



*Rewarding Learning*

**ADVANCED SUBSIDIARY (AS)  
General Certificate of Education  
2017**

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**Geography**  
**Assessment Unit AS 2**

*assessing*

Human Geography

**[SGG21]**

**FRIDAY 19 MAY, AFTERNOON**

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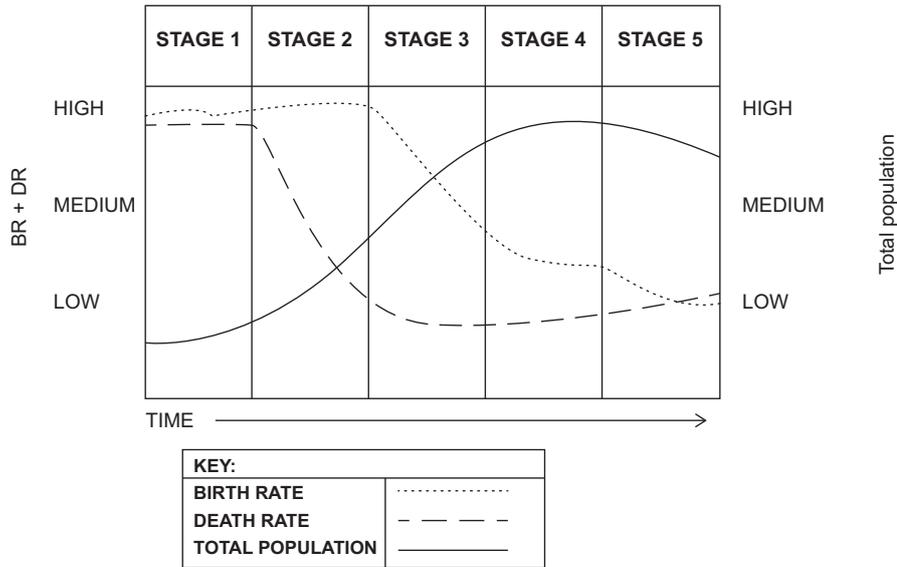
**MARK  
SCHEME**

## General Descriptions for Marking Criteria

Knowledge and Understanding	Skills	Quality of Written Communication	Level
The candidate will show a wide-ranging and accurate knowledge and a clear understanding of the concepts/ideas relevant to the question. All or most of the knowledge and understanding that can be expected is given.	The candidate will display a high level of ability through insightful analysis and interpretation of the resource material with little or no gaps, errors or misapprehensions. All that is significant is extracted from the resource material.	Excellent quality of written communication. The candidate will express complex subject matter using an appropriate form and style of writing. Material included in the answers will be relevant and clearly organised. It will involve the use of specialist vocabulary and be written legibly and with few, if any, errors in spelling, punctuation and grammar.	3
The candidate will display an accurate to good knowledge and understanding of many of the relevant concepts/ ideas. Much of the body of knowledge that can be expected is given.	The candidate will display evidence of the ability to analyse and interpret the resource material but gaps, errors or misapprehensions may be in evidence.	Good quality of written communication. The candidate will express ideas using an appropriate form and style of writing. Material included will be relevant and organised but arguments may stray from the main point. Some specialist terms will be used and there may be occasional errors in spelling, punctuation and grammar. Legibility is satisfactory.	2
The candidate will display some accurate knowledge and understanding but alongside errors and significant gaps. The relevance of the information to the question may be tenuous.	The candidate will be able to show only limited ability to analyse and interpret the resource material and gaps, errors or misapprehensions may be clearly evidenced.	Basic quality of written communication. The candidate will have a form and style of writing which is not fluent. Only relatively simple ideas can be dealt with competently. Material included may have dubious relevance. There will be noticeable errors in spelling, punctuation and grammar. Writing may be illegible in places.	1

## Section A

1 (a) (i)



2 × [1]

[2]

(ii) In Stage 1 the birth rate will be high; this can be seen in a few places today, for example with Rainforest tribes. Birth rates will be high because:

- No birth control or family planning.
- So many children die in infancy that parents tend to produce more in the hope that several will survive.
- Many children are needed to work on the land.
- Children are regarded as a sign of virility.
- Some religious beliefs (Roman Catholic and Hindus) encourage large families.

In Stage 2 the birth rate will remain high while the death rate falls. It is not until Stage 3 that the birth rate begins to fall. At Stage 3 they fall rapidly. This can be seen in Cuba today. The birth rates will fall at this stage due to:

- Family planning and contraceptives, sterilisation, abortion and government incentives.
- A lower infant mortality rate leading to less pressure to have so many children.
- Increased mechanisation and industrialisation meaning fewer labourers are needed.
- Increased desire for material possessions (cars, holidays, bigger homes) and less desire for bigger families.
- An increased incentive for smaller families.
- Emancipation of women, enabling them to follow their own careers rather than being solely child bearers.

At Stage 4 the birth rates will remain low and fluctuating at around 16/1000. This can be seen in Canada and the USA. Some countries have entered into Stage 5 where the birth rate has fallen below the death rate to give declining populations (e.g. Japan). At least 2 places needed to be mentioned. No places, maximum Level 2.  
No reward for answers entirely on death rate.

**Level 3 ([5]–[6])**

A detailed account of why the birth rate has changed with place reference provided.

**Level 2 ([3]–[4])**

Answers with no place reference will fall into this level.

**Level 1 ([1]–[2])**

A poorer answer with inaccuracies and limited explanation across the five stages. [6]

- (b) (i) The continent with the largest concentration of countries that have a policy to lower fertility is Africa. Following this there are also countries in South America and South East Asia that have policies to lower the fertility. The only continent that does not have any countries with a policy to lower fertility is Europe. For maximum [3] distribution must be described. 3 countries named but no distribution element, maximum [1] [3]
- (ii) Candidates need to answer this question with reference to a specific case study. Those who do not should be limited to [2]. For full marks they need to have factual information relating to their chosen case study, not just a name. Most answers will be based around the ideas of over, under and optimum population and the effect each of these will have on the standard of living and quality of life. [4]

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- 2 (a) (i) Candidates will identify that Tower Hamlets has experienced a decrease in the number of areas that are described as most deprived whereas Bromley has experienced an increase in the number of areas described as most and least deprived. Change over time in one area, maximum [2] [3]
- (ii) They are not required to answer this question using a case study. For a positive effect most will discuss the improved housing conditions and facilities in the Inner city areas and the benefit this will bring to people living there and to the environmental quality. For a negative effect many will focus on the increased house prices that will force the original residents to leave. But mark all answers on merit. 2 × [2] [4]

- (b) Candidates can discuss the following differences between the rural and urban areas:

**POPULATION SIZE:** Rural areas will have lower population totals and lower population densities. These will increase as urbanity increases. However, there is wide discrepancy over the number of people that make a settlement a village, town or city.

**ECONOMIC ACTIVITY:** Rural settlements have traditionally been defined as places where most of the workforce are farmers or are engaged in other primary activities. This can be seen in the Resource. In contrast, most of the workforces in urban areas are employed in secondary and service industries. We can see the large number of products and restaurants being advertised in the urban area in Resource 2B. Recently, more rural settlements have now become commuter settlement for people working in the nearby urban spaces so the traditional divide of farming and services has lessened.

**SERVICES:** The provision of services, such as schools, hospitals, shops, public transport and banks is usually limited, at times absent, in the rural areas. There is a greater range of entertainment facilities in the urban area. This can clearly be seen in Resource 2B.

**BUILDING HEIGHT:** As can be seen from the resource there would be a greater concentration of buildings and taller buildings in the urban area. This is due to competition pushing the price of the land upwards making it more economically viable to build upwards. Building height would decrease as you moved from urban to rural along the rural to urban continuum.

**LAND USE:** In the rural areas, settlements are widely spaced with open land between adjacent villages. In urban areas, settlements are often packed closely together and within towns there is a greater mixture of land use with residential, industrial, services and open-space provision.

They need to refer to the continuum and discuss how the level of urban and rural characteristics changes along the continuum. No reference to this then mark suboptimally with a maximum of [6].

**Level 3 ([6]–[8])**

A good, well written answer that has fully used the resource and their own knowledge (as outlined above). They have addressed the differences in detail and referred to the continuum.

**Level 2 ([3]–[5])**

Still a good answer but one aspect maybe less well answered. Responses that do not refer to the continuum will be placed into this level. The detail may be less. Answers that are purely descriptive of rural and urban, maximum Level 2.

**Level 1 ([1]–[2])**

There may be inaccuracies or the candidate demonstrates a poor understanding of the differences that are evident. The range of differences may be poor and one aspect completely omitted. [8]

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- 3 (a) (i) • Developed economies have seen a fall in their share of world GDP in 2004 from 54% to 43%.  
• However, other economies have seen a growth. The emerging and developing and other economies have grown from 19% to 29% and 27% to 28% respectively. If all 3 groups are not mentioned maximum [2], no figures, maximum [1]. At least 2 figures needed for [3] [3]

- (ii) Candidates must answer this question in relation to their national case study. They are expected to know specific factual case study information relating to why their area has experienced the change outlined. This will not be marked as Levels but rather 2 × [3]. Candidates who have no case study detail will be limited to [2] for each reason offered. The factual details provided will depend on the case study selected. If they select MINT economies they would be expected to discuss that these countries (Mexico, Indonesia, Nigeria and Turkey) all contain very young populations, all are in geographically good locations and they are (except Turkey) commodity producers.  
Mexico: Close to the US and well-connected to Latin America, has a large export economy and large working population.  
Indonesia: Heart of S.E. Asia, 4th largest population in the world,

growing middle class and rapid urbanisation.

Nigeria: Near to the Atlantic and part of the rising continent, very entrepreneurial and has commodity wealth.

Turkey: Geographically located well between East and West.

BRICS is the longest established and most successful of the emerging markets. It includes Brazil, Russia, India, China and South Africa.

Together BRICS countries have 3 billion people, close to half of the total world population. This was a crucial factor in their growth. The abundant low wage force was attractive to multinational companies.

Also:

- Russia has vast supplies of oil and natural gas.
- China has developed major manufacturing and exporting.
- India has a growing IT industry.
- Brazil exported minerals.

If not a BRICS or MINT country, maximum [2]

[6]

- (b) At the beginning of the new millennium, world leaders gathered at the United Nations convention to shape a vision on how to fight poverty. That vision was translated into 8 Millennium Development goals. Candidates need to only focus on one of these. Their evaluation should identify the successes that have been created but also identify the areas that still need to be improved. They should highlight that there have been many successes across the globe, but acknowledge that gaps still remain.

Below are example points that they may offer in their evaluation. This is not a definitive list and candidates may use different points. Mark all evaluations on individual merit.

### **GOAL 1: ERADICATE POVERTY AND HUNGER**

Points for evaluation may include:

- Extreme poverty has declined significantly over the last two decades. In 1990 nearly half the population in the developing world lived on less than \$1.25 a day: that proportion has dropped to 14% in 2015.
- Globally, the number of people living in extreme poverty has declined by more than half, falling from 1.9 billion in 1990 to 836 million in 2015. Most progress has occurred since 2000.
- The number of people in the working middle classes (live on more than \$4 a day) has almost tripled between 1991 and 2015. This group now makes up half the workforce in the developing regions, up from just 18% in 1991.
- The proportion of undernourished people in the developing regions has fallen by almost half since 1990, from 23.3% in 1990–1992 to 12.9 in 2014–2016.
- Despite enormous progress, even today, about 800 million people still live in extreme poverty and suffer from hunger. Over 160 million children under five have inadequate height for their age due to insufficient food.

### **GOAL 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION**

Points for evaluation may include:

- The primary school net enrolment in the developing regions has reached 91% in 2015, up from 83% in 2000.
- The number of out-of-school children of primary age worldwide has fallen by almost half, to an estimated 57 million in 2015, down from 100 million in 2000.
- Sub-Saharan Africa has had the best record of improvement in primary education of any region since the MDGs were created. The region achieved a 20% increase in the net enrolment from 2000–2015, compared to a gain of 8% in 1990–2000.
- The literacy rate among youth aged 15–24 year olds has increased

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globally from 83% to 91% between 1990 and 2015. The gap between woman and men has narrowed.

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### **GOAL 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN**

Points for evaluation may include:

- Many more girls are now in school compared to 15 years ago. The developing regions as a whole have achieved the target to eliminate gender disparity in primary, secondary and tertiary education.
- In Southern Asia, only 74 girls were enrolled in primary school for every 100 boys in 1990. Today, 103 girls are enrolled for every 100 boys.
- Between 1991 and 2015, the proportion of women in vulnerable employment as a share of the total female employment has declined from 13%.
- Women have gained ground in parliamentary representation in nearly 90% of the 174 countries with data over the last 20 years. The average proportion of women in parliament has doubled during the same period. Many students may reference women getting the vote for the first time in Saudi Arabia in 2015.
- Women do remain, however, at a disadvantage in the labour market. Globally about three-quarters of working-age men participate in the labour force, compared to only half of working-age women.
- Women earn 24% less than men globally.
- In 85% of the 92 countries with data on unemployment rates by level of education for the years 2012–2013, women with an advanced education have higher rates of unemployment than men with similar levels of education.
- Despite continuous progress, today the world has still far to go towards equal gender representation in private and public decision making.

### **GOAL 4: REDUCE CHILD MORTALITY**

Points for evaluation may include:

- The global under-5 mortality rate has declined by more than half, dropping from 90 to 43 deaths per 1000 live births between 1990 and 2015.
- Despite population growth in the developing regions, the number of deaths of children under five has declined from 12.7 million in 1990 to almost 6 million in 2015, globally.
- Since the early 1990s, the rate of reduction of under-five mortality rate has more than tripled globally.
- In Sub-Saharan Africa, the annual rate of reduction of under-five mortality rate was five times faster during 2005–2013 than it was during 1990–1995.
- Measles vaccination helped prevent nearly 15.6 million deaths between 2000 and 2013. The number of globally reported measles cases declined by 67% for the same period.
- About 84% of children worldwide received at least one dose of measles vaccine in 2013, up from 73% in 2000.
- However, big gaps exist between the poorest and the richest households. Under-five mortality rates are almost twice as high for children in the poorest households as for children in the richest.
- Also, gaps exist between rural and urban areas. In rural areas only 56% of births are attended by a trained skilled health professional compared to 87% in the urban areas.

### **GOAL 5: IMPROVE MATERNAL HEALTH**

Points for evaluation may include:

- Since 1990, the maternal mortality rate has declined by 45% worldwide, and most of the reduction has occurred since 2000.
- In Southern Asia, the maternal mortality rate declined by 64% between

- 1990 and 2013, and in Sub-Saharan Africa it fell by 49%.
- More than 71% of births were assisted by skilled health personal globally in 2014, an increase from 59% in 1990.
- In Northern Africa, the proportion of pregnant woman who received four or more antenatal visits increased from 50% to 89% between 1990 and 2014.
- Contraceptive prevalence among woman aged 15 to 49, married or in a union, increased from 55% in 1990 worldwide to 64% in 2015.
- However, gaps exist between rural and urban areas. In rural areas only 56% of births are attended by a trained skilled health professional compared to 87% in the urban areas.
- The maternal mortality in the developing regions is 14 times higher than in the developed regions.
- In the developing regions it is estimated that just half of pregnant women receive the recommended minimum of four antenatal care visits.

### **GOAL 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES**

Points for evaluation may include:

- New HIV infections fell by approximately 40% between 2000 and 2013, from an estimated 3.5 million cases to 2.1 million.
- By June 2014, 13.6 million people living with HIV were receiving antiretroviral therapy (ART) globally, an increase from 800 000 in 2003. ART averted 7.6 million deaths from Aids between 1995 and 2013.
- Over 6.2 million malaria deaths have been averted between 2000 and 2015, primarily of children under five years of age in sub-Saharan Africa. The global malaria incidence rate has fallen by an estimated 37% and the mortality rate by 58%.
- More than 900 million insecticide-treated mosquito nets were delivered to malaria-endemic countries in Sub-Saharan Africa between 2004 and 2014.
- Between 2000 and 2013, tuberculosis prevention, diagnosis and treatment saved an estimated 37 million lives. The TB mortality rate fell by 45% and the prevalence rate by 41% between 1990 and 2013.
- However, only an estimated 36% of the 31.5 million people living with HIV in the developing regions were receiving ART in 2013.

### **GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY**

Points for evaluation may include:

- Ozone depleting substances have been virtually eliminated since 1990, and the ozone layer is expected to recover by the middle of this century.
- Terrestrial and marine protected areas have increased substantially since 1990. In Latin America and the Caribbean, coverage of terrestrial protected areas rose from 8.8% to 23.4% between 1990 and 2014.
- In 2015, 91% of the global population is using an improved drinking water source, compared to 76% in 1990.
- Of the 2.6 billion people who have gained access to improved drinking water since 1990, 1.9 billion gained access to piped drinking water on premises. Over half the global population (58%) now enjoy this higher level of service.
- Worldwide, 2.1 billion people have gained access to improved sanitation. However, in 2015, one in three people (2.4 billion) still use unimproved sanitation facilities.
- The proportion of urban population living in slums in the developing world fell from approximately 39.4% in 2000 to 29.7% in 2014. However, over 880 million people are estimated to still be living in slum-like conditions in the developing world's cities.
- Global emissions of carbon dioxide have increased by over 50% since 1990.

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- 5.2 million hectares of forest were lost in 2010, an area the size of Costa Rica.
- Overexploitation of marine fish stocks led to declines in the percentage of fish stocks within safe biological limits.
- Species are declining overall in numbers and distribution. This means they are increasingly threatened with extinction.
- Water scarcity affects 40% of the people in the world and is projected to increase.

**GOAL 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT**

Points for evaluation may include:

- Official development assistance from developed regions increased by 66% between 2000 and 2014, reaching \$135 billion.
- In 2014, Denmark, Luxembourg, Norway, Sweden, and the United Kingdom continued to exceed the United Nations development assistance target of 0.7% of gross national income.
- In 2014, 79% of imports from developing regions to developed countries were admitted duty free, up from 65% in 2000.
- Internet population has grown from just over 6% of the world's population in 2000 to 43% in 2015. As a result, 3.2 billion people are linked to a global network of content and applications.
- As of 2015, 95% of the world's population is covered by a mobile-cellular signal.
- The number of mobile-cellular subscriptions has grown almost tenfold in the last 15 years.

Mark as [2] for an outline of the aims and [4] for an evaluation of the success. So no levels needed.

[6]

**Section A**

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## Section B

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- 4 **OUTLINE:** Malthus wrote his theory at the end of the 18th century. He believed that population will grow faster than food supply. Food supply can only grow arithmetically, for example, 1, 2, 3, 4, 5, and so on but population grows geometrically, 2, 4, 8, 16, etc. This means that food supply could not keep up with population growth. Population will inevitably exceed food supply. Once this has happened, negative and positive checks will be applied to the population to bring it down.

**Evidence for Malthus:**

- Famines are frequently happening in many LEDC countries in the world. These are also the countries that have also the fastest population growth rates today.

**Limitations of Malthus theory will include the following:**

(These are only possible points. Mark all as merit).

- Anti-Malthusians criticise the theory as being too simplistic. A shortage of food supply is just one possible explanation for starvation, disease and war (Malthus population checks). Some maintain that starvation today is not caused by a shortage of food as we have food surpluses in North America and Europe. Starvation in the modern world results not because there is not enough food globally but is related to the distribution of this food from wealthy MEDCs to poor LEDCs.
- Malthus could also not have foreseen the spectacular changes in farming technology which means that we can produce enough food from an area the size of a football pitch to supply 1000 people for a year. The increase in technology means that we can find new ways to produce more food as the population of the world grows.

**OUTLINE:** Boserup's theory, on the other hand, said that food supply would increase to accommodate population growth. She believed that when a population found that they were approaching food shortages they would invent or create ways to increase food supply. For example, new technology, better seeds or new farming methods. Her theory is best summarised as "necessity is the mother of invention".

**Evidence for Boserup:**

- New farming machinery and re-organisation has greatly increased the efficiency of farms and consequently yields.
- The Green revolution produced seeds that could increase yields by up to 8 times.
- Famine, rather than being a population check, is more likely to have resulted from a natural disaster, war or the country growing too many cash crops. Cash crops are grown to sell overseas. In times of famine the countries are often producing large cash crop harvests. They need money to pay off foreign debts.
- There is enough food to feed the world. The problem lies with the distribution – it is not always where it is needed.

**Limitations of her theory include:**

- Like Malthus, her theories are based on the assumption of a "closed" community. In reality, except on a global scale, communities are not closed because there is constant in- and out-migration. It is therefore difficult to test her ideas. Many argue that out-migration occurs in response to overpopulation to relieve the population pressure, not technological advances.

- Overpopulation can also lead to unsuitable farming practices which may degrade the land rather than creating technological advances to improve production. Candidates who leave one theory out completely will be marked in levels out of 8 (L1 [1]–[2], L2 [3]–[5], L3 [6]–[8]). Award [0] for a response not worthy of credit.

### Level 3 ([11]–[15])

The candidate has a solid understanding of both Malthus and Boserup. They have evaluated both of the theories by looking at both the evidence for each and the limitation of each. Quality of written communication is excellent.

### Level 2 ([6]–[10])

The candidate still clearly understands the theory. However, their evaluation maybe weaker. They may have only looked at either the evidence or the limitations, giving a one sided evaluation. Candidates who have left one theory out will be limited to this level. A balanced answer is not needed, but both theories need to be present. Quality of written communication is good.

### Level 1 ([1]–[5])

A poorer understanding. There may be flaws in the theories described and the evaluations inaccurate or too brief. Quality of written communication is basic. [15]

- 5 The aim of a National Park in Northern Ireland would be to:
- Promote and enhance the natural and cultural heritage of the area
  - Promote sustainable use of the natural resources of the area
  - Promote understanding and enjoyment (including enjoyment in the form of recreation) of the special qualities of the area by the public: and
  - Promote sustainable economic and social development of the areas communities.

Candidates need to give an outline of the arguments in favour of and the arguments against a National Park in Northern Ireland. Both need to be present but a balanced account is not required.

#### Arguments in favour may include:

- £2–4 million of additional funding for the National Park area
- Direct employment via an established National Park Authority (up to 30 jobs)
- Landscape and built heritage protection and maintenance of the area's biodiversity
- Increased opportunities for recreation and increased numbers of visitors
- Increased visitor expenditure and employment associated with tourism industry and countryside management
- Increased levels of visitor management
- Higher property values and zoned land
- Support for local services
- Possible use of the National Park "brand" for local produce schemes and for attracting visitors

#### Potential negative impacts include:

- Increase in the number of second homes
- Increase in house prices with associated affordability and change in social mix; increase in rateable value of houses and property
- Increases in zoned land values and reversion of non-zoned values to that of agricultural process
- Possible impacts due to visitor numbers on the landscape, biodiversity and built heritage unless careful management is put into place.

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- Potential conflicts between tourism/recreation and landowners, especially if access points are not adequate
  - Changes in employment profile – tourism jobs, which tend to be lower paid and seasonal
- Award [0] for a response not worthy of credit.

**Level 3 ([11]–[15])**

A well written answer that has competently outlined both the arguments for and against a National Park in Northern Ireland. They have mentioned specifics and have evidence of facts and figures for some of their arguments. Quality of written communication is excellent.

**Level 2 ([6]–[10])**

Still a good answer that has both elements of the question present. They may, however, lack and facts or specifics in their point, more so relying on general statements to illustrate their points. Quality of written communication is good.

**Level 1 ([1]–[5])**

Students who only discuss either the arguments for or against the National Park will be limited to this level. Quality of written communication is basic. [15]

- 6 This answer needs to be addressed using a national case study so candidates need to do so with case study specifics of figures and place names. General answers will not gain Level 3. Be wary of answers that simply define or outline the processes they have chosen. Also, candidates need to show that contribution can be positive or negative. Contributions may include:

**GLOBALISATION:** Greater accessibility to world trade markets, increased employment opportunities, greater variety of products for consumers, closure of small businesses, the environmental impact, etc.

**AID:** Increased investment for development projects and industrial growth, increased dependency on foreign money, increased debt, much aid is wasted or inappropriately spent, etc. Candidates who leave out entirely globalisation or aid will be marked in levels out of 8, (L1 [1]–[2], L2 [3]–[5], L3 [6]–[8])  
Award [0] for a response not worthy of credit.

**Level 3 ([11]–[15])**

The candidate clearly understands the impact of globalisation and aid on their case study. They have explained this competently through the use of factual place and figures specific to their case study. Quality of written communication is excellent. The influence can be positive or negative.

**Level 2 ([6]–[10])**

This is still a good answer. Candidates who do not use specific case study information can be placed in this level. The level of detail maybe slightly less. Quality of written communication is good.

**Level 1 ([1]–[5])**

A poorer answer that may have all the relevant elements of the question addressed but with limited detail and/or inaccuracies. Quality of written communication is basic. [15]

**Section B**

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**30****Total****75**AVAILABLE  
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