

# **General Certificate of Education**

# **Geography 2030**

# GEOG3 Contemporary Geographical Issues

# **Mark Scheme**

Specimen mark scheme for examinations in June 2010 onwards This mark scheme uses the <u>new numbering system</u> 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.

Further copies of this Mark Scheme are available to download from the AQA Website: www.aqa.org.uk

Copyright © 2009 AQA and its licensors. All rights reserved.

#### COPYRIGHT

AQA retains the copyright on all its publications. However, registered centres for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to centres to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Set and published by the Assessment and Qualifications Alliance.

# GEOG3 General Guidance for GCE Geography Assistant Examiners

# **Quality of Written Communication**

As required by QCA, the marking scheme for this unit includes an overall assessment of quality of written communication. There are no discrete marks for the assessment of written communications but where questions are "Levels" marked, written communication will be assessed as one of the criteria within each level.

- Level 1: Language is basic, descriptions and explanations are over simplified and lack clarity.
- **Level 2:** Generally accurate use of language; descriptions and explanations can be easily followed, but are not clearly expressed throughout.
- **Level 3:** Accurate and appropriate use of language; descriptions and explanations are expressed with clarity throughout.
- **Level 4:** Accurate and mature use of language; descriptions and explanations are expressed coherently and confidently.

# Levels Marking - General Criteria

The following general criteria relate to knowledge, understanding and their critical application and the quality of written communication as outlined in the AQA Geography subject specification. They are designed to assist examiners in determining into which band the quality of response should be placed, and should be used when assessing the level of response an answer has achieved. It is anticipated that candidates' performances under the various dimensions will be broadly inter-related and the general guidelines for each level are as follows:

**Level 1:** An answer at this level is likely to:

- display a basic understanding of the topic;
- make one of two points without support of appropriate exemplification or application of principle;
- demonstrate a simplistic style of writing perhaps lacking close relation to the term of the question and unlikely to communicate complexity of subject matter;
- lack organisation, relevance and specialist vocabulary;
- demonstrate deficiencies in legibility, spelling, grammar and punctuation which detract from the clarity of meaning.

**Level 2:** An answer at this level is likely to:

- display a clear understanding of the topic;
- make one or two points with support of appropriate exemplification and/or application of principle;
- demonstrate a style of writing which matches the requirements of the question and acknowledges the potential complexity of the subject matter;
- demonstrate relevance and coherence with appropriate use of specialist vocabulary;
- demonstrate legibility of text, and qualities of spelling, grammar and punctuation which do not detract from the clarity of meaning.

# Level 3: An answer at this level is likely to:

- display a detailed understanding of the topic;
- make several points with support of appropriate exemplification and/or application of principle;
- demonstrate a sophisticated style of writing incorporating measured and qualified explanation and comment as required by the question and reflecting awareness of the complexity of subject matter and incompleteness/tentativeness of explanation;
- demonstrate a clear sense of purpose so that the responses are seen to closely relate to the requirements of the question with confident use of specialist vocabulary;
- demonstrate legibility of text, and qualities of spelling, grammar and punctuation which contribute to complete clarity of meaning.
- N.B. A perfect answer is not usually required for full marks. Clearly, it will be possible for an individual candidate to demonstrate variable performance between the levels. In such cases the principle of best-fit should be applied. Experience suggests that the use of exemplars within this mark scheme and the discussion which takes place during the Standardisation Meeting normally provides sufficient guidance on the use of levels in marking.

# **Annotation of Scripts**

- Where an answer is marked using a levels of response scheme the examiner should annotate the script with 'L1', 'L2' or 'L3 at the point where that level is thought to have been reached. The consequent mark should appear in the right hand column. Where an answer fails to achieve Level 1, zero marks should be given.
- Where answers do not require levels of response marking, each script should be annotated to show that one tick equals one mark. It is helpful if the tick can be positioned in the part of the answer which is thought to be credit-worthy. For points marked questions, where no credit-worthy points are made, zero marks should be given.

# **General Advice**

It is important to recognise that many of the answers shown within this marking 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 credit-worthy. The degree of acceptability is clarified through the Standardisation Meeting and subsequently by telephone with the Team Leader as necessary.

# Section A

# 01 Notes for answers A02 - 5, AO3 - 2

Changes:

- Increasing amplitude of a wave
- Decreasing wavelength
- 2m disparity between 00.15 and 00.30
- 6m disparity between 00.45 and 01.00
- huge wave (7m) just after 01.00
- sudden onset of extreme tidal wave (within minutes)

Hazards represented:

- continuous rise of sea level, but in stages
- each stage indicating a marked rise in a short period of time
- final stage is a huge wave which may swamp coastal protection mechanisms

# Mark scheme

- Level 1 Basic/simple statements, ups and downs mainly. No reference to trends/hazards as given above. 1-3 marks
- Level 2 Statements as given above in NFA. Some sophistication of answer and/or clear identification of hazard(s). 4-7 marks

# 02 Notes for answers

### A01 - 8

The vast majority of earthquakes occur along plate boundaries, the most powerful being associated with destructive margins. At conservative margins, the boundary is marked by a fault, movement along which produces the earthquake. Perhaps the most famous of these is the San Andreas fault of California where the fault line represents the boundary between the North American and Pacific plates. Some earthquakes occur away from plate boundaries and are associated with the reactivation of old fault lines. It has also been suggested that man could be the cause of some minor earthquakes by building large reservoirs where the water puts pressure on the surface rocks or by the subsidence of deep mine workings.

# Mark scheme

- Level 1 Simple and generalised statements of causes of earthquakes (i.e. of process), with no depth or detail. Specific locations are not given. 1-3 marks
- Level 2 Specific and detailed causes of specific hazards access this level, with good use being made of case studies and named plate boundaries and/or earthquakes. 4-8 marks

5

# 03 Notes for answers

# A02 - 8, AO3 - 2

Responses to earthquakes and their effects will depend on the level of economic development of the affected area.

In general, they may include:

- in inability to leave area, or reluctance
- preparation in the event of earthquakes FEMA (USA)
- modification of buildings variety of ways could be described
- education to minimise loss of life, including earthquake drills, emergency supplies in the home, posters
- fire prevention smart meters
- pre-planning of emergency services
- land-use planning to minimise damage and risk.

# Mark scheme

- Level 1 Simple statements of responses which could apply to any earthquake hazard. No specific detail provided. 1-3 marks
- Level 2 Specific statements of responses which can be clearly attributed to named areas and/or earthquakes access this level. 4-8 marks
- Level 3 Fully developed answer, with good elaboration of more than one response. Rounded answer with full range of responses analysed and/or evaluated.

9-10 marks

### 04 Notes for answers

### A02 - 5, AO3 - 2

Station A: full cloud, southerly wind, 15 knots, dry, 5C Station B: full cloud, SW wind, 25 knots, raining, 10C Reasoning: Station A in cold sector; Station B in warm sector; therefore different air masses with differing characteristics. Frontal activity creating rain at B.

- Level 1 Description only given, no explicit comparison, and no reasoning other than identification of sectors 1-3 marks
- Level 2 Clear statements of difference, with further credit for appropriate reasoning. 4-7 marks

# 05 Notes for answers AO1 - 8

Reasons:

- an anticyclone is an area of relatively high atmospheric pressure
- it is represented on a weather map by a system of closed isobars with pressures increasing towards the centre
- anticyclones move slowly and may remain stationary over an area for several days and weeks
- the air in an anticyclone subsides, that is falls from above. Therefore, this air warms as it falls, producing a decrease in the relative humidity of the air. This in turn leads to a lack of cloud development, and dry conditions
- isobars are usually far apart, and therefore there is little pressure difference between the centre and edges of the anticyclone
- hence, winds are weak, and flow gently outwards
- in the British Isles, the winds flow clockwise around the centre of the anticyclone.

# Winter weather

In winter anticyclones result in:

- Cold daytime temperatures below freezing to a maximum of 5C;
- Very cold night-time temperatures below freezing with frosts;
- Clear skies by day and night generally. Low level cloud may linger and radiation fogs (caused by rapid heat loss at night) may remain in low lying areas;
- High levels of atmospheric pollution in urban areas, caused by a combination of subsiding air and lack of wind. Pollutants are trapped by a temperature inversion (when air at altitude is marginally warmer than air at lower levels).

Some anticyclones are described as being "blocking". Such anticyclones establish themselves over Britain and NW Europe and remain stationary for many days. Depressions which would normally travel across the British Isles on a westerly air stream are steered around the upper edge of the high, and away from the area. Extreme weather conditions are then produced, with dry and freezing weather in winter.

- Level 1 Simple statements of description and/or process. No recognition of the role of subsiding air. 1-3 marks
- Level 2 Some detail and depth for either description or process. The influence of air movement is acknowledged, as may subsequent processes. 4-8 marks

### 06 Notes for answers AO2 - 8, AO3 - 2

An urban area can be identified as a warmer area in "the sea" of the surrounding cooler rural air. This is the **urban heat island**. Cities tend to be warmer than the surrounding rural areas for the following reasons:

- Building materials such as concrete, bricks and tarmac act like bare rock surfaces in that they absorb large quantities of heat which is slowly released at night. Some of these surfaces also have a high reflective capacity and many multi-storey buildings are able to concentrate the heating effect in the surrounding streets as energy is reflected downwards.
- Heat comes from industries, housing and vehicles which all burn fuel (anthropogenic heat, i.e. caused by human activities) and from the large numbers of people present.
- Air pollution from industries and vehicles increases cloud cover and creates a "pollution dome" which allows in the short wave radiation but absorbs a large amount of the outgoing radiation as well as reflecting it back to the surface.
- In urban areas, water falling onto the surface is disposed of as quickly as possible. This changes the urban moisture and heat budget as reduced evapotranspiration means that more energy goes into heating the atmosphere.

The heat island effect develops best under certain meteorological conditions. The contrast between urban and rural areas is greatest under calm, high-pressure conditions, particularly with a temperature inversion in the boundary layer. Heat islands are also better developed in winter when there is a bigger impact from city heating systems. Urban-rural contrasts are much more distinct at night when the impact of insolation is absent and surfaces, having absorbed heat by day, can slowly release it back into the atmosphere after the sun has gone down. Heat islands, therefore, are not constant as they vary both seasonally and diurnally. Evidence may also come in the form of precise data.

	Level 1 – Simple statements of concept.	No depth of discussion	1-3 marks
--	---	------------------------	-----------

- Level 2 Detailed statements of concept. Better responses may discuss actual evidence of the UHI. 4-8 marks
- Level 3 A full evaluation of the concept. Refers to variation in extent of the UHI seasonally and diurnally. 9-10 marks

### 07 Notes for answers

# AO2 - 5, AO3 - 2

Variety of trophic levels operating here:

- Autotrophs: solar energy being converted into food energy by green plants and bacteria, etc.
- Herbivores: Insects, caterpillars, rabbits
- Carnivores: weasels, spiders, mice, moles
- Omnivores: birds
- Top carnivores: owls, foxes.

At each successive level, there are fewer organisms and a lower biomass.

### Mark scheme

Level 1 – Simple statements. No reference to trends/classifications as given above.

1-3 marks

Level 2 – Statements as given above in NFA. Some sophistication of answer, or classification, and/or commentary. 4-7 marks

# 08 Notes for answers AO1 - 8

An example: a lithosere.

A lithosere is an example of a succession that begins life on a newly exposed rock surface. This surface may typically have been left behind on the retreat of a glacier, formed on an emerging raised beach, or developed on scree formations. In the British Isles, such a succession would develop as follows:

- the bare rock surface would initially be colonised by **bacteria and algae**, which can survive where there are few nutrients. Bare rock tends to be very dry and there is rapid surface runoff.
- the pioneers begin to colonise starting with **lichens** which can withstand the acute water shortage. Lichens begin to break down the rock and assist water retention.
- as water retention improves, **mosses** begin to colonise. These also improve water retention and weathering to produce the beginnings of the soil in which more advanced plants can grow.
- grasses, ferns, herbs and flowering plants begin to colonise. As these die back, bacteria convert their remains into humus, which helps to recycle nutrients and further improve soil fertility.
- **shrubs** colonise, which in turn begins to reduce grass cover as competition for light increases.
- pioneer trees become established. These are mainly fast growing species such as **willow, birch and rowan**.
- slower growing species begin to develop such as **ash and oak**. Initially, they are in the shade of shrubs, so they only appear in the later stages of the succession. They are the dominants of the climatic climax community temperate deciduous forest

# Mark scheme

- Level 1 Simple statements of description and/or process. No clear recognition of the role of time. 1-3 marks
- Level 2 Some detail and depth for either description or process. The influence of time is acknowledged, as may subsequent processes. 4-8 marks

### 09 Notes for answers AO2 - 8, AO3 - 2

**Biodiversity** refers to the range of wild and cultivated species in a biome. Such diversity has recently become a major environmental issue because environments are being degraded at an accelerating rate and much diversity is being lost through the destruction of natural habitats.

In ecosystems, **biodiversity** is inversely related to the number and severity of limiting factors in the physical environment. Thus cold and / or arid environments (for example, tundra and hot deserts) have low biodiversity, whilst warm and moist environments (for example, tropical rainforests) have high biodiversity.

The impact of human activity on ecosystems is normally to reduce **biodiversity**. This may be caused by deliberate action (for example, farmers reduce biodiversity by removing species that compete with crops and domestic livestock) or by the indirect destruction of habitats (for example, due to acid rain).

Increasingly developing countries with tropical rainforests are asserting sovereignty over the biodiversity of their natural resources. Many biotechnological and pharmaceutical companies want to use the genes of plants and organisms to derive improved plants, foods and drugs. Several Central American countries (for example, Belize, El Salvador and Guatemala) have joined together to negotiate with such firms. They have seen that Madagascar, the home of the periwinkle, has received no financial benefit from the development of the cancer drug, Vincristine, from that plant.

Costa Rica is thought to be the country with the highest levels of biodiversity. It has the most diverse set of climates in the world. It contains between 5 and 7% of the world's known plant and insect species. One estimate suggests that if it were to receive 2% of the royalties from sales of 20 products made from its resources, the country would gain more income than from its current main exports of coffee and bananas.

# Mark scheme

- Level 1 Simple statements of concept, or simple statements of concern only. No depth of discussion. 1-3 marks
- Level 2 Detailed statements of concept and/or concern. Better responses may discuss evidence to support their argument. 4-8 marks

Level 3 - A full evaluation of the concept, with a balanced view on its relative importance. 9 - 10 marks

# Section B

# 10 Notes for answers AO2 - 2, AO3 - 5

Landfill: London dominates (over 2 x Vienna; 5 x Amsterdam)

Energy recovery: Amsterdam has 40% (2 x Vienna; 5 x London)

Composting: Vienna has largest proportion (15%); small amounts only in the other two cities Recycling: both Vienna and Amsterdam have much higher proportions than London.

# Comments:

Landfill: unsightly, threat to groundwater, produces methane gas

Energy recovery: involves incineration, produces CO2 and other toxins, but can be used to heat water

Composting: expensive on a large scale; needs advanced anaerobic digestion; can produce useful by-products

Recycling: high costs of collection, high set up costs, low market values of materials. Relies on individuals.

- Level 1 Description only given, no explicit comparison, and no commentary other than more obvious statements. 1-3 marks
- Level 2 Clear statements of difference, with further credit at this level for appropriate and sophistication of commentary. 4-7 marks

# 11 Notes for answers AO1- 8

Gentrification is a process of housing improvement. It is associated with a change in the neighbourhood composition in which low income groups are displaced by more affluent people, usually in professional or managerial occupations. Gentrification is a process by which the regeneration of inner cities can take place, but it is different from other schemes in that gentrification is carried out by individuals or groups of individuals, and not by supported bodies. Gentrification involves the rehabilitation of old houses and streets on an individual basis, but is openly encouraged by other groups such as estate agents, building societies and local authorities.

One of the clear positive outcomes is that the social mix of the area is changed and becomes more affluent. The purchasing power of the residents is greater which leads to rise in the general level of prosperity. The area becomes dominated by "yuppies", with a subsequent increase in the number of bars, restaurants and other higher status services. The very nature of the refurbishment that takes place in each house leads to the creation of local employment, such as design, building work, furnishings and decoration.

There are, however, clear disadvantages of gentrification. Local people on low incomes find it increasingly difficult to purchase houses, as the price of refurbished property rises markedly. Indeed, the size of the privately rented sector diminishes as more properties are sold off. Friction and conflict occurs between the "newcomers" and the original residents.

Gentrification is taking place in the central parts of a wide number of towns and cities in the UK. Well documented examples include Notting Hill and Islington in London.

- Level 1 Simple statements of concept, or simple statements of illustration only. No depth of discussion. 1-3 marks
- Level 2 Detailed statements of concept and/or illustration. Better responses may discuss actual evidence of gentrification. 4-8 marks

# 12 Notes for answers AO2 - 8, AO3 - 2

Urban planners are extremely concerned that CBDs are declining, as there are potentially large problems for run-down city centres which can become very dangerous at night. Dereliction, increased numbers of low grade shops and lack of investment all encourage "blight" to set in. Planners see the CBD as an important social and cultural meeting point for a city. A declining CBD will only accelerate the success of the out-of-town centres. A number of strategies are being devised to help **the city centre** "fight back":

- The provision of a more attractive shopping environment with pedestrianisation, new street furniture, floral displays, paving and landscaping
- The construction of all-weather shopping malls that are air conditioned in the summer and heated in the winter, often with integral low cost parking
- The encouragement of specialist areas, such as open street markets, cultural quarters and arcades
- The improvement of public transport links to the heart of the CBD, with rapid transit systems, park and ride schemes and shopper buses
- The extensive use of CCTV and emergency alarm systems to reduce crime and calm the fears of the public, particularly women
- The organisation of special shopping events such as Christmas fairs, late night shopping and Sunday shopping
- Conservation schemes that enhance the ambience of heritage cities such as Chester, York, Bath and Cambridge.

Many cities are also encouraging functions other than retailing to increase the attractions of a CBD by:

- Developing a wider range of leisure facilities, such as café bars, restaurants, music venues (such as the "Arenas" in many city centres), cinemas and theatres that people would visit in the evening
- Promoting street activity as is often the case at Covent Garden in London
- Developing a wide range of nightlife, such as "clubbing" in Manchester and Leeds (but there are negatives associated with this with the high level of policing that will be necessary)
- Establishing theme areas, such as the gay area in Manchester, or the cultural quarters of Sheffield and Stoke
- Developing flagship attractions (for example the photographic museum in Bradford)
- Encouraging residential activities to return to city centres, either in the form of gentrification or new up-market apartments.

**On the rural – urban fringe**, large areas have been devoted to major retail parks and this has involved the following:

- Redevelopment and/or clearance of a large area of cheap farmland, or a brownfield site
- The creation of extensive areas of car parking (The Trafford Centre has 10000 spaces)
- The construction of a link to a motorway interchange, or outer ring road
- The development of other transport interchange facilities bus station, supertram, railway station.
- The construction of linked entertainment facilities e.g. Warner Village cinemas, fast food outlets.

# Mark scheme

- Level 1 Simple statements of impact. No depth to answer, mostly generalisations. Limited use of examples. 1-3 marks
- Level 2 Some detail and depth for one type of impact: negative or positive. Good use is made of at least one example. 4-8 marks
- Level 3 Fully developed answer, for both forms of impact, positive and negatives. Rounded answer with full range of impacts discussed and/or evaluated. 9-10 marks

# 13 Notes for answers AO2 - 2, AO3 - 5

Similarities:

Small amounts for combating hunger; and gender equality (although Ghana is relatively high); improving slum conditions. Health dominates all three.

#### Differences:

Ghana – emphasis on health, education and energy Tanzania – even more on health than Ghana; greater emphasis on roads; less so on water supply Uganda – largest amount on health (AIDS?); roads also high.

Comments:

Health biggest issue – AIDS and loss of health workers overseas for higher wages? East African countries have communication priorities – less colonial infrastructure? Hunger not an issue? Denial or fertile lands?

- Level 1 Description only given, no explicit comparison, and no commentary other than more obvious statements 1-3 marks
- Level 2 Clear statements of similarity/difference, with further credit at this level for appropriate and sophistication of commentary. 4-7 marks

# 14 Notes for answers AO1 - 8

The variation in the economic development of countries is known as the development continuum. This variation has many causes, but the following seem to have contributed to the widening that has taken place in recent times:

- primary products can be moved more cheaply. Costs in shipping raw materials in the 1990s were only one-third of those in the 1920s
- trade barriers are fewer and their removal has stimulated far more trade. World trade is dominated by the MEDW, accounting for 75% of the world's exports (80% of the manufactured exports). Some NICs gain a great deal from trade, however, the flow of profits is back to the MEDW. Countries in the MEDW can also act unilaterally if they see their interests being harmed such as the USA in 2002 with a tariff placed on steel imports
- regulatory bodies (IMF, WTO) tend to be dominated by a few wealthy states and rule changes only come on to the agenda when the dispute involves countries from within the MEDW. As a result, 70% of the world's population are excluded from the world economy, because they have assets that they are unable to realise to support development
- there are more capital flows around the world, however, much capital is controlled by institutions from countries in the MEDW
- technology is no longer associated with high productivity and high wages. The transfer of technology enables many countries within the LEDW to increase their productivity but wages in such countries have not kept pace with this rise. Technology is therefore widening the development gap between countries as many workers in the LEDW earn less to make the same product compared with workers in countries of the MEDW
- the existence of **Third World Debt** is often the result of falling commodity prices so that many countries are unable to repay loans. Although the debts of some of the poorest countries were abolished in 1999, many initiatives have only scratched the surface of the problem as most countries do not provide the UN-recommended 0.7% of GNP as aid.

# Mark scheme

Level 1 – Simple statements of concept, or simple statements of illustration only. No depth of discussion.

1-3 marks

Level 2 – Detailed statements of concept and/or illustration. Better responses may discuss the actual evidence of the continuum. 4-8 marks

#### 15 Notes for answers AO2 - 8, AO3 - 2

Many countries have organised themselves into groups that have worked to in various ways to protect and enhance their domestic economies, their social status and level of development. The best known of these are:

### G8 (formerly G7)

The grouping of the richest nations in the world, whose leaders meet at regular intervals. Members are: Japan, Germany France, Italy, USA, UK, Canada and Russia. The European Union has observer status.

### **European Union (formerly the European Community)**

Began with the 1957 Treaty of Rome and an original six members (France, Italy, Belgium, Netherlands, Luxembourg and West Germany). Expanded gradually to incorporate another 27 members by 2007.

# North American Free Trade Agreement (NAFTA)

NAFTA came into effect in 1994 with the objective of eliminating most tariffs and other restrictions on trade and investments between the USA, Canada and Mexico.

### Association of South East Asian Nations (ASEAN)

ASEAN developed from the old SEATO anti-communist grouping in 1967 with five original members – Indonesia, Malaysia, the Philippines, Singapore and Thailand. The other countries that have joined since are Brunei, Vietnam, Laos, Myanmar and Cambodia. Its objectives are to accelerate economic growth and social progress, and to promote regional peace and stability.

### **Organisation of Petroleum Exporting Countries (OPEC)**

A powerful cartel that represents the interests of oil exporters and sets quotas in order to control the price of oil. Members include Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela.

There are also a number of organisations that attempt to regulate development:

**World Trade Organisation (WTO)** which replaced the General Agreement on Tariffs and Trade (GATT) and has far greater power to arbitrate in trade disputes than its predecessor. WTO essentially exists to promote free trade.

**Organisation for Economic Co-operation and Development (OECD)** which is a grouping of the richer nations whose aim is to raise and maintain living standards in its members countries and also within non-member countries.

**International Bank for Reconstruction and Development (IBRD)** which was formerly known as the World Bank. Its purpose is to aid development, but it is often treated with suspicion by developing countries.

International Monetary Fund (IMF) which is similar to IBRD in its aims.

# Mark scheme

- Level 1 Simple statements of reasoning. No depth to answer, mostly generalisations. Limited use of examples. 1-3 marks
- Level 2 Some detail and depth for at least one reason: economic or social. Good use is made of at least one example. 4-8 marks
- Level 3 Fully developed answer, with good elaboration of more than one reason. Rounded answer with full range of reasons discussed and/or evaluated. 9-10 marks

# 16 Notes for answers AO2 - 2, AO3 - 5

- Falling numbers of people living in poverty from 1981 to 2001
- Proportion of EA is falling, from over half to a quarter
- Proportion of SA is rising, from 33% to 40%
- Proportion of SSA is increasing to 25% in 2001
- LA is also increasing in proportion, though numbers may well be similar
- Small amounts elsewhere in the world where is North America?

### Mark scheme

Level 1 – simple statements of description, year-by-year analysis given. No reference to trends as given above (other than first one). 1-3 marks

Level 2 – statements as given above in NFA. Some sophistication of description. 4-7 marks

# 17 Notes for answers AO1 - 8

One in six people worldwide struggle on a daily basis in terms of: nutrition, uncontaminated drinking water, safe shelter, adequate sanitation and access to basic health care. These people have to survive on \$1 a day or less and are largely denied access to public services for health, education and infrastructure.

A number of factors interrelate in terms of creating such poverty. They are:

- subsistence farming economies
- malnourishment (famine see below)
- short term disasters: floods, droughts, plagues of locusts, war (see below).

E.g. Famine is often associated with poverty. There are several causes of famine:

- Drought lack of rainfall causes soil and groundwater sources to decline which ultimately leads to a reduction in the supply of water. The soil will eventually not meet the needs of particular plants and agriculture crops, creating serious problems for areas that depend on farming, both arable and pastoral.
- A population increase that is greater than the rate of crop (food) production. This often occurs in areas where there is a sudden influx of refugees, fleeing a war zone or an area of civil unrest. It can also occur as people migrate from one drought zone to another.
- A rapid rise in the price of foodstuffs and/or animals. This can occur when the quality of farmland and grazing land declines in quality (often during a drought), but is further compounded by a breakdown in the local economy and marketing systems. Control mechanisms react too slowly and inflationary price rises fuel panic buying, which rapidly lead to shortages of basic food stuffs.

- Level 1 Simple and generalised statements of causes of poverty (i.e. of process), with no depth or detail. Specific locations are not given. 1-3 marks
- Level 2 Specific causes of specific aspects/areas of poverty access this level, with good use being made of case studies and/or good development of one or more factors. 4-8 marks

# 18 Notes for answers AO2 - 8, AO3 - 2

For example: The United Nations.

The UN summit of 2000 agreed 8 Millennium Development Goals (MDG) to tackle extreme poverty in its many dimensions. These goals are to:

- eradicate extreme poverty and hunger
- achieve universal primary education
- promote gender equality and empower women
- reduce child mortality
- improve maternal health
- combat HIV/AIDS, malaria and other diseases
- ensure environmental sustainability
- develop a global partner ship for development.

Candidates may choose to discuss these MDG in their entirety or individually. Either approach would be acceptable. They may also discuss the suitability of each of them in different parts of the world. Sub-Saharan Africa is said to be the "Epicentre of the crisis".

Candidates could also refer to a range of international agencies, including non-governmental agencies and charities.

# Mark scheme

Level 1 – Simple statements of an agency's role. No depth to answer, mostly generalisations. Limited use of exemplification and/or sense of place.

1-3 marks

- Level 2 Some detail and depth for one type of response from an agency/ies. Good development of the impact of that response in one area of the world, with perhaps some evaluation of impact. 4-8 marks
- Level 3 Fully developed answer, with good elaboration of more than one agency. Rounded answer with full range of responses discussed and/or evaluated. 9-10 marks

# Section C

# Mark scheme for the essay questions

Level	Marks 40	Assessment criteria	
1	1-9	The answer shows a basic grasp of concepts and	
		ideas, but points lack development or depth.	
		<ul> <li>Explanations are incomplete and arguments partial</li> </ul>	
		and lack coherent organisation or reasoned	
		conclusions.	
		<ul> <li>Examples are superficial.</li> </ul>	
		There is no evidence of synopticity.	
2	10-19	The answer is relevant and accurate, and shows	
		reasonable knowledge and critical understanding of	
		concepts and principles with some use of specialist	
		vocabulary.	
		<ul> <li>Arguments are not fully developed and the</li> </ul>	
		organisation of ideas and the use of examples and	
		general theories show imbalances.	
		Some ability to identify, interpret and synthesise some	
		of the material.	
		Limited ability to understand the roles of values,	
		attitudes and decision-making processes.	
		Sketch maps/diagrams are not used effectively.	
		Evidence of synopticity is limited.	
3	20-29	Sound and frequent evidence of thorough, detailed	
		and accurate knowledge and critical understanding of	
		concepts and principles, and of specialist vocabulary.	
		<ul> <li>Explanations, arguments and assessments or</li> </ul>	
		evaluations are direct, logical, purposeful and	
		generally balanced.	
		<ul> <li>Some ability to identify, interpret and synthesise a range of meterial</li> </ul>	
		range of material.	
		<ul> <li>Some ability to understand the roles of values, attitudes and decision-making processes.</li> </ul>	
		<ul> <li>Examples are developed and sketch maps/diagrams</li> </ul>	
		<ul> <li>Examples are developed and sketch maps/diagrams are used effectively.</li> </ul>	
		<ul> <li>There is strong evidence of synopticity.</li> </ul>	
4	30-40	<ul> <li>Strong evidence of thorough, detailed and accurate</li> </ul>	
-		knowledge and critical understanding of concepts and	
		principles and of specialist vocabulary.	
		<ul> <li>Explanations, arguments and assessments or</li> </ul>	
		evaluations are direct, logical, perceptive, purposeful,	
		and show both balance and flair.	
		<ul> <li>There is a high level of insight, and an ability to</li> </ul>	
		identify, interpret and synthesise a wide range of	
		material with creativity.	
		Evidence of maturity in understanding the role of	
		values, attitudes and decision-making processes.	
		Examples are well-developed and sketch	
		maps/diagrams are fully integrated.	
		The answer is fully synoptic.	

# 19

# AO1 - 14, AO2 - 16, AO3 - 10

Appropriate content for a response to this question might include:

- outlines of the nature of tectonic processes, including vulcanicity and seismicity
- the hazards that tectonic processes represent; comparisons/contrasts could be made between the processes
- potential responses and adjustments to such hazards, including management strategies

Synopticity emerges with the following:

- understanding the context of varying timescales (frequency, periodicity)
- evidence of breadth/depth of case study material
- critical understanding the various processes in different contexts
- critical understanding of the impact in areas with varying levels of economic development and levels of technology
- recognising the varying capacity to manage such hazards with a comparison made between the MEDW and the LEDW
- understanding contrasts between urban and rural environments
- understanding contrasts between agricultural and industrial/commercial environments
- recognising time factor aspects that relate to the 'when' in the question wording -people in certain buildings at certain times of day, people on transport systems etc.
- understanding that some processes can have recreational and/or tourism opportunities to generate income and are therefore not perceived as hazardous.

This question requires a discussion approach. Any conclusion is creditable as long as it is reasonable and related to the preceding content and discussion.

# 20

# AO1 - 14, AO2 - 16, AO3 - 10

Appropriate content for a response to this question will include:

- an outline of the possible causes of global warming
- description of the possible effects of global warming, both on a global scale and on the British Isles
- discussion of the responses to global warming at a variety of scales.

The question should be fully addressed and the synoptic element is achieved when there is a more critical view of the causes, consequences and responses to global warming.

**Synopticity** is therefore achieved by:

- evidence in the breadth/depth of case-study material
- detailed critical understanding of reasoning, impact and response
- good understanding of at least one, and preferably more, of the elements given above
- recognition of complexity of the issue of global warming; some recognition of the debate around the issue
- an awareness of the interrelationships of the various aspects covered in the question.

The question requires an account and the answer should cover all elements. Any reasonable conclusion can be credited as long as it is measured and reasonable, and related to the preceding content.

#### 21 AO1 - 14, AO2 - 16, AO3 - 10

Appropriate content for a response to this question might include:

- outlines of the characteristics of the vegetation of the chosen tropical vegetation
- potential adaptations and adjustments to the climatic factors
- the role of human activity in changing/modifying the natural vegetation

Synopticity emerges with the following:

- understanding the context of varying timescales
- clear critical understanding of the various processes involved
- contrasts in economic development and levels of technology in terms of human interference
- contrasts within different agricultural environments which may have an impact
- evaluative comments re: statement given in question i.e. human v climatic influences.

This question requires a discussion approach and the response should come to a view. Any conclusion is creditable as long as it is reasonable and related to the preceding content and discussion.

### 22 AO1 - 14, AO2 - 16, AO3 - 10

Appropriate content for a response to this question will cover the urban problems themselves, and their solutions with an emphasis on contrasts between the MEDW and the LEDW. Common urban problems include the following areas:

- social poverty, housing issues, social stress, crime, equality issues
- economic unemployment, under-employment and associated poverty
- political distribution of income and equality issues, conflict
- environmental atmospheric pollution, watercourse and groundwater pollution

The distribution of these problems and their impact should be a feature of any response. The relative importance of each could be considered in terms of the impact on the lives of people, on different sections of the community and on the effective functioning of cities.

The obvious contrast is between cities in the MEDW and in the LEDW, but contrasts can also be made within the MEDW, between 'good' cities (e.g. Seattle) and 'bad' cities (e.g. Detroit). Solutions could be set out in terms of:

- governmental economic intervention, both sectoral and spatial
- governmental social programmes and policies
- environmental planning and pollution controls, including curbing the use of motor vehicles, public transport policies, etc.
- the role of voluntary action, including urban self-help schemes.

The question should be fully addressed and the synoptic element is achieved when there is a more critical view of problems, coupled with some discussion of solutions, so that the two strands of the question are covered explicitly.

Synopticity is therefore achieved by:

- evidence in the breadth/depth of case-study material
- detailed critical understanding of at least one urban problem
- detailed critical understanding of at least one solution
- awareness of the interrelationships of the various aspects covered in the question.

The question requires a discussion and the response should come to a view. Any reasonable conclusion can be credited as long as it is measured and reasonable, and related to the preceding content.

# 23

# AO1 - 14, AO2 - 16, AO3 - 10

Appropriate content for a response to this question will include:

- an outline of the reasons for the growth of TNCs in the world
- description of the social and economic impacts of TNCs on a variety of countries in the world, both host and origin
- discussion of the relative importance and roles of TNCs in the world economy

The question should be fully addressed and the synoptic element is achieved when there is a more critical view of roles of TNCs and NICs, coupled with some discussion of consequences, so that the two strands of the question are covered explicitly.

**Synopticity** is therefore achieved by:

- evidence in the breadth/depth of case-study material
- detailed critical understanding of reasoning and impact
- good understanding of at least one, and preferably more, of the elements given above
- recognition of the changing importance of NICs over time
- awareness of the interrelationships of the various aspects covered in the question.

The question requires a report and the response should cover all elements. Any reasonable conclusion can be credited as long as it is measured and reasonable, and related to the preceding content.

# 24

# AO1 - 14, AO2 - 16, AO3 - 10

This question should be answered in the context of a conflict over the use of a resource at a local scale. A wide range of studies will be relevant (as chosen by the centre). Appropriate content for a response to this question will include:

- an outline of the attitudes of different groups of people to a local conflict
- description of the processes which may/will operate to resolve the conflict
- discussion of the winners/losers when the conflict is resolved.

The question should be fully addressed and the synoptic element is achieved when there is a more critical view of the roles of different stakeholders in the conflict, coupled with some discussion of consequences, so that the three strands of the question are covered explicitly.

**Synopticity** is therefore achieved by:

- evidence in the depth of the chosen case-study material
- detailed critical understanding of causes and consequences
- good understanding of at least one, and preferably more, of the elements given above
- recognition of variation in the basis of attitudes (e.g. overtime) within groups who may lose or benefit from the conflict.
- recognition that the perception of winners/losers changes over time and/or space.

The question requires a report and the response should cover all elements. Any reasonable conclusion can be credited as long as it is measured and reasonable, and related to the preceding content.