

## General Certificate of Secondary Education

# **Geography 3031** *Specification A (Full Course)*

3031/2F Foundation Tier

## Mark Scheme

### 2006 examination -June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

#### GENERAL GUIDANCE FOR GCSE GEOGRAPHY ASSISTANT EXAMINERS

#### **Quality of Written Communication**

Where candidates are required to produce extended written material in English, they will be assessed on the quality of written communication.

Candidates will be required to:

- present relevant information in a form and style that suits its purpose;
- ensure that text is legible and that spelling, punctuation and grammar are accurate;
- use specialist vocabulary where appropriate.

#### Levels Marking - General Criteria

Where answers are assessed using a level of response marking system the following general criteria should be used.

#### Level 1: Basic

Knowledge of basic information

Simple understanding

Little organization; few links; little or no detail; uses a limited range of specialist terms

Reasonable accuracy in the use of spelling, punctuation and grammar

Text is legible.

#### Level 2: Clear

Knowledge of accurate information

Clear understanding

Organised answers, with some linkages; occasional detail/exemplar; uses a good range of specialist terms where appropriate

Considerable accuracy in spelling, punctuation and grammar.

Text is legible.

#### Level 3: Detailed

Knowledge of accurate information appropriately contextualised and/or at correct scale Detailed understanding, supported by relevant evidence and exemplars

Well organized, demonstrating detailed linkages and the inter-relationships between factors Clear and fluent expression of ideas in a logical form; uses a wide range of specialist terms where appropriate

Accurate use of spelling, punctuation and grammar

Text is legible

Level 3 does not always equate to full marks, a perfect answer is not usually expected, even for full marks.

#### **Annotation of Scripts**

- One tick equals one mark, except where answers are levels marked (where no ticks should be used). Each tick should be positioned in the part of the answer which is thought to be credit worthy.
- Where an answer is levels marked the examiner should provide evidence of the level achieved by means of annotating 'L1', 'L2' or 'L3' in the left hand margin.
- The consequent mark within this level should appear in the right-hand margin.
- Ticks must **not** be used where an answer is levels marked.
- Examiners should add their own brief justification for the mark awarded e.g. *Just L3*, *detail and balance here*.
- Where an answer fails to achieve Level 1, zero marks should be given.

#### **General Advice**

Marks for each sub-section should be added in the right-hand margin next to the maximum mark available which is shown in brackets. All marks should then be totaled in the 'box' at the end of each question in the right-hand margin. The totals should then be transferred to the boxes on the front cover of the question paper. These should be totaled. The grand total should be added to the top right-hand corner of the front cover. No half marks should be used.

It is important to recognize that many of the answers shown within this mark scheme are only exemplars. Where possible, the range of accepted responses is indicated, but because many questions are open-ended in their nature, alternative answers may be equally creditworthy. The degree of acceptability is clarified through the Standardization Meeting and subsequently by telephone with the Team Leader as necessary.

Diagrams are legitimate responses to many questions and should be credited as appropriate. However, contents which duplicate written material or vice versa should not be credited.

Quality of Written Communication (QWC) is part of the award of marks in levels marked answers only. In levels marked answers the quality of the geography is assessed and a level and mark awarded according to the geography. As is sometimes the case, the geography may be sound at a particular level but the examiner may not be sure as to whether there is quite enough to raise the mark within that level. In this case the examiner should consider the QWC of the answer. QWC that fulfils the criteria for the level should lead to the rise in the mark but where the QWC does not fulfil the criteria, the answer should remain at the mark first thought appropriate. In cases where QWC has been used in the award of marks, the examiner should indicate this with QWC and arrows that indicate either an upward or downward trend according to its impact on the final award of the mark.

#### **Question 1: POPULATION**

(a) (i) Number of live births/how many/the number (of babies) born (1) per 1000 (head of population) NOT per year (1).

2 marks

(ii) 19

1 mark

(iii)  $(4 \times 1)$ 

2200

1950

LEDCs

3/4 - three quarters

4 marks

(b) (i) Accurately completed bar. No shading needed. If vertical line is missing it is OK.

1 mark

(ii) 2090(2090 - 2100 = 0)

1 mark

(iii) 2 x 2 for developed points. Can be two separate statements per reason NOT3 & 1. Must relate to "falling" / slower growth rate / reduction etc.

Family planning – contraceptives are more readily available and therefore, there is less unprotected sex, so fewer children are born. Change in attitude to Family Planning.

Careers for women – as more careers become available for women they put off having children until later and so there is less opportunity for them to have large families. Better education leading to jobs. Can't look after children because at work.

*Improved healthcare* – this reduces the infant mortality rate. People are therefore more certain that fewer children will die, and so they do not keep trying for children as an insurance to ensure some survive to look after them in old age. Contraception is made available.

4 marks

(c) (i)  $4 \times 1$ 

Push factors – landless labourers in S China / Vietnam boat people.

Pull factors – Philippine domestics / W European professionals / Chinese joining relatives in HK.

4 marks

(ii) Level marking. Must be <u>advantage</u> to <u>country</u> or <u>region</u> NOT people.

#### Level 1 Basic (1-2 marks)

Simple statements.

More people to work/greater variety of foods/ more people to pay taxes/ bring certain skills. Help economy. Bring money in.

#### Level 2 Clear (3-4 marks)

Elaborated or linked statements.

Immigrants are prepared to work at low paid jobs that the native population refuse/ introduction of takeaways widens the diet of the receiving country/ Many immigrants have skills and can be doctors or nurses in a country



#### (d) Level marking

Relating to physical factors.

#### Level 1 Basic (1-2 marks)

Simple statements – no credit for human factors

Too cold/ too wet/ too high/ to densely forested/too dry/poor soils/lack of natural resources/too hot, etc.

#### Level 2 Clear (3-4 marks)

Elaborated or linked statements

In Antarctica too cold to grow food. Too much rain might cause flooding. Tops of mountains too cold to grow crops.

Anything relating to tectonic activity/flooding cannot be a basic statement. Must be developed to show why they do not live there.

4 marks

To get to top L2, need more than one factor.

#### **Question 2 SETTLEMENT**

(a) (i) Increasing percentage (1) of people living in urban areas/towns and cities.

(1) (Allow one mark for a generalised idea of urban development)

2 marks

(ii) Country B

1 mark

(iii)  $(4 \times 1)$ 

30

1975

South America

40

4 marks

(b) (i) Accurately completed bar. Vertical line not required.

1 mark

(ii) 1911(1911 - 1920 = 0)

1 mark

(c) (i) 4 x 1

*Physical Factors* – Soil erosion in Himalayas. Long dry season in Bihar. Flooding around Bay of Bengal.

Human Factors - High BR in city. Hospitals and doctors so low DR. Bangladesh densely populated. Farmers very poor in Bihar and Uttar Pradesh.

4 marks

(ii) Level marking

Must have more than one effect to get to L2. If MEDC L1 max.

#### Level 1 Basic (1-2 marks)

Simple statements.

Growth of shanty towns / increased traffic congestion / crime / specified form of pollution / unemployment / lack of piped water / insufficient sewage systems / lack of food / overcrowding **OR** over population (not both).

#### Level 2 Clear (3-4 marks)

Elaborated or linked statements

Loss of farmland needs qualifying. Shantytowns developed because they were not able to build enough houses for the people / There was a break down in the infrastructure as the sewage and water supply systems were unable to cope / The road system was not able to cope with the increased traffic leading to congestion / Many remained unemployed as they did not have the skills to work in the offices or factories/ Increased traffic congestion led to increased air pollution.

Accept positive effects if realistic

#### (iii) 2 x 2 for developed points or 2 x 1 (not 3 x 1) e.g.

*Use of Brownfield sites* – This would reduce the amount of derelict land and would mean less greenfield sites are used for development.

*Improving shanty towns* - Self help schemes have been introduced where the inhabitants of the shantytowns are given materials to complete the building of the house. Building proper sewage systems in shantytowns has reduced diseases like cholera.

#### **Transport Policies**

Development of park and ride schemes - this will reduce traffic in city centres. Improved public transport system, means less cars on road. Congestion charges.

4 marks

#### (d) Level 1 Basic (1 - 2 marks)

Incorrect sequence or less than three names = 1 mark.

A correct sequence or three names = 2 marks.

A full description of only one zone = L1.

#### Level 2 Clear (3 – 4 marks)

Accurate description = L2. Correct sequence – idea of concentric circles, sectors or multiple nuclei depending on model chosen. Distinguish between inner and outer urban suburbs and inner city and twilight zone. Expect some description – e.g. class of housing, type of housing etc.

If text and diagram, mark text first and then credit any additions in the diagram.

Full marks can be obtained for an annotated diagram.

A <u>minimum</u> of two zones / areas must be fully described to reach L2.

4 marks

#### **Question 3 AGRICULTURE**

(a) (i) The growing of fruit / vegetables / flowers / salad / glasshouse cultivation / 1 mark horticulture.

(ii)

	True (T) or False (F)
All the market gardening areas have good motorway links.	F
None of the market gardening areas are near large urban areas	F
The market gardening areas of Cornwall have mild winter temperatures.	Т

3 marks

(iii)  $2 \times 2$  for developed points OR  $1 \times 2$  NOT 3 + 1.

*Climate* – Areas with mild winters and early springs means that the produce is ready for the market earlier and so can command higher prices.

*Soil* – Needs very fertile soils such as the peat and silts of the Fens because of the intensive nature of the farming. Benefits also from the lighter sandier soil, which warm up earlier in the spring and so the crops are ready earlier. Fertile must be qualified by reference to a location or a description of soil properties.

*Distance from markets* – Much market garden produce is perishable and so has to be got to the market as quickly as possible so it is grown close to large urban markets.

4 marks

(b) (i) 2 x 1 Several people are planting rice (1) in padifields/water (1). No credit for people growing rice.

A skills question, accept only what is on the photograph. Large amount of labour or intensive / planting or picking / by hand or no mechanisation or no technology / in water or flooded fields or padi fields or irrigated or marshland / fields separated by banks or bunds.

2 marks

(ii) Water/flat land / sunshine / impervious clay soil.

#### (c) (i) **Level 1 Basic (1 – 2 marks)**

MAX L1 for MEDC.

Simple statements.

Adding fertiliser/irrigating /greater use of mechanisation/different crops being grown / more being sold.

#### Level 2 Clear (3 – 4 marks)

Elaborated or linked statements.

HYV of rice are being grown which need large amounts of fertiliser/land is being irrigated so that more than one harvest can be gained each year/Cash crops such as cotton are being grown instead of food crops.

4 marks

(ii) 2 x 1 disadvantages – poor do not benefit/ cost of seeds/ soil erosion/ salinisation / costs more money / pollution (if qualified) / eutrophication of rivers / greater use of machinery so more unemployment / cash crops at expense of food crops.

2 marks

(d) (i) Common Agricultural Policy (at least two words correct, one of which must be agriculture/al).

1 mark

(ii) Level marking

No marks for naming policy. MAX L1 if choose a policy not on Figure 9.

#### Level 1 Basic (1 – 3 marks)

Lifts from Figure 9 with some description of what they mean but not related to impact on farming.

Quotas tell farmers how much they can produce, set aside is land that is not cultivated.

#### Level 2 Clear (4 – 6 marks)

Linked statements which show government policy <u>linked</u> to impact on farming.

Set aside. Farmers had to set aside 10% of their land if they were to receive the arable area payments, which have replaced guaranteed prices for arable crops. The set aside land can be used for grazing but no food crops produced upon it. Arable area payments are made per hectare for growers of cereal crops, oil seed rape, sunflower seeds, soya beans, peas, beans and linseed. Farmers can claim for woodland if it was previously arable land. Woodland grant scheme gives grants to farmers who wish to plant woods on their land. In environmentally sensitive areas farmers can be paid for protecting the environment by planting hedges or protecting wetland habitats.

6 marks

#### **Question 4** Industry

(a) (i) Manufacturing industry / an industry than turns raw materials into finished products. They make / assemble / process.

1 mark

(ii)

	True (T) or
	False (F)
All integrated steelworks are on a coalfield.	F
All integrated steelworks are on an iron ore field	F
All integrated steelworks are less than 50km from the coast.	T

3 mark

(b) 2 x 2

E.g. Steel Industry. MAX 1 for each heading if no secondary industry specified.

Generic answers to a named industry MAX 2.

No credit for primary / tertiary.

Inputs - Coal and iron ore and limestone

Processes - Mixed in blast furnace, heated.

Outputs - Steel. Waste.

4 marks

(c) (i) 2 x 1 Circular access road / links to motorway / open space / flat land. Large number of trees / large number of car parks / next to motorway / next to houses or labour / large number of flat buildings / Greenfield site / edge of town / lots of space for development / landscaped / ring road inside park.

2 marks

(ii) Near to source of labour/good road or motorway access for transport/large area of flat land.

2 marks

(iii) 2 x 1

Advantages – brought new jobs to the area / brought prosperity / the multiplier effect / non polluting industrial area / led to innovation / increase in house prices.

2 marks

(d) No mark for naming factors.

Max L1 if factor not on Figure 12.

#### Level 1 Basic (1 – 3 marks)

Simple statements. Simple lifts with some developments.

Lifts from Figure 12 with some description of what they mean but not related to location of industry.

Industry will locate near to a source of energy.

The government can encourage industry to move to an area.

Industry needs to be where it can get raw materials

#### Level 2 Clear (4 – 6 marks)

Linked statements which show impact an industrial location.

Heavy industry needs large amount of bulky raw materials so the industry will be found near to these raw materials or a good transport system. A heavy industry needs a flat site to build the factory on. Government policy can encourage industry into an area of high employment by means of grants

and retraining.

(e) Nitrogen oxide/sulphur dioxide/factory chimneys/specific industrial plant (e.g. blast furnaces)/ transport provided specifically linked to heavy industry/ fumes / smoke / carbon-dioxide / greenhouse gases.

1 mark

(ii) N.B. can be either land or sea pollution but must be linked to industry.
 Do not credit both land and sea pollution.
 MAX L1 if land or sea not specified.
 Not the effect on people. Must be effects of acid rain on land / sea.

Not the effect on people. Must be effects of acid rain on land / sea. Acid rain only = 0 marks.

#### **Level 1 Basic (1 – 2 marks)**

Simple statements

Slag heaps/derelict buildings/ dumping waste/poisonous fumes / affects rocks or landscape. Credit rivers and lakes under land pollution.

#### Level 2 Clear (3 – 4 marks)

Linked or elaborated statements.

Oil tankers delivering oil for industry can spill oil which can contaminate beaches and destroy wildlife/Industrial waste such as chemicals can be dumped in the sea/where the sea is toxic or rich in nutrients due to pollution it cause algae grow quickly/ In coal mining areas the waste materials are left as slag heaps which are unsightly and can be unstable/when deindustrialisation takes place the area can be left with derelict buildings and industrial waste.

4 marks

#### **Question 5** Managing Resources

(a) (i) Any material or product that (people) find useful / use / need / depend on / relied on, etc.

1 mark

(ii) 2 x 1 Can be two lifts directly from Figure 13 or comments on the overall pattern. The richest 20% of countries use most of the world's resources/84% of cars are owned by the richest 20% of countries etc. Accept general statements based on the graph such as "the richest consume most of the world's cars/paper etc. Credit opposites once.

2 marks

(b) (i) The reuse (of waste materials), reused/ used to make something new.

1 mark

(ii) Aluminium/glass/paper etc

2 marks

(iii) Transport and processing of waste may cause (air) pollution. Using fuel.

1 mark

(c) Causes <u>NOT</u> effects. MAX L1 if not using Figure 15.

#### **Level 1 Basic (1 – 2 marks)**

Simple statements – lifts directly from the stimulus. *Greenhouse gases/burning fossil fuels/heat trapped/temperature rise.* 

#### Level 2 Clear (3 – 4 marks)

Linked statements.

The greenhouse gases are given out when fossil fuels are burnt. This keeps the earth warm by preventing the escape of heat that would normally be lost to the atmosphere. These gases let heat in but prevent most of it from getting out. As the amount of gas increases the temperature of the earth increases.

4 marks

(d) (i) 2 x 1

Near the Equator/high temperatures/near the sea/coral islands/ one named appropriate activity /see native culture (fishing villages). Many resorts / uninhabited islands / airport.

2 marks

(ii) It is not destroying the environment (1) for the next generation (1). It is making full use of existing scarce resources. (1) Benefits local people (1), respects local tradition / culture (1). Is sustainable (1).

2 marks

(iii)  $3 \times 2$ , or  $3 \times 1 + 1$ . Must refer to rules given.

No number, no mark.

If the number does not relate to the rule, 0 marks.

Resorts are to only use recycled water in the gardens – great increase in demand for water from tourists. Makes use of scarce resources.

*No building to be taller than the treetops* – holiday developments to fit into the landscape and not to spoil the existing scenery.

No more than 20% of an island to be built on – no island to become too built up and so most of the island remain natural with the existing vegetation, Each island to have its own solar powered generator for producing electricity – use renewable energy which is non polluting and there will be no need to import expensive sources of energy, e.g. oil.

#### (iv) Level 1 Basic (1 – 2 marks)

Simple statements. MAX L1 if MEDC.

Traffic congestion/unskilled jobs/seasonal/destroying local culture/specified pollution/crime/sex tourism/drugs/(accept litter as form of specified pollution)

MAX 1 for list of named pollutants including litter.

#### Level 2 - (3 - 4 marks)

Linked or elaborated statements

Many of the jobs produced are seasonal and are unskilled such as cleaners and waiting staff / the influx of westerners from MEDCs bring ideas and dress which is alien to the population in the LEDCs. Many of the hotels are western in type and do not fit into the local landscape/ Increased amount of traffic from cars and aeroplanes lead to air pollution.

4 marks

#### **Question 6** Development

(a) (i) Gross National Product (at least two of the words correct, one of which to include National).

(ii) 2 x 1

Can be lifts directly from Figure 13 or comments on the overall pattern. E.g. there are only four countries which give more than the UN target for aid.

2 marks

(b) (i) Tied/conditional / bi-lateral.

1 mark

(ii) They provide expertise / equipment / make money. Straight lift from Figure 18.

LEDCs have to buy goods and services from donor country. MEDCs get goods and services from donor country. MEDCs get goods, etc., more cheaply. Political advantages/status. Guaranteed market for MEDC goods.

2 marks

(iii) Provides goods which cannot be used in the LEDC/ send goods that depend on the use of electricity, which the LEDC has not got. Dependent on aid/money spent on inappropriate 'things'. The money given may have to be spent on MEDC goods, on experts' salaries.

1 mark

(c) (i) 2 x 1 or developed point (2). No marks for example.

Low technology/uses local materials /uses traditional skills/ cost little /

Low technology/uses local materials /uses traditional skills/ cost little / technology which local economy can support / is realistic / local people can quickly learn how to use it / it is sustainable.

2 marks

(ii)  $3 \times 2 \text{ or } 3 \times 1 + 1$ 

Must refer to given advantages. No number, no mark. If number does not relate to the role -0 marks.

Fewer trees have to be  $cut\ down$  – this means that there is less danger of soil erosion as the trees act as protection from the wind and rain.

*It can be sold by women* – Gives them an income/ improves their status / more time to spend with family.

Produces less smoke – healthier because women are not breathing in smoke. It can also burn crop stalk and animal dung – make use of waste material – less wood burnt.

6 marks

(d) (i) 2 x 1

Lack of water/drought/too much water/flooding.

Lack of clean water/poor infrastructure / walk a long way.

2 marks

(ii) Level 1 Basic (1 -2 marks)

MAX L1 for MEDC.

Building dams/sewage systems/wells/irrigation/filtering.

#### Level 2 Clear (3-4 marks)

Dams are built to provide water all year. Wells are being dug to tap underground water supply. Sewage works improve quality of water.

#### (e) Level 1 Basic (1 – 2 marks)

Simple statements. Direct lifts from Figure 20. LEDCs mainly export primary products / LEDCs mainly export agricultural products MEDCs mainly export secondary products. Get into debt.

#### Level 2 Clear (3 – 4 marks)

Linked or elaborated statements.

LEDCs mainly export primary products which are low in value and subject to great price fluctuations/ LEDCs mainly export agricultural products which are subject to damage by the weather and other problems MEDCs mainly export secondary products which have greater added value. Get into debt because primary products are low value. Secondary products cost more to buy.

4 marks