

## Paper 2 Mark scheme

### Question 1 - Changing cities

Question number	Answer	Mark
1(a)	A	(1)

Question number	Answer	Mark
1(b)(i)	Urbanisation means an increase in the proportion of people living in urban areas compared to rural areas (1).  <b>Accept any other appropriate response</b>	(1)

Question number	Answer	Mark
1(b)(ii)	Award 1 mark for each of the following, maximum 1 mark:  Urbanisation has been most rapid in LICs (1)  Rate has slowed down in HICs since the 1960s (1)  Global rates slowed in the 1990s (1)  Today, Africa has the fastest rate of urbanisation (1)  Today, developed countries have about 75:25 urban-rural split (1)  Reject trends pre-1960 Projected trends, responses with no temporal element / idea of change.  <b>Accept any other appropriate response</b>	(1)

Question number	Answer	Mark
1(c)(i)	Award 1 mark for each of the following, up to a maximum of 2 marks:  Overgrown vegetation (1)  Broken windows/boarded up (1)  Deserted/no industrial activity (1)  Derelict (1)  Neglected (1)  <b>Accept any other appropriate response</b>	(2)
Question	Answer	Mark

<b>number</b>		
<b>1(c)(ii)</b>	Loss of manufacturing sector jobs/businesses (1). Accept closure of factories. <b>Accept any other appropriate response</b>	<b>(1)</b>

<b>Question number</b>	<b>Answer</b>	<b>Mark</b>
<b>1(c)(iii)</b>	Award 1 mark for each of the following, maximum 1 mark: Unemployment (1) Lower family incomes (1) Loss of community cohesion (1) De-population (1) <b>Accept any other appropriate response</b>	<b>(1)</b>

<b>Question number</b>	<b>Answer</b>	<b>Mark</b>
<b>1(c)(iv)</b>	Award 1 mark for each change, up to a maximum 3 marks: Using land use maps or satellite images (1) Using graphs of employment sector/unemployment (1) Using GIS (1) <b>Accept any other appropriate response</b>	<b>(3)</b>

<b>Question number</b>	<b>Answer</b>	<b>Mark</b>
<b>1(d)(i)</b>	D	<b>(1)</b>

Question number	Answer	Mark
<b>1(d)(ii)</b>	<p>Award 1 mark for each of the following, up to a maximum of 2 marks:</p> <p>Increased competition for jobs (1)</p> <p>Increased strain on services/schools/housing (1)</p> <p>Overcrowding (1)</p> <p>Changes the population structure of London (1)</p> <p>Reject impacts on rural areas or areas where the migrants have left (i.e. outside London).</p> <p><b>Accept any other appropriate response</b></p>	<b>(2)</b>

Question number	Answer	Mark
<b>1(e)(i)</b>	C	<b>(1)</b>

Question number	Answer	Mark
<b>1(e)(ii)</b>	<p>Award 1 mark for one of the following, up to a maximum of 1 mark:</p> <p>3.5 km (1)</p> <p>Accept distances between 3km and 4km (1).</p>	<b>(1)</b>

Question number	Answer	Mark
<b>1(e)(iii)</b>	<p>Award 1 mark for a point about suburbanisation and a further one mark for a development of this point, up to a maximum of 4 marks:</p> <p>Flat land (1), which is easy to build on (1)</p> <p>Near A/main roads (1), which provide good access to places (1)</p> <p>Located near the centre of York (1) so commuters do not have far to travel (1)</p> <p>Nature reserve/fields nearby (1), which provide a relaxing/quiet living environment (1)</p> <p><b>Accept any other appropriate response</b></p>	<b>(4)</b>

Question number	Answer	Mark
<b>1(f)</b>	<p>Award 1 mark for impact on CBD and a further one mark for explanation of its effect, up to a maximum of 3 marks:</p> <p>Growth in out-of-town shopping centres (1), which offered cheaper prices (1) took customers away from the CBD (1)</p> <p>Many shops in the CBD lost customers (1), which meant that they were making less money (1) and some eventually closed down (1)</p> <p>Many CBDs have become pedestrianised (1), with improved street lighting (1) to make them more appealing to shoppers (1)</p> <p><b>Accept any other appropriate response</b></p>	<b>(3)</b>

Question number	Indicative content
1(g)	<p style="text-align: center;"><b>A02 (4 marks)/A03 (4 marks)</b></p> <p><b>A02</b></p> <ul style="list-style-type: none"> <li>• Quality of life is a combination of different factors such as health, sanitation, education, employment, wealth, access to clean drinking water.</li> <li>• Major cities in developing/emerging countries are faced with a number of challenges that affect quality of life; in particular, the need to develop infrastructure and services such as water, sewage, drainage and waste collection.</li> <li>• Environmental issues such as increased air pollution due to a growing number of car users and/or industries, affect the quality of life in major cities and require careful management.</li> <li>• Social and economic issues such as the spread of disease, crime, unemployment and education need to be managed.</li> <li>• The UK and developing/emerging countries manage the economic, environmental and social issues in different ways.</li> <li>• In major cities in the UK, strategies to improve the quality of life may include waste management (e.g. recycling), developing job opportunities, increasing the quality and quantity of schools, improving healthcare and welfare provision, the development of integrated transport systems and increasing the supply of affordable and energy-efficient housing.</li> <li>• In major cities in developing/emerging countries, bottom-up (e.g. site and service schemes and self-help schemes) and top-down approaches (e.g. government policies and investment in improving transport, education and waste disposal) have been taken to improve the quality of life.</li> </ul> <p><b>A03</b></p> <p>Evaluation will depend on the specific case studies, but may include:</p> <ul style="list-style-type: none"> <li>• The quality of life in some areas of major cities is low and the reasons for this vary – and these reasons are a combination of social, economic, environmental and political factors.</li> <li>• The type of strategy(s) relative impact of an approach used to improve the quality of life vary and are influenced by factors such as the level of development of a country, national government policy and international relations with other countries. Some countries have greater economic power and influence to prioritise urban improvements.</li> <li>• Approaches to improving the quality of life vary in their effectiveness, e.g. a strategy may target only a particular area or is dependent on a reliable supply of funding.</li> <li>• The advantage of some approaches is the consequential effect on other aspects of quality of life, e.g. by improving access to clean</li> </ul>

Question number	Indicative content
	<p>drinking water the spread of disease is limited, residents experience better health and are able to go out to work.</p> <ul style="list-style-type: none"> <li>• In some cities, there are barriers preventing approaches being successful, such as a lack of funding, rapidly-growing populations and the legacy of deindustrialisation.</li> </ul>

Level	Mark	Descriptor
	0	No acceptable response.
Level 1	1–3	<ul style="list-style-type: none"> <li>• Demonstrates isolated elements of understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3)</li> </ul>
Level 2	4–6	<ul style="list-style-type: none"> <li>• Demonstrates elements of understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3)</li> </ul>
Level 3	7–8	<ul style="list-style-type: none"> <li>• Demonstrates accurate understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3)</li> </ul>

## Question 2 – Global development

Question number	Answer	Mark
2(a)(i)	Total wealth/income earned by a country in a year.  <b>Accept any other appropriate response</b>	(1)

Question number	Answer	Mark
2(a)(ii)	C	(1)

Question number	Answer	Mark
2(a)(iii)	Working to show:  The correct addition of total GDP (\$billions), 37.3 (1)  The division of this number by 7, the total number of countries, arriving at a mean of 5.3 – or a number that rounds to 5.3 – US\$ billion (1)  Maximum of 1 mark if no working out is shown.	(2)

Question number	Answer	Mark
2(a)(iv)	Award 1 mark for one of the following up to a maximum of 2 marks:  Income per capita/GNI per capita (1)  Life expectancy (at birth) (1)  Education/mean years of school and expected years of schooling (1)  <b>Accept any other appropriate response</b>	(2)

Question number	Answers	Mark
2(b)	C E	(2)

<b>Question number</b>	<b>Answer</b>	<b>Mark</b>
<b>2(c)(i)</b>	<p>Award 1 mark for identifying a relevant advantage/disadvantage and a further one mark for justification of how top-down development projects have this impact, up to a maximum of 2 marks each.</p> <p>Advantages</p> <p>Large-scale government investment and political support/will (1) has the potential to affect positively the lives of a large number of people (1).</p> <p>Political and government support provides conditions for a multiplier effect/'take off' (1) which could lead to rapid economic development (1).</p> <p>The local economy could be improved (1) so there are more funds available to spend on healthcare, education and training (1).</p> <p>Disadvantages</p> <p>High capital expenditure costs (1), which could lead to government debt/the diversion of spending from education/healthcare to pay off the debt (1).</p> <p>Government/politicians are sometimes removed from local people/needs are often ignored (1) so they do not benefit in terms of economic and social development (1).</p> <p>Often focussed on the needs of cities or a government power base, not rural areas/more marginal areas (1) so could exacerbate existing development inequalities (1).</p> <p><b>Accept any other appropriate response</b></p>	<b>(4)</b>

<b>Question number</b>	<b>Answer</b>	<b>Mark</b>
<b>2(c)(ii)</b>	<p>Award 1 mark for each descriptive point, up to a maximum of 2 marks:</p> <p>A 'wordle' or similar online tool could be used (1) to analyse the text of websites to see words frequently in the source text (1).</p> <p>Text could be coded into positive and negative impacts (1) and then counted (1).</p> <p>Accept any other reasonable response.</p>	<b>(2)</b>

<b>Question number</b>	<b>Answer</b>	<b>Mark</b>
<b>2(d)(i)</b>	One mark for each correct plot.	<b>(2)</b>



Question number	Answer	Mark
2(d)(ii)	1 mark for an accurate best fit line which shows that life expectancy increases with increased access to safe drinking water.	(1)

Question number	Answer	Mark
2(d)(iii)	<p>Award 1 mark for a reason for the relationship shown in Figure A, maximum 1 mark.</p> <ul style="list-style-type: none"> <li>• People drinking safe water do not get diseases and live longer (1).</li> <li>• Development projects such as building wells or irrigation have improved overall basic living standards (1).</li> </ul> <p><b>Accept any other appropriate response.</b></p>	(1)

Question number	Answer	Mark
2(e)	<p>Award 1 mark for a basic change and a further one mark for extension through description or explanation, up to a maximum of 4 marks:</p> <p>Birth rate has decreased (1) due to wider availability of contraception (1)</p> <p>Death rates have decreased (1) as there is better health care (1)</p> <p>Life expectancy is increasing (1) because there is a greater awareness of the causes of disease (1)</p> <p>There is a population of working age (1), infant mortality is reducing and people are surviving to adulthood (1)</p> <p><b>Accept any other appropriate response.</b></p>	(4)

Question number	Indicative content
2(f)	<p style="text-align: center;"><b>AO2 (4 marks)/AO3 (4 marks)</b></p> <p><b>AO2</b></p> <ul style="list-style-type: none"> <li>• There has been a growth in private investment by TNCs into developing/emerging countries.</li> <li>• This growth is a result of TNCs being attracted by cheap supplies of raw materials, cheap workers, good transport links and infrastructure, proximity to markets and favourable government policies that sometimes offer incentives to TNCs to locate in their country.</li> <li>• Positive social and economic impacts of this growth include the provision of new jobs and skills for local people, local/national economy is improved, sharing of ideas, e.g. in terms of the production of goods or the organisation and management of industry.</li> <li>• Negative social and economic impacts of this growth could include the idea of 'exploitation' workers.</li> <li>• Understanding the impacts of changes to economic sectors can benefit a country can have positive and negative impacts on people and the economy.</li> <li>• Social/economic positive impacts are likely to be linked to increased wages/standard of living and the growth of a consumer society.</li> <li>• Social/economic negative impacts are likely to be linked to workers being exploited – low pay – long working hours – poor working conditions.</li> </ul> <p><b>AO3</b></p> <ul style="list-style-type: none"> <li>• Growth in private investment by TNCs will often result in a combination of positive and negative impacts for people and the economy.</li> <li>• Impacts are inter-related, e.g. new jobs are created, which increases disposable income and consumer spending/this contributes to a positive multiplier effect on a larger scale for goods and services, e.g. improved infrastructure, better education etc.; TNCs exploit cheap labour, which means that workers are often badly paid, they are footloose and move out of a country at any point, which creates economic uncertainty for the host country.</li> <li>• Positive impacts can be short term and longer term and can impact on different groups of people. For example, in the short term, jobs are created for locals which, in the longer term, could provide them with the skills to set up their own business. Also, short term improvements in the economy may facilitate the reinvestment of money into education, health and infrastructure.</li> <li>• The negative impacts can also affect different groups of people over different timescales. For example, in the short term, labourers may</li> </ul>

Question number	Indicative content
	experience low wages and a poor working environment (as the TNC wants to maximise profit), but in the longer term, a country may become reliant on a particular TNC – which is not sustainable.

Level	Mark	Descriptor
	0	No acceptable response.
Level 1	1–3	<ul style="list-style-type: none"> <li>• Demonstrates isolated elements of understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements that are supported by limited evidence. (AO3)</li> </ul>
Level 2	4–6	<ul style="list-style-type: none"> <li>• Demonstrates elements of understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3)</li> </ul>
Level 3	7–8	<ul style="list-style-type: none"> <li>• Demonstrates accurate understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently leading to judgements that are supported by evidence throughout. (AO3)</li> </ul>

### Question 3 – Resource management

Question number	Answer	Mark
<b>3(a)</b>	<p>Award 1 mark for each of the following, up to a maximum of 2 marks:</p> <p>humans (1)</p> <p>worms (1)</p> <p>dogs (1)</p> <p>cattle (1).</p> <p><b>Accept any other appropriate response</b></p>	<b>(2)</b>

Question number	Answer	Mark
<b>3(b)(i)</b>	A	<b>(1)</b>

Question number	Answer	Mark
<b>3(b)(ii)</b>	Accept between 31% and 27%	<b>(1)</b>

Question number	Answer	Mark
<b>3(b)(iii)</b>	<p>Award 1 mark for suggesting one reason, and a further 1 mark for an appropriate extension, up to a maximum 2 marks:</p> <p>increase in overfishing creates stock reduction for the future (1), which leads to an unsustainable stock level for future generations (1)</p> <p>more overfishing leads to a decline in the percentage of stocks that are underfished (1) because of a reduction in juvenile fish (1)</p> <p>increase in marine pollution/impact of global warming on the oceans (1), leading to a general decline in the health of fish stocks (1).</p> <p><b>Accept any other appropriate response</b></p>	<b>(2)</b>

Question number	Answer	Mark
3(b)(iv)	<p>Award 1 mark for a basic environmental impact of overfishing and a further 1 mark for extension through description or explanation, up to a maximum of 4 marks:</p> <p>fewer fish left in the sea/ocean (1) use of data from Figure 3 to support (1)</p> <p>reducing the amount of fish that predators eat (1), therefore having knock-on effects further up the food chain (1).</p> <p>increases the species further down the food chain that the fish would have consumed (1)</p> <p>a decline in fish stocks in one area (1) could lead to other un-tapped parts of the ocean might becoming exploited (1).</p> <p><b>Accept any other appropriate response.</b></p>	(4)

#### Question 4 – Energy resource management

Question number	Answer	Mark
4(a)	C	(1)

Question number	Answer	Mark
4(b)(i)	3600 MW Accept 3500 to 3700 MW	(1)

Question number	Answer	Mark
4(b)(ii)	24.5% Accept 22% to 28%	(1)

Question number	Answer	Mark
4(b)(iii)	B	(1)

Question number	Answer	Mark
4(b)(iv)	<p>Award 1 mark for suggesting one reason, and a further 1 mark for an appropriate extension, up to a maximum 2 marks:</p> <p>government renewable energy targets (such as Kyoto Protocol) (1) because it incentivises investment in renewable energy sources (1)</p> <p>desire to increase the UK's energy mix (1), which will reduce reliance on fossil fuels (1)</p> <p>government subsidies for renewable energy (1), which makes investment in renewable energy sources more viable/cheaper (1)</p> <p>public dislike of onshore windfarms/'nimbyism' (1) has led to an increase in offshore wind farm construction (1).</p> <p><b>Accept any other appropriate response</b></p>	(2)

<b>Question number</b>	<b>Answer</b>	<b>Mark</b>
<b>4(c)</b>	<p>Award 1 mark for change in energy consumption and a further 1 mark for an explanation of the effect of this, up to a maximum of 2 marks:</p> <p>increased incomes/personal wealth (1), leading to growth in consumerism of products that require electricity (1)</p> <p>growth in ownership of hi-tech products (1) that requires electricity/electrical products to function (1)</p> <p>rising car ownership/2 to 3-car families (1), which increases the demand for oil (1).</p> <p><b>Accept any other appropriate response</b></p>	<b>(2)</b>

<b>Question number</b>	<b>Answer</b>	<b>Mark</b>
<b>4(d)</b>	<p>Award 1 mark for point about energy source and a further one mark for explanation of its effect, up to a maximum of 4 marks:</p> <p>non-renewable energy resources are finite (1), which means they will eventually run out (1) so alternatives in the form of renewables are needed that can be recycled/reused/replenished (1) over a shorter period of time (1)</p> <p>non-renewable energy resources emit carbon dioxide (1) which is a greenhouse gas (1) and causes global warming (1), which causes sea level rise/extremes in climate (1)</p> <p><b>Accept any other appropriate response</b></p>	<b>(4)</b>

Question number	Indicative content
4 (e)*	<p style="text-align: center;"><b>AO2 (4 marks)/AO3 (4 marks)</b></p> <p><b>AO2</b></p> <ul style="list-style-type: none"> <li>• Renewable energy sources are those energy sources whose flow is continuous and will never run out, whereas non-renewable energy resources (e.g. fossil fuels – oil, coal and natural gas) will eventually run out.</li> <li>• The development of non-renewable energy resources can have <b>negative</b> impacts on people, e.g. coal mining can be dangerous and damaging to health as workers may have to endure cramped conditions deep below the surface.</li> <li>• The development of non-renewable energy resources can have <b>positive</b> impacts on people such as providing employment opportunities.</li> <li>• The development of renewable energy resources can have <b>negative</b> impacts on people, e.g. through the development of windfarms, which some people believe spoil the scenery or disrupt TV/radio/mobile phone signals.</li> <li>• The development of renewable energy resources can have <b>positive</b> impacts on people such as it agrees with their ethics/viewpoints about reducing the effects of global warming. The development of renewable energy resources (e.g. solar, wind, tidal) that do not emit greenhouse gases – which is ultimately healthier for people as no air pollution is created.</li> </ul> <p><b>AO3</b></p> <ul style="list-style-type: none"> <li>• Impacts are often inter-related, with one impact often leading to another, potentially more serious, impact. The burning of non-renewable energy resources (e.g. coal, oil) can lead to air pollution, which can then lead to respiratory problems and an increase in the cases of asthma in a particular region.</li> <li>• People are often aware of the negatives of developing non-renewable resources but accept these as the potential outcomes (i.e. jobs/money) are perceived to be worth the risk.</li> <li>• Different groups of people can be affected differently within a country, e.g. in some parts of the world, owners of TNCs will benefit from non-renewable resources as their development is relatively cheap and the technology is readily available. However, other people in the same country may suffer as a result of the environmental impacts and on an international scale there might be wider impacts such as global warming or the increasing cost of these resources for consumers.</li> <li>• The impacts of non-renewable and renewable energy resources can vary significantly depending on the type of resource, the nature of the country wanting to develop it and the way it is being (sustainably) managed. For example, laws about planning permission, carbon emissions and waste disposal can all have indirect positive or negative impacts on people.</li> </ul>



Level	Mark	Descriptor
	0	No acceptable response.
Level 1	1–3	<ul style="list-style-type: none"> <li>• Demonstrates isolated elements of understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements are supported by limited evidence. (AO3)</li> </ul>
Level 2	4–6	<ul style="list-style-type: none"> <li>• Demonstrates elements of understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding but not entirely coherently, leading to judgements that are supported by evidence occasionally. (AO3)</li> </ul>
Level 3	7–8	<ul style="list-style-type: none"> <li>• Demonstrates accurate understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently, leading to judgements that are supported by evidence throughout. (AO3)</li> </ul>

<b>Marks for SPGST</b>		
<b>Performance</b>	<b>Marks</b>	<b>Descriptor</b>
SPGST 0	0	<p><i>No marks awarded</i></p> <ul style="list-style-type: none"> <li>• Learners write nothing.</li> <li>• Learner' response does not relate to the question.</li> <li>• Learner's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning.</li> </ul>
SPGST 1	1	<p><i>Threshold performance</i></p> <ul style="list-style-type: none"> <li>• Learners spell and punctuate with reasonable accuracy.</li> <li>• Learners use rules of grammar with some control of meaning and any errors do not significantly hinder meaning overall.</li> <li>• Learners use a limited range of specialist terms as appropriate.</li> </ul>
SPGST 2	2–3	<p><i>Intermediate performance</i></p> <ul style="list-style-type: none"> <li>• Learners spell and punctuate with considerable accuracy.</li> <li>• Learners use rules of grammar with general control of meaning overall.</li> <li>• Learners use a good range of specialist terms as appropriate.</li> </ul>
SPGST 3	4	<p><i>High performance</i></p> <ul style="list-style-type: none"> <li>• Learners spell and punctuate with consistent accuracy.</li> <li>• Learners use rules of grammar with effective control of meaning overall.</li> <li>• Learners use a wide range of specialist terms as appropriate.</li> </ul>

### Question 5 – Water resource management

Question number	Answer	Mark
5(a)	A	(1)

Question number	Answer	Mark
5(b)(i)	7.5 million acre-feet	(1)

Question number	Answer	Mark
5(b)(ii)	65.8%  Accept between 60% and 70%	(1)

Question number	Answer	Mark
5(b)(iii)	C	(1)

Question number	Answer	Mark
5(b)(iv)	<p>Award 1 mark for suggesting one reason, and a further 1 mark for an appropriate extension, up to a maximum 2 marks:</p> <p>between 1950 and 1980, the area received a similar amount of rainfall (1) so the water supply did not change very much during that period (1)</p> <p>the Government might have been trying to conserve water since 1988 (1) which has led to a fall in water supply (1)</p> <p>water transport systems / pipes may be leaking and in need of repair (1), which is why water supply has been falling in the last 20 years (1)</p> <p>increased amount of rainfall / wetter seasons (1) increased the water supply during the early-mid 1980s (1).</p> <p><b>Accept any other appropriate response</b></p>	(2)

Question number	Answer	Mark
<b>5(c)</b>	<p>Award 1 mark for point about water consumption and a further one mark for explanation of reason for the change, up to a maximum of 2 marks:</p> <p>changes in levels of rainfall (1) such as periods of drought or above average rainfall (1)</p> <p>over-abstraction of ground water (1), leading to lower levels of discharge into the river basin (1)</p> <p>climate change (1) leading to long term decline in precipitation/river flow since 1987 (1)</p> <p><b>Accept any other appropriate response</b></p>	<b>(2)</b>

Question number	Answer	Mark
<b>5(d)</b>	<p>Award 1 mark for point about water resource and a further one mark for explanation of reason for management, up to a maximum of 4 marks:</p> <p>to ensure/increases the availability of (clean) drinking water (1), which will improve the health of the population (1)</p> <p>to reduce flooding (1), allowing for the necessary infrastructure for industry to be established (1)</p> <p>to increase opportunities for leisure and recreation (1), which could bring jobs to an areas (1)</p> <p>to prevent water supply becoming polluted (1), which has a negative impact on the health of the local population (1)</p> <p>water resources are finite (1) but the global population/demand is growing (1).</p> <p><b>Accept any other appropriate response</b></p>	<b>(4)</b>

Question number	Indicative content
5(e)*	<p style="text-align: center;"><b>AO2 (4 marks)/AO3 (4 marks)</b></p> <p><b>AO2</b></p> <ul style="list-style-type: none"> <li>• Water supply is not just about the availability of clean drinking water in a country; water supply also covers water quality and provision for uses other than domestic supply.</li> <li>• There are a number of different factors that can influence that water supply in a country, e.g. annual rainfall, infrastructure of storing and moving water (including sewage and water pipes) and human intervention (e.g. dams/reservoirs and geopolitical agreements).</li> <li>• Annual rainfall varies globally – which has a direct impact on the amount of water available in a country for domestic, agricultural and industrial usage.</li> <li>• In many parts of the world, annual rainfall is not even throughout the year. This presents countries with the challenge of storing water when it is not required and moving water supplies from areas of high rainfall to areas of high demand.</li> <li>• The management and sustainable use of water is essential to ensure a regular and consistent water supply; the way in which this is done varies between countries at different levels of development.</li> </ul> <p><b>AO3</b></p> <ul style="list-style-type: none"> <li>• Water supply needs to be managed to meet demand – and there are different types of demand within a country, e.g. for agriculture, industry and domestic uses.</li> <li>• The ability to successfully manage the water supply sustainably within a country may be just as, or even more, important than the annual levels of rainfall in the first place. For example, mismanagement of water supplies could actually lead to water-quality problems and therefore reduce the availability of supply for domestic use.</li> <li>• More-developed countries often have a greater capacity to manage their water resources (e.g. through large top-down projects such as dams and reservoirs) which reduce the reliance on a regular, high annual rainfall. Also, more-developed countries often have the technology and infrastructure to overcome distribution problems; if one area of the country receives a low annual supply then water can be transported from an area with a high supply and lower demand.</li> <li>• Sustainable management is required to reduce water supply problems in the future – and this can vary between countries, depending on various political, social, economic and environmental factors.</li> </ul>

Level	Mark	Descriptor
	0	No acceptable response.
Level 1	1–3	<ul style="list-style-type: none"> <li>• Demonstrates isolated elements of understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Attempts to apply understanding to deconstruct information but understanding and connections are flawed. An unbalanced or incomplete argument that provides limited synthesis of understanding. Judgements are supported by limited evidence. (AO3)</li> </ul>
Level 2	4–6	<ul style="list-style-type: none"> <li>• Demonstrates elements of understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Applies understanding to deconstruct information and provide some logical connections between concepts. An imbalanced argument that synthesises mostly relevant understanding, but not entirely coherently, leading to judgements are supported by evidence occasionally. (AO3)</li> </ul>
Level 3	7–8	<ul style="list-style-type: none"> <li>• Demonstrates accurate understanding of concepts and the interrelationship of places, environments and processes. (AO2)</li> <li>• Applies understanding to deconstruct information and provide logical connections between concepts throughout. A balanced, well-developed argument that synthesises relevant understanding coherently, leading to judgements that are supported by evidence throughout. (AO3)</li> </ul>

<b>Marks for SPGST</b>		
<b>Performance</b>	<b>Marks</b>	<b>Descriptor</b>
SPaG 0	0	<p><i>No marks awarded</i></p> <ul style="list-style-type: none"> <li>• Learners write nothing</li> <li>• Learner's response does not relate to the question.</li> <li>• Learner's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning.</li> </ul>
SPaG 1	1	<p><i>Threshold performance</i></p> <ul style="list-style-type: none"> <li>• Learners spell and punctuate with reasonable accuracy</li> <li>• Learners use rules of grammar with some control of meaning and any errors do not significantly hinder meaning overall.</li> <li>• Learners use a limited range of specialist terms as appropriate.</li> </ul>
SPaG 2	2–3	<p><i>Intermediate performance</i></p> <ul style="list-style-type: none"> <li>• Learners spell and punctuate with considerable accuracy</li> <li>• Learners use rules of grammar with general control of meaning overall.</li> <li>• Learners use a good range of specialist terms as appropriate.</li> </ul>
SPaG 3	4	<p><i>High performance</i></p> <ul style="list-style-type: none"> <li>• Learners spell and punctuate with consistent accuracy.</li> <li>• Learners use rules of grammar with effective control of meaning overall.</li> <li>• Learners use a wide range of specialist terms as appropriate.</li> </ul>

