### UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Level

### MARK SCHEME for the June 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. This 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 began. 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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Grade thresholds for Syllabus 9696 (Geography) in the June 2005 examination.

	maximum	minimum mark required for grade:		for grade:
	mark available	A	В	E
Component 3	50	32	28	19

The thresholds (minimum marks) for Grades C and D are normally set by dividing the mark range between the B and the E thresholds into three. For example, if the difference between the B and the E threshold is 24 marks, the C threshold is set 8 marks below the B threshold and the D threshold is set another 8 marks down. If dividing the interval by three results in a fraction of a mark, then the threshold is normally rounded down.



June 2005

**GCE A LEVEL** 

MARK SCHEME

MAXIMUM MARK: 50

SYLLABUS/COMPONENT: 9696/03

GEOGRAPHY

Human Options



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- 9 (a) Table 1 gives the results from three surveys to find out why peasant farmers did not want to move to newly irrigated land in a desert area of Rajasthan, India. Fig. 5 shows the location of the state of Rajasthan.
  - (i) Using Table 1, identify,

[2]

#### A two physical factors,

e.g. uncertainty of receiving water, less availability of water, low land productivity.

#### B two economic factors,

#### that farmers gave as reasons for not wanting to move.

e.g. lack of loan facilities, lack of labourers to hire, difficulty in selling produce.

Credit one correct identification 0, two or three correct 1 and four 2

#### (ii) How important was distance to the farmers questioned?

[3]

distance of land from road (reason 14) and from house (15) not an issue **1** distance from water (13), school (17) and daily market (16) a problem **1** as a discriminator, recognition of distance aspect to either fragmentation (4) or separation from other settlers from same village (12) **1** 

# (iii) What other information would you require for a fuller understanding of irrigation in this area of Rajasthan? [5]

Candidates need knowledge of irrigation and skills in considering the limitations of the table's evidence.

There is much potential here, possible items include information about

- location
- environment e.g. rainfall, soils, relief, drought records
- irrigation project e.g. need, timeframe, costs, bodies
- crop, stock and land-use
- peasant farmers e.g. source, ethnicity, literacy, poverty
- other e.g. survey is Yes/No only, size of sample.

max 3 for developing one of the above lines (broad scope)

#### (b) To what extent is debt a major obstacle to increasing food production in one or more countries you have studied? [15]

Quite likely to be a considerable extent at the level of either the individual producer and/or the country. Whilst any approach is acceptable, depending on the chosen example(s), it is anticipated that most L3 responses would recognise both aspects.

Debt may prevent a farmer of country from starting to increase food production in the first place or restrict/limit attempts already under way.

Some candidates may identify (an)other factor(s) as major obstacle e.g. catastrophe.

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- L3 Develop a perceptive assessment of debt as an obstacle to increasing food production, probably at both the scale of the producer and at national scale, based in one or more detailed examples. Likely to integrate content and evaluation in the response. [12-15]
- L2 Produce a sound response, which may have some good elements, but which is limited in its overall quality by the modest examples used and/or the conceptual understanding of debt and/or the assessment offered. [7-11]
- L1 Show basic knowledge of debt and/or increasing food production but lack the material, skills (or time) to produce anything more than a simple and superficial response which may make little or no meaningful assessment. [0-6]

#### [Total: 25]

### 10 (a) Fig. 6 shows how costs and revenue (income) may vary across space for a manufacturing or service company. Using the figure,

#### (i) identify what the shaded areas represent, [2]

where revenue > costs 1 i.e. where profit is made/a profitable location 1

#### (ii) compare how costs and revenue vary across space, [3]

revenue is constant whilst costs vary **1**, starting high at edges and dropping to central point **1** with an anomaly/localised difference at X **1**.

#### (iii) suggest reasons for the existence of the low cost production zone (X). [5]

Here unseen factors operate to lower costs. These may relate to transport and/or to production. Could be the result of government policies e.g. an EPZ or subsidies or more generally with the existence of agglomeration economies, localised cheap labour pool etc. It could be seen in urban terms e.g. where land costs are low through the presence of an industrial estate or less desirable land of lower bid rent or where labour costs are reduced e.g. near shanty towns.

max 3 for one reason developed well

### (b) Using examples, assess the potential advantages and disadvantages of industrial agglomeration for companies considering a change of location. [15]

Agglomeration is essentially the concentration of industry in close proximity when several industries or companies choose the same location. It occurs in order to minimise costs, to obtain economies of scale through linkages between firms or to benefit from locational incentives e.g. an area of government assistance.

Whilst its **potential advantages** are well known, it could be the assessment of **disadvantages** which will help judge answer quality. They may be environmental (negative externalities such as noise, lack of space, air pollution); social (e.g. breaking of existing relationships with local community); economic (diseconomies of scale, heightened competition, reduced access to local market) or political (e.g. planning issues).

allow deglomeration.

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#### Candidates will probably:

- L3 Produce an assured assessment, which whilst most likely dominated by the consideration of potential advantages has good disadvantages content. Use contrasting examples, appreciate the process of location decision-making and demonstrate skills of judgement. [12-15]
- L2 Make a reasonable attempt at the question which is largely sound but limited overall by the lack of or generality of examples, by restricted conceptual understanding and/or by the assessment offered. For a response which only considers potential advantages max.10.
  [7-11]
- L1 Struggle to make anything more than basic observations about industrial agglomeration. May lack suitable examples, a broad appreciation of the topic or an accurate conceptual foundation.

Lists of advantages/disadvantages remain in this level.

[0-6]

[Total: 25]

11 (a) Fig. 7A shows wind resource potential measured in 1995 in Mexico, a LEDC in Central America. The location of Mexico is shown in Fig. 7B.

Suggest reasons why countries like Mexico, with excellent potential for developing wind as an energy resource, may not have yet done so. [10]

Candidates need to consider the significance of other factors. In relation to wind these may include,

- lack of finance e.g. national debt, rural poverty/pricing structures, other financial priorities
- lack of technology (at a suitable price? as no-strings aid?)
- lack of skills and technical expertise (to maintain or to install)
- preference for other renewables e.g. HEP
- risk assessments e.g. hurricane damage
- other e.g. local factors, land ownership, tourism, ten year time-scale.

More generally, reasons include,

- established dependence on non-renewables e.g. US oil
- relative costs for non-renewable and new energy
- energy policy
- level of demand, mainly urban, better served by power station?
- other.

No knowledge of Mexico is expected but the LEDC context should be understood. Credit simple reasons 1, developed reasons 2 or 3.

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### (b) Using examples, assess the environmental impacts at the <u>local</u> scale of the continued production and use of fossil fuels. [15]

For **fossil fuels** accept coal, oil and gas. For **production** accept the original extraction and on site/off site preparation, processing or refining. Allow associated transport). For **use** accept any sector/scale e.g. domestic, transport, manufacturing. The scale is **local** more to keep candidates from global warming and ozone issues than to specify where. Accept local impact of wider issues e.g. acid rain.

(Fuelwood and nuclear are not acceptable.)

For **assess** candidates ideally introduce the material and give some sense of degree or seriousness, variety of impacts (e.g. air, land, noise and water pollution), of changes in impact as methods/technology change and of what needs to be/is being done.

#### Candidates will probably:

- L3 Produce an effective assessment of a range of environmental impacts, which is reasonably balanced production/use and based in detailed local example(s). Distinguished by its structure, sense of judgement and the quality of the assessment offered.
  [12-15]
- L2 Make a reasonable attempt which may be unbalanced between examples and assessment and/or between production and use. Has a generally sound quality but remains limited, maybe with some global content. [7-11]
- L1 Offer a response which at the upper end of the level is ordinary in quality and either quite general or narrow with minimal or basic assessment. Often at the lower end of the level work is misconceived, fragmentary or superficial. [0-6]

[Total: 25]

# 12 Table 2 gives information by state about deforestation and logging in the 1990s for the Amazonian rainforest of Brazil, a LEDC in South America. Fig. 8A shows the location of the states and Fig. 8B shows the location of Brazil.

(i) Give the meaning of the term *deforestation*.

[2]

the total deliberate removal or clearance of forest/trees, by cutting and/or burning or at rates faster than natural regeneration/without replanting.

for basic point 1, needs some further element or rigour for second mark

(ii) Supporting your answer with data from Table 2, identify the state which was the most affected by deforestation and logging and the state which was the least affected by these activities in the period shown. [3]

most affectedMata Grossohighest deforested area in both years, 7610 and 6540(by far) the greatest area logged 4080-7000.

least affected Amapá zero recorded deforestation and logging low 80-140 (but not the lowest).

Credit identification **1** and use of data **2** 

For one correct max 2

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### (iii) Suggest reasons for the variation in the numbers of logging centres in the different states. [5]

A number of valid suggestions can be made, e.g. variation in state law or attitude to the rainforest environment; revenue/tax considerations; accessibility; quality and quantity of trees etc.

Credit valid reasons 1 or 2 if perceptive or well-developed.

#### (b) Choose <u>one</u> degraded environment which you have studied. Explain the attitudes of different groups of people either during its degradation or during attempts to improve it and analyse the conflicts of interest which occurred. [15]

A rural or urban environment may be used. Rainforest is acceptable despite (a).

The ability to recognise and appreciate the views of different groups of people and to identify conflicts of interest is an expressed objective of the syllabus. In the past many candidates have wrongly interpreted conflicts of interest as 'conflicts'.

The kinds of groups of people may be landowners, cultivators, environmentalists, authorities, polluters, those who stand to profit, local residents, NGOs etc.

#### Candidates will probably:

- L3 Develop an assured and mature response based on detailed knowledge of an environment, explaining well the different attitudes of at least three groups of people. Show good grasp of the concept of conflicts of interest and analyse at least one effectively. [12-15]
- L2 Produce an answer which may be stronger in its knowledge and understanding of the chosen environment than of the attitudes of different groups of people. May cover one group well (e.g. the main agent of degrading/upgrading) but just mention another or others. May be aware of conflicts of interest in quite general terms. [7-11]
- L1 Struggle to use the example known in the manner required. May describe the case reasonably and mention one or two groups of people without being able to explain their attitudes much. May have a wrong conception of conflicts of interest or omit this element entirely. [0-6]

[Total: 25]

#### 13 (a) (i) Give the meaning of the term *locational advantage*.

[2]

benefits or competitive edge derived from a place's unique nature and/or position.

### (ii) Using examples, explain the operation of locational advantage in international trade. [8]

Seen in all economic sectors e.g. primary production of tropical crops; secondary, in relation to mineral resource endowment; tertiary in nearness to potential custom e.g. the US and in routes, entrepots etc. Affects competition and market share and produces disparities within and between countries.

Whilst location cannot be changed it may be influenced by protective measures and developments such as EPZs and over time as global trading shifts.

Using levels awareness credit basic accounts 1-3, moderate 4-6 and the best 7-8.

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### (b) To what extent is international trade a more secure basis for a country's economic development than international tourism? Support your answer with examples. [15]

An attempt to span the two topics under the Global Interdependence Option, as both topics should be studied. Recent events have provided plenty of material suggesting that both are insecure but any overall judgement is valid, if argued. Most are likely to answer from LEDC experience but the deindustrialisation and tertiarisation of MEDCs could be interesting.

Better candidates may recognise that tourism is itself an invisible export (when sold overseas) and an invisible import (when purchased from overseas).

One or more aspects of the word **secure** may be taken:

- safety e.g. international terrorism, wars, disputes
- stability e.g. tourism's seasonality or fashionability; trade cycles
- certainty e.g. trade agreements, colonial ties
- other.

#### Candidates will probably:

- L3 Analyse and synthesise the two subjects well, arguing clearly for an overall position based on good knowledge and understanding of examples. Recognise more than one aspect of security conceptually. [12-15]
- L2 Produce a reasonable but restricted answer which may be stronger on content than assessment; be in two halves, trade/tourism lacking integration; or be rather general whilst sound in the argument made. [7-11]
- L1 Make one or more simple points about trade and/or tourism. Offer an opinion which is not backed up by detailed example(s) or much argument. [0-6]

[Total: 25]

### 14 (a) What social and economic factors help to explain the demand for new types of tourism (such as eco-tourism and adventure, wilderness or sports tourism)? [10]

Any **new types of tourism** may be considered, those listed above are just a steer.

Here **social factors** may include,

fashion; search for new experiences; greater environmental awareness; health and fitness boom; boredom with 'old' destinations; interest to try out new facilities; media influence; peer group activity and tales; age/sex profile of population; more and longer holidays (can travel further); change in norms; other.

#### And economic factors may include,

for consumers: greater general affluence and disposable income; greater proportion of budget being spent on tourism; good deals; exchange rates; other.

for providers: <u>potential profit</u>; exploitation of new markets; eco-tourism's aim to assist local economies; marketing strategies; other.

Whilst it may be difficult to differentiate **social and economic factors** fully, for an answer which is wholly **social** or **economic max 6**.

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#### (b) Fig. 9 lists ten principles for sustainable tourism.

### Using some of the principles in Fig. 9, assess the extent to which tourism in <u>one</u> destination you have studied can be considered sustainable. [15]

The list of principles is quite long, but allows maximum scope for candidates to use the **destination** they have studied. Hence the loose phrase **some of the principles**. One indication of better answers will be the explicit use of principles from the list in the assessment made, rather than description.

A **destination** may be from the scale of a single hotel, enclave or eco-tourism project to something quite large (such as an island or region) but candidates who choose 'Kenya' or similar may struggle to interpret this meaningfully.

#### Candidates will probably:

- L3 Provide a strong assessment of the destination chosen in terms of sustainability, making good use of several principles from the figure, weighing evidence well and demonstrating detailed knowledge. Show awareness of sustainability to a greater/lesser extent. [12-15]
- L2 Make a satisfactory attempt at the question, which may include some good elements. Offer an assessment which is sound as far as it goes but which may be somewhat general, lack the detailed knowledge needed to go further or not be integrated into the account. [7-11]
- L1 Provide an answer which may be stronger in the description of the destination than in understanding of sustainability or assessment, or offer an overall assessment with little support or reference to the figure. Notes and fragments remain in this level. **[0-6]**

[Total: 25]

### 15 (a) In 2003, the Dr. Martens company moved production of its boots from the UK where a worker was paid \$490 a week, to China where the weekly wage was \$25.

# What other advantages may a location in <u>LEDCs</u> offer to manufacturers, apart from low labour costs? [10]

A LEDC location is usually considered to offer **advantages** which may include,

- keen and plentiful labour supply
- lack of unionisation
- lack of restrictive employment laws
- access to new markets, some of which are potentially vast
- little or no environmental controls
- economic incentives e.g. reduced rents, low tax
- proximity to competitors
- proximity to raw materials (transport-saving)
- other.

Candidates may legitimately take a broad and less detailed overview, or develop a few of the above potential advantages. A full answer consists of at least three advantages, of which at least one must not relate to labour.

For a response without the use of named or located examples max 7

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### (b) Assess the importance of <u>MEDC</u> location in the global organisation and operation of <u>one</u> transnational corporation (TNC) you have studied. [15]

In many cases **MEDC location** is for headquarters, administration, research, marketing; research and development functions. Much will depend on the TNC chosen cf VW and a Korean *chaebol* and on its organisation, which may be regionalised. MEDCs are also likely to be markets and may be the destination of components for assembly etc.

**importance** may be dealt with for MEDCs alone or in comparison with LEDC locations in the TNC's **organisation and operation**. A simplified map or diagram may assist the response.

#### Candidates will probably:

- L3 Make a good assessment of the significance of MEDC locations in the organisation and operation of the chosen TNC. Recognise a number of different functions that MEDC locations fulfil and perhaps observe change over time. An answer distinguished by its detail, rigour and overall structure. [12-15]
- L2 Have satisfactory knowledge of the chosen TNC and identify MEDC locations and functions suitably. Provide an assessment which is either partial or general and not fully supported from the example. [7-11]
- L1 Make a few points about a TNC, refer to more than one or offer a general answer not based in an example. Offer little or no observation on the significance of MEDC locations. [0-6]

[Total: 25]

16 (a) Fig. 10 shows the downward spiral (vicious circle) which may occur in a peripheral region from which there is outmigration of labour.

# Using examples, explain the upward spiral (virtuous circle) which, by contrast, a core region may experience from the inward migration of labour. [10]

Alert candidates would do well to start by redrawing the figure - or one similar - for the core. Thus young and ambitious people arrive, boosting the labour force, making the core more attractive both for current economic activity and to new investment and (further) increasing core/periphery disparity. In association with new waged the local market and purchasing power increase leading to an increase in local services and to further attraction of activities.

Much will depend on how far the candidate can go in explanation beyond the figure and on the quality of the example(s) chosen. A better candidate may integrate the response e.g. for Nairobi, rather than cover the material twice.

explanation/5-6 example(s)/5-4

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### (b) Under what circumstances may capital, resources and labour move <u>from</u> the core <u>to</u> the periphery? Support your answer with examples. [15]

There are two circumstances in regional development theory:

1 When *spread effects* operate.

Classically these occur at an interim stage of development when, as the core expands, it reaches the point where diseconomies of scale set in and operating in the core becomes more difficult and costly. E.g. as congestion increases, land prices rise and organisations decide to decentralise and find peripheral locations attractive.

2 When *regional development initiatives* are put in place.

Governments attempt to reduce the congestion of the core/increase the development of the periphery/overcome regional disparities by schemes of many kinds e.g. agriculture; mining; energy; manufacturing; growth poles; provision of services etc.

A full answer may consist of the two above **circumstances** only, but some candidates may also recognise,

3 When urban-rural migration occurs.

e.g. on retirement, especially of the affluent who may innovate, or when family/village ties pull a young male home with his skills/savings e.g. to establish a business.

4 Through *remittances*.

As part of the income of a rural-urban migrant is sent back to support the family.

5 When the periphery is Friedmann's *resource-frontier region*.

Flows are to exploit the newly discovered resources, establish businesses etc.

#### Candidates will probably:

- L3 Demonstrate good conceptual awareness of core-periphery and explain at least spread effects and regional planning very well, maybe introducing other circumstances also. Base their response in detailed knowledge of examples. The answer is distinguished by its clarity of perspective, structure and overall quality. [12-15]
- L2 Produce a satisfactory response which may have some good features in terms of understanding shown. Identify both spread effects and regional planning (for one only in detail, max 10). Use some examples but these may be limited in scope or in detail.
  [7-11]
- L1 Make a few ordinary points about core-periphery flows. May identify one or more of the circumstances, perhaps trying to answer from migration rather than regional development material. Produce a descriptive answer from which circumstances do not emerge clearly. Misinterpretations of core-periphery and fragments remain in L1.

[0-6]

[Total: 25]