossil fuels* to the energy consumption of these regions.

Candidates should identify coal, natural gas and oil only. Accounts that consider these separately as well as together may do better, given the very different usage of coal and natural gas. Approximate percentages for ease of reference:

	N Am	S&C Am	E&CIS	M East	Africa	Asia/P
coal	22	4	18	2	31	49
gas	25	21	35	46	21	10
oil	40	45	32	51	41	32
total	87	70	85	99	93	91

Many candidates may focus on the 'highs' and 'lows', but reward well responses which attempt to be fuller. The explanation is likely to be in terms of factors affecting supply (physical, social, economic, political).
Candidates must both **describe** and **explain**; it may help to bear in mind the mark bands **0–4, 5–7** and **8–10** in relation to overall quality. [10]

(b) Assess the environmental impacts associated with the development of two or more *renewable* energy resources.

Attention is more often given to the positive environmental impacts of **renewables** as alternatives to pollutative and depleting non-renewable energy resources, than to the negative impacts. Aware candidates know of the counter-arguments in environmental terms, such as,

HEP e.g. flooding land, methane production, instability, ecosystem loss
wind e.g. visual impact, mountains and coasts, impact on birds
tidal e.g. disruption of estuaries as habitats, silting

Negative environmental impacts may be found for all types including solar, geothermal, biofuels etc. Nuclear, although conditionally renewable, is not acceptable. The assessment may be in positive/negative or cost/benefit terms and relate to energy needs, local populations, environmental quality, land-use etc.

Candidates will probably:

L3 Provide a perceptive assessment of environmental impacts, based on detailed knowledge of the chosen renewables and good conceptual understanding. [12–15]

L2 Develop a response of satisfactory to good quality. Cover one renewable well and the other(s) less so, or deal with all in a restricted manner. Show sound but limited knowledge and suitable but limited assessment. [7–11]

L1 Make one or more basic points about energy, maybe defining 'renewable' and/or 'impacts' weakly. Take a descriptive not an evaluative approach. Fragmentary and note-form responses remain in L1. [0–6]

[Total: 25]

4 (a) The World Health Organization believes that, on average, 4.6 million deaths per year are caused by air pollution and 5.1 million deaths by water pollution.

With the help of examples, describe and explain some of the links between pollution and mortality.

WHO data is for 'directly attributable' deaths, mainly relating to breathing difficulties associated with poor air quality and diseases such as diarrhoea, dysentery and typhoid from contaminated water in LEDCs. This gives candidates an opportunity to combine material for the Core (factors affecting mortality) and this environmental option. Any medium (land, air, water) or source is valid.

Whilst any examples are acceptable better candidates may do well to combine background pollution (above) with accidents or incidents such as Bhopal, 1984, and may show an appreciation of timescale in relation to mortality. For example, the gas leak at Bhopal killed 3,828 people immediately (official figures) but an estimated 22,000 by 2007, with approx. 120,000 suffering effects such as cancers and breathing difficulties from lung damage.

It may help to bear in mind the following mark bands in relation to overall quality: **0–4, 5–7** and **8–10**. [10]

(b) Why is it so difficult to solve the problem of air pollution?

Candidates ideally combine a number of reasons and show an appreciation of scale, complexity, dynamism and management issues. Factors may be physical, such as micro-climatic effects and natural sources; social, such as population growth or illiteracy; economic, such as multiple sources, development issues, costs; or political, such as transborder issues, international treaties etc.

Candidates will probably:

L3 Provide a strong overall perspective on the topic, which whilst not fully comprehensive shows high levels of knowledge and exemplar support, and conceptual understanding. Impress with the reality of the account and the ability to organise the explanation. [12–15]

L2 Make a satisfactory to good attempt at an explanation. It may be unbalanced in emphasis, covering one or more aspects in detail and mentioning others, or broader with limited depth. For a response based on one example only, max. 10. [7–11]

L1 Write descriptively about air pollution rather than addressing the question set. Provide one or more basic reasons, simply expressed in a partial explanation. Offer little or no exemplar support, maybe writing generally.
Fragmentary and note-form responses remain in this level. [0–6]

[Total: 25]

5 With reference to *one* country:

An opportunity to use the management case study from the syllabus, section **3.2**. The question is open and permissive in order to enable candidates to use the example they have from anywhere in the world. Home country remains very popular. It is legitimate to include invisible exports, and therefore tourism, but only as part of the response.

(a) describe and explain some of the major issues the country faces in its involvement in world trade;

It is likely from past experience that **major issues** may include the following sorts of phenomena,

physical	e.g. remoteness, access, landlocked, resource endowment, hazards
social	e.g. labour, skills, education, QA, population pressure, fashion
economic	e.g. world market, innovation, competitiveness, currency, tariffs
political	e.g. WTO, trade blocs, instability, sanctions

A full response consists of two or more issues, well developed.
For one issue, **max. 6**.
Use the mark bands **0–4, 5–7** and **8–10** as a guide to overall quality. [10]

(b) evaluate the country's trading strategy.

The response may be static (contemporary) or dynamic, reflecting change over time, for example in an NIC with a transition from import substitution to specialist exports or in the face of market changes. The command word **evaluate** involves assessment and may yield comments on costs and benefits, strengths and weaknesses etc. Any observations on the values which underpin the **strategy** e.g. in terms of development, government policy or the use of the country's resources (physical and human) are especially creditable. So too is material which shows differentiation between locations and/or groups of people.

Candidates will probably:

L3 Provide a well developed evaluation of the trading strategy of the chosen country, showing judgment and making use of detailed evidence. Impress by the perspective taken and the organisation of the account. [12–15]

L2 Offer a sound but limited evaluation, which may include both good observations and have apparent gaps. Show satisfactory knowledge of the trading strategy and suitable understanding but lack development which is fuller and deeper comments. [7–11]

L1 Make one or more simple observations about the country's trade, in which a strategy may not be clear. Take a largely descriptive rather than an evaluative approach. Lack the knowledge, understanding, skills (or time) to respond in more than a basic manner. [0–6]

[Total: 25]

6 Table 1 shows international tourist arrivals in world regions in 1995 and 2000 and forecasts made for future years.

(a) (i) Describe the *main* features of the data in Table 1.

Elements of overall analysis and data support are needed.

Tourist arrivals in all regions are forecast to increase, but this growth varies over time and between world regions. **2**
Data support (absolute or relative). **2** [4]

(ii) With the help of examples, outline *three* different reasons why the forecasts of international tourist arrivals might turn out to be inaccurate.

The **reasons** may fall into either one of the following broad areas,

- changing circumstances and intervening events
  e.g. concerns about global terrorism or diseases such as SARS; political instability; wars; the world economy
- difficulties of making forecasts
  e.g. initial data collection (1995); assumptions on which all forecasts are based; progressive divergence over time (close to 2010 already); errors; the role of the unforeseen; fashion

Suggest credit **2, 2, 2** to **3, 2, 1**. [6]

(b) How useful is the application of the life cycle model of tourism at the scale of world regions?

Although commonly associated with the emergence of one resort or destination, Butler's model can be applied at other scales. It may, for example, be useful in diagnosing the history of tourism development in a region, or providing examples of all the stages, but it may be somewhat meaningless in combining countries which are very different in terms of their nature, attitudes to tourism or policy. Candidates may answer generally, or might use their home region for exemplar support. Clearly an annotated diagram of the model would assist the response.

Candidates will probably:

L3 Provide a good assessment of the model's usefulness at this scale, supported by examples from one or more world regions. Demonstrate good conceptual understanding of the model and models' use. [12–15]

L2 Show sound knowledge and understanding of the life cycle of model. Apply it and assess its usefulness in a partial or limited manner. At the upper end, include some good elements; at the lower end, remain just satisfactory. [7–11]

L1 Struggle to adapt the material they have to answer the question set. Make one or more basic points in a descriptive manner. Assessment may be perfunctory or lacking and understanding or recall faulty. [0–6]

[Total: 25]

7 (a) Fig. 3 shows Rostow's model of economic growth.
Describe and explain the roles of the primary, secondary, tertiary and quaternary sectors in economic development, with reference to the stages shown in Fig. 3.

Whilst Rostow's model is not specified, the roles of the four sectors are. A full answer involves some comment on each of the five stages (but not on all four sectors in each). Understanding of trends in employment; linkages; the multiplier effect; diversification; and the progression of industrialisation, deindustrialisation and tertiarisation may assist the explanation.

For a sound answer on the stages, but with little or no reference to Fig. 3, **max. 6**.

Please use the mark bands **0–4, 5–7** and **8–10** as a guide to overall quality. [10]

(b) With reference to the development of one or more regions within **a named country, assess the usefulness of an understanding of cumulative causation.**

The three key elements to look for are initial advantages, spread (and backwash) effects and the cumulation, multiplier, up spiral or "snowball" phenomenon. It is possible to approach this using any **region(s)**, core or peripheral. It is likely that most candidates will find **usefulness** but its limitations or the role of other factors, may distinguish better responses.

Candidates will probably:

L3 Provide an assured assessment, demonstrating detailed knowledge of the development of the chosen region(s) and a firm grasp of the three elements of cumulative causation as a concept. Recognise limitations as well as usefulness. [12–15]

L2 Develop a sound response, which may contain some good observations.
Produce a broad piece of restricted depth or one which is uneven and/or unbalanced in terms of level of knowledge, quality of understanding and assessment made. [7–11]

L1 Make a response which is basic or simplistic in nature. Offer one or more points in a context which lacks detail or may be general to the chosen country. Show partial or faulty understanding of cumulative causation. Make little or no effective assessment, writing descriptively more than analytically. [0–6]

[Total: 25]

8 (a) With the help of examples, explain why some indices of social and economic inequality are considered better than others.

This can be approached in at least two different ways: the overall suitability, robustness or helpfulness of some single criterion indices, and the generally accepted preference for multiple criterion indices (HDI, PQLI, HFI etc.) overall.

A full answer needs to touch both social and economic, and ideally, sees social as more than simply demographic indices (fertility rate, life expectancy, infant mortality rate etc.)

Credit responses which try to explore and examine what **better** may mean in this context and which cover the **others** suitably rather than assuming them away.

Please use the mark bands **0–4, 5–7** and **8–10** as a guide to overall quality. [10]

(b) In some LEDCs why may the majority of the population experience little social and economic development? Support your response with examples.

An opportunity to consider factors in an interactive manner in several dimensions,

social	e.g. tribalism, elites, population pressure, AIDS
economic	e.g. extreme poverty, indebtedness, lack of funds, diversion of funds towards other priorities, inflation, landlessness
physical	e.g. extreme environments, remoteness, water issues, land degradation, hazards
political	e.g. instability, breakdown in governmental structures, corruption, inability to cope.

An appreciation of scale, pressures and the implications of rural and urban residence may assist the response.

Candidates will probably:

L3 Provide an account distinguished by its overall perspective, which integrates exemplar content and reasoning, drawing on factors in a number of dimensions in an interactive way. [12–15]

L2 Show some knowledge and understanding of the issue and of suitable examples, but provide an account, which remains partial or restricted in scope. For a well-developed response on one LEDC, max. 10. [7–11]

L1 Make one or more basic points in quite a general way. Focus on one or two issues, showing little appreciation of the wider picture. Consider development broadly, rather than as experienced by the majority. Offer notes or fragments. [0–6]

[Total: 25]