UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Level

MARK SCHEME for the November 2005 question paper

9696 GEOGRAPHY

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

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which Examiners were initially instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking be.g.an. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

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

9 (a) Fig. 5 shows changes in the area of agricultural land in China, 1978-96.

(i) Using Fig. 5, name the region shown to have had,

A - the greatest percentage increase in agricultural area,
Yunnan (6.1, but not needed for credit). **(1)**

B - the greatest percentage decrease in agricultural area.
Shanghai (-19.7, but not needed for credit). **(1)** **[2]**

(ii) To what extent can an east-west pattern be seen in Fig. 5?

Suggest credit element(s) of agreement. **(2/3)**
e.g. between Border provinces (+1%) and Coastal (-7.5%) or a general pattern of small gains/stability in the W and medium to large losses in the E and element(s) of disagreement. **(2/1)**
e.g. some gains are in the N in Inner Mongolia & Heilongjiang and S Yunnan there is no neat E-W trend, some values do not work, as Hubei/Anhui. **[4]**

(iii) What further information would you require for a fuller understanding of changes in a region's agricultural land area?

Much potential, possibilities include information about,
- environment e.g. geology, soils, relief, climate
- nature of losses/gains e.g. land-use, ownership, quality, location
- reasons for losses/gains e.g. urbanisation, road building
- other

Candidates should demonstrate knowledge of agricultural change and appreciation of the potential and limitations of information. **[4]**

(b) Evaluate the effects of the intensification of agriculture on people and environment in an area you have studied.

Although much depends on the area chosen, likely indications of quality include recognition of positive and negative effects, the significance of time scale, and different outcomes for different groups of people and/or locations.

Candidates will probably:

Level 3

Offer a good evaluation firmly based in detailed knowledge of the chosen area and distinguished by its overall development, perspective and judgement. Likely to identify different outcomes, as above, and to be reasonably balanced between people and environment. **[12-15]**

Level 2

Make a reasonably sound attempt at the question, which may be good in part(s) but restricted overall, simply remain somewhat general or be unbalanced description/evaluation or people/environment. **[7-1**

Level 1

Demonstrate limited knowledge of a suitable case, limited understanding of intensification. May use simple evaluative words relating to effects or be descriptive. Produce a fragmentary answer or simple points. **[0-6]**

Total: 25

10 (a) (i) Give the meaning of the term *economies of scale* for industry. Explain how economies of scale occur.

economies of scale cause average costs to be lower in large-scale operation than in small scale ones, so an increase in the scale of the business will lead to a reduction in unit costs. **2**

They may be internal e.g. by specialisation, bulk purchasing or spreading fixed costs, such as of machinery, over more output or external e.g. a specialised labour pool, reduced costs of supplies. **3**

Please show in text. **/5**

(ii) Give the meaning of the term *diseconomies of scale* for industry. Explain how diseconomies of scale occur.

diseconomies of scale make costs per unit higher in large-scale operations and may represent the loss of former economies of scale through growth. **2**

They are usually seen as the challenges and costs of increased communication, and decision-making within larger companies and resultant inefficiencies. **3**

Please show in text. **/5**

Examples may assist the explanation. **[10]**

(b) To what extent have government policies influenced the location of manufacturing industry in <u>one or more</u> countries you have studied?

Most countries will have experienced clear government influence on industrial location either in relation to the siting of individual plants or factories or in area terms (industrial estate, EPZ, assisted areas, regional development plans). Candidates may make appeal to other factors of equal or greater importance such as industrial inertia or the historic legacy, the power of TNCs or local factors. A map or a diagram may be helpful.

Candidates will probably:

Level 3

Use detailed knowledge of government industrial location policy and of industry in the country or countries chosen as the foundation for a clear and accomplished assessment, probably considering well the role of at least one other factor. **[12-15]**

Level 2

Show reasonable knowledge and understanding of industrial location in the chosen example(s) but make an assessment which is at best partial or may appear superficial, perhaps with a 'tacked on' quality after narrative. **[7-11]**

Level 1

Find it difficult to make more than descriptive observations about industrial location. May not have any clear appreciation of the government's role. May know of policy in general but not be able to support this from the chosen country or countries. Remain descriptive or offer only a 'safe' and unsupported assessment, such as 'to a certain extent' **(for 5 - 6)**. **[0-6]**

Total: 25

Environmental Management

11 (a) Fig. 6 shows for world regions in 2002 the percentage of their total energy consumption provided by different sources.

(i) Using Fig. 6, identify the world region which had the highest percentage consumption of,

A - fossil fuels,
Middle East. **(1)**

B - renewable energy.
South and Central America. **(1)** **[2]**

(ii) How may the physical resources of the regions affect their energy production?

To a considerable degree as costs may be lower and control/access is not an issue if its own resources are used e.g. the Middle East's oil/gas, South and Central America's HEP. Imports are not differentiated so there is greater complexity than is apparent. Countries purchase what they need/do not have/wish to hold in reserve.

Suggest credit observations. **(2/3).** Support from figure. **(2/1)** **[4]**

(iii) Suggest reasons for the relatively high contribution of nu… energy in Europe and the former Soviet Union .

A number of **reasons** are valid including the ability of MEDCs financially and technologically; concerns over depletion of and pollution from fossil fuels; past energy policy, inertia and the relative costs of alternatives. **[4]**

(b) Explain some of the issues in the production of electrical energy in <u>one</u> country you have studied. To what extent can the production of electrical energy there be considered sustainable?

Here **issues** allows candidates to use the example they have. These may be at any scale from international, e.g. imports, agreements; national, e.g. policy, debt; regional, e.g. demand; to local, e.g. siting factors for HEP. Comprehensive answers are not required given the scale and complexity of some countries that may be chosen.

The definition of **sustainable** previously used on this paper is, 'development which meets the needs' of the present without compromising the ability of future generations to meet their own needs but candidates may supply and use another.

Candidates will probably:

Level 3

Demonstrate a keen awareness of two or more issues in the production of electrical energy in the chosen country, and provide a detailed and effective explanation of each. May identify change over time and the viewpoints/needs of different groups of people. Provide an assessment of sustainability which is conceptually robust and well-developed. **[12-15]**

Level 2

Provide a reasonable explanation of issues for the chosen country and some assessment with a 'satis as far as it goes' quality to the response which is diagnostic. Show clear limitations of knowledge and/or understanding and lack a full appreciation of sustainability. **[7-11]**

Level 1

Make a few valid points in an inadequate whole. Lack the detailed recall of an example, the understanding of the issues and of sustainability as a concept or the skills in assessment to make more than a basic response. Answers on "energy" rather than electrical energy are likely to remain in this level as are notes if time was running out. **[0-6]**

Total: 25

12 (a) What factors may lead to the environmental degradation of <u>urban</u> areas in <u>MEDCs</u>?

[MEDCs chosen expressly to avoid rural-urban migration, poverty and "shanty" answers in relation to LEDC urban areas].

Factors may be,
- social e.g. people's attitudes, motives, outward migration
- economic e.g. profit, pollute and pay, costs of technologies and alternatives deindustrialisation, decentralisation
- environmental e.g. age of urban fabric, location e.g. Athens or Venice
- political e.g. other priorities, lack of power to enforce laws, corruption
- size, scale and complexity of urban areas

Suggest credit any one dimension **maximum 4**. Comprehensive answers are not needed but indications of quality may be an appreciation of the interaction of different factors, the use of examples and a sense of the reality of MEDC urban problems. **[10]**

(b) Using examples, assess the extent to which the disposal of wastes can be considered sustainable. (You may refer to solid, liquid, gas and particulate wastes).

Again **sustainable** treatment 'meets the needs of the present without compromising the ability of future generations to meet their own needs'.

Anything is possible here from disposal which is highly pollutative where nothing is (yet) done to the carefully engineered, monitored, managed, innovative and paid for where public authorities and private citizens co-operate. Land, water or air pollution are acceptable singly or in combination.

Candidates will probably:

Level 3

Develop a good answer which demonstrates clear understanding of sustainability and knowledge of contrasting examples of waste disposal, most probably of at least two types (solid, liquid, gas/particulate). Provide a perceptive overall assessment identifying elements of greater and lesser sustainability. **[12-15]**

Level 2

Make a satisfactory attempt at the question but lack the knowledge or understanding to broaden the answer or to further develop the assessment offered. May consider one type of waste in detail or several in a more limited manner. **[7-11]**

Level 1

Have limited knowledge of waste disposal, maybe using one example only or writing in general or vague terms. Have little or no robust understanding of sustainability and make a basic level assessment (if any). **[0]**

Total: 25

Global Interdependence

13 (a) For <u>one</u> country you have studied, describe and explain the <u>main</u> changes in its exports since 1960.

Credit visibles and invisibles (if offered).

The syllabus and Option dateline is 1960 with the intention of avoiding significantly earlier material whilst not being rigid on the 1960 start. What is wanted is the ability to distinguish change over time as exports increase and decrease in quantity, revenue or significance and as new elements enter e.g. consumer electronics or tourism.

The explanation offered may involve factors in a number of dimensions (social, economic, environmental, political) and at scales from the local to the global.

Suggest for **describe 4/5** and for **explain 6/5**. **[10]**

(b) With reference to examples, assess the role of trade agreements in international trade.

Trade agreements whether regional e.g. NAFTA or bilateral, between two countries, usually introduce protection and control and therefore work against free trade. However recent global agreements e.g. GATT/WTO have encouraged seeking free(r) trade as a means of achieving further economic growth. Any agreements are valid.

Classically protectionist measures help to avoid competition, the forcing out of small players from the market and balance of payments problems by introducing fixed or certain elements to trading patterns. They may be a lifeline to producers at any economic stage e.g. banana growing in the tropics or NIC manufacturing.

They may stem from different motives e.g. colonial ties, a desire by MEDCs to dominate and benefit, or be linked to aid packages e.g. in post-war Afghanistan.

Candidates will probably:

Level 3

Develop a mature and perceptive assessment, based on detailed knowledge of at least two trade agreements or use 'big picture' material ably. Show good conceptual grasp of both free and protected trade. **[12-15]**

Level 2

Make an assessment which is sound overall and may have some good features (knowledge and/or understanding) but one which is held back through lacking development, integration or not being wholly convincing. A detailed assessment of one agreement remains in this level. **[7-11]**

Level 1

Have limited knowledge of trade agreements and limited or flawed understanding of their role. May offer little or no assessment. Brief, fragmentary or considerably irrelevant responses remain in L1. **[0-6]**

Total: 25

14 (a) Fig. 7 gives information about eco-tourism in 1998 for states in Canada and USA, North America's two MEDCs.

What factors may help to explain the variation in policies on eco-tourism and numbers of eco-tourism holidays offered?

Factors in different dimensions may all have relevance. For instance,
- social - environmental awareness; population pressure
- economic - state spending priorities; potential profit
- environmental - quality; fragility; habitats; percentage urban
- political - state government; pressure groups; legislation

No knowledge of Canada and USA is needed, but if environments such as Alaska, the Rockies or the coasts, the existence of National Parks, protection of indigenous peoples etc. are mentioned credit can be given. **[10]**

(b) Describe <u>one or more</u> examples of eco-tourism in <u>LEDCs</u>. How successful is the development from the point of view of <u>local</u> people?

The awareness of the views of different groups of people is an assessment objective. The sorts of **local people** we may encounter include villagers and chiefs/leaders; men/women; the young/old; cultivators, fishermen; providers of food, accommodation or transport; tour guides etc..

Ideally **eco-tourism** should,
- involve local people
- support local communities/economies
- protect environments and indigenous cultures.

How successful it is may be considered in relation to the above aim other factors e.g. standard of living, personal satisfaction, life expectanc integrity of family or community life e.g. by reducing rural-urban migration.

Candidates will probably:

Level 3

Make a good assessment of relative success/failure, based in detailed description of the chosen example and demonstrating keen conceptual understanding of the nature of eco-tourism. Appreciate the viewpoints of different constituent groups of local people. **[12-15]**

Level 2

Describe the chosen example reasonably. Develop a sound but ultimately limited assessment of success/failure, either through narrow understanding of eco-tourism's aims or viewing the local people as homogenous. **[7-11]**

Level 1

Describe the chosen example but make little or no assessment of its success. Show little understanding of eco-tourism as a concept. Just produce an answer which is very short or in note-form. **[0-6]**

Total: 25

Economic Transition

15 (a) Fig. 8 shows the relationship between social development and economic development for selected countries in 2001. Social development is expressed by an index which combines life expectancy with education (adult literacy and average number of years in school). Economic development is measured by GDP (Gross Domestic Product) per person.

(i) Give <u>one</u> reason why it is important to study social development and not just economic development.

A number are possible, e.g. quality of life or standard of living matters, the position of women or social justice are a concern.

For a single point **1** for a developed or illustrated point. **[2]**

(ii) Describe the relationship shown between social development and economic development, supporting your answer with information from Fig. 8.

It is basically linear or direct, they both increase together, social progress is linked to economic growth **(2)** and for exemplar support **(1).**

For the recognition of exceptions or anomalies **(1)** e.g. at any one level of income (vertically) or social development (horizontally) **[4]**

(iii) What are the limitations of using GDP per person to measure economic development?

There are problems with,
- its measurement e.g. gathering statistics, the informal sector
- its calculation e.g. an average masks rich/poor disparities within population
- its narrowness, as other aspects of economic development matter e.g. debt,
- sector growth
- other

Credit single points **(1)** and developed points **(2)** **[4]**

(b) To what extent is the concept of resource endowment helpful in understanding global patterns of economic development?

To some extent.

Resource endowment is likely to be seen in mineral terms, but accept agriculture and energy resources. To include human resources is legitimate but would change the nature of the response.

There are (mineral) resource-rich countries e.g. in Sub-Saharan Africa which struggle for other reasons and resource-poor countries, such as Japan and Luxembourg, which are amongst the most developed. The discovery of resources - notably oil - has transformed the development of many countries.

Candidates will probably:

Level 3

Develop a mature and perceptive response, which whilst not comprehensive, offers a good assessment of resource endowment and considers the role of other factors ably. Root their argument in contrasting examples from both MEDCs and LEDCs. May take a broad view of what constitutes a resource. **[12-15]**

Level 2

Produce a response which is sound but limited. Have some useful points to make but may tend towards the physically deterministic or the rather general, using few examples or ones lacking in much detail. Mention other factors without developing them much. Make an assessment which may have good points but which is moderate overall. **[7-11]**

Level 1

Have a simple global perspective which may see resource endowment alone as a suitable explanation of economic development or mention one or more other factors. Refer to no examples, just one or areas with little meaning such as "Africa". Fragments and notes remain in L1. **[0-6]**

Total: 25

16 (a) With reference to <u>one or more</u> regions, describe and explain the process of cumulative causation in regional development.

Proposed by Myrdal (1957) to explain regional differences in development.

The key ideas are,
- initial advantage(s) e.g. mineral resource, natural harbour, soil quality
- the circular cumulation process or upward spiral, reinforcing growth and triggering further development
- spread and backwash effects
- agglomeration, considering linkages and/or the multiplier effect

It is probably more likely that candidates will take a “successful” region, but any region may be chosen. Some awareness of resulting regional imbalance is needed for a full answer.

Suggest credit any one of the key ideas **maximum 4**, such that a full answer has at least three elements. For a good general answer without reference to region(s) **maximum 6**. **[10]**

(b) Assess the main difficulties for the government in managing the development of <u>*one*</u> country you have studied.

A variety of **main difficulties** may be seen, although some, such as financial, may be more prominent. The syllabus allows for the study of the development of a country (in comparison with the development of other countries) or of the regions within a country. As such we may see MEDC/LEDC or regional disparities and core-periphery contrasts and issues.

The assessment may have elements of seriousness, space/time scale, Implications, decision-making, groups of people involved, and may legitimately include attempted solutions (especially failed ones?).

Candidates will probably:

Level 3

Provide a good quality assessment of two or more difficulties faced in the chosen country, perhaps mentioning others. Demonstrate good understanding of what it means to manage development and detailed knowledge of the example. **[12-15]**

Level 2

Make a sound but limited response. Make some good points, show satisfactory knowledge of the country and a general understanding of development management. Offer a partial or narrow assessment. For an answer on one difficulty, if well developed maximum 10. **[7-11]**

Level 1

Have some knowledge of the chosen country's development and mention one or more difficulties, although the perspective and expression may be limited and the example quite general. Offer little or no assessment. **[0-6]**

Total: 25