GradeMax



Mark Scheme (Results)

Summer 2018

Pearson Edexcel IAL Geography
(WGE01)
Paper 01: Global Challenges

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

General Guidance on Marking

All candidates must receive the same treatment.

Examiners should look for qualities to reward rather than faults to penalise. This does NOT mean giving credit for incorrect or inadequate answers, but it does mean allowing candidates to be rewarded for answers showing correct application of principles and knowledge.

Examiners should therefore read carefully and consider every response: even if it is not what is expected it may be worthy of credit.

Candidates must make their meaning clear to the examiner to gain the mark. Make sure that the answer makes sense. Do not give credit for correct words/phrases which are put together in a meaningless manner. Answers must be in the correct context.

Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the Team Leader must be consulted.

Using the mark scheme

The mark scheme gives:
- an idea of the types of response expected
- how individual marks are to be awarded
- the total mark for each question
- examples of responses that should NOT receive credit.

1 / means that the responses are alternatives and either answer should receive full credit.
2 ( ) means that a phrase/word is not essential for the award of the mark, but helps the examiner to get the sense of the expected answer.
3 [ ] words inside square brackets are instructions or guidance for examiners.
4 Phrases/words in **bold** indicate that the meaning of the phrase or the actual word is **essential** to the answer.
5 ecf/TE/cq (error carried forward) means that a wrong answer given in an earlier part of a question is used correctly in answer to a later part of the same question.

Quality of Written Communication

Questions which involve the writing of continuous prose will expect candidates to:
- show clarity of expression
- construct and present coherent arguments
- demonstrate an effective use of grammar, punctuation and spelling.

Full marks will be awarded if the candidate has demonstrated the above abilities.

Questions where QWC is likely to be particularly important are indicated "QWC" in the mark scheme BUT this does not preclude others.

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Question Number	Answer	Mark
1 a (i)	AO2 (1 mark) **C** - 2010 (1)	**(1)**

Question Number	Answer	Mark
1 a (ii)	AO2 (2 marks) • Between 2000 -2016 meteorological hazards have shown a gradual increase. (1) • There have been large fluctuations in meteorological hazards. (1) • In 2007 there were anomalously large number of meteorological hazards Accept other correct comparative descriptions of pattern; may include data.	(2)

Question Number	Answer	Mark
1 a (iii)	AO1 (2 marks) • An increase in the global temperaures could lead to increased evaporation (1) leading to greater frequency/intensity of low pressure system formation / rainfall events and therefore flooding. (1) • A greater number of people living in vulnerable areas e.g. closer to rivers (1) therefore greater number of hazardous events which cause damage to people/infrastructure. (1) Accept other correct explanations.	**(2)**

Question Number	Answer	Mark
1 (b)	AO1 (4 marks) Award 1 mark for identifying a cause that can lead to avalanches and a further expansion mark explaining how, up to a maximum of 2 marks each. • An increase in temperature can loosen the bonds between the snow (1) leading to the formation of a weak layer in the snow. (1) • A heavy loose snowfall which falls onto a wet snow (1). Leading to the formation of a weak layer which is overcome by the weight of the added snowfall (1). • Vibrations in the ground caused by earthquakes / heavy machinery (1) can cause destabilisation in the snow pack leading to avalanche. (1) • Build-up of snow / ice on slope angles over 25 degrees (1) which collapse due to gravity. (1) Accept any correct causes. Mark as 2+2 NB Do not mark as 3 + 1.	**(4)**

<table>
<tr><th>Question number</th><th colspan="2">Answer</th><th>Mark</th></tr>
<tr><td>1 (c)</td><td colspan="2">AO1 (6 marks)
Marking instructions
Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.
Indicative content guidance
The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:
Communities are the first line of defense in preparing and responding in the event of a hazard. This may include working together to provide reinforcement for homes / windows or establishing supplies of water and food or hazard kits.
Communities provide a sense of connection and therefore reduce the sense of isolation felt by affected residents. There is the culture of aiding those affected within the community.
In local communities there are a diverse range of skills which may be essential in the preparation for hazardous events. This could include building or carpentry which help with reinforcements.
There may be experience of past events faced by members of the community therefore allowing for a more reasoned response to an event. This could aid mitigation attempts before and after the event.
Communities can work alongside the national agencies to aid in the training, education and preparation for a hazardous event.
Local people have a greater understanding of the requirements / needs of local people after an event has impacted upon the community.
There is a counter-argument that community approach may be fatalistic and accept what is told /happening to them or god-willing.
Accept answers which refer to the actions of individuals within a community.</td><td>(6)</td></tr>
<tr><th>Level</th><th>Mark</th><th>Descriptor</th><th></th></tr>
<tr><td></td><td>0</td><td>No rewardable material.</td><td></td></tr>
<tr><td>Level 1</td><td>1-2</td><td>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)
Understanding addresses a narrow range of geographical ideas which lack detail. (AO1)</td><td></td></tr>
<tr><td>Level 2</td><td>3-4</td><td>Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)
Understanding addresses a range of geographical ideas which are not fully detailed and/or developed. (AO1)</td><td></td></tr>
<tr><td>Level 3</td><td>5-6</td><td>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</td><td></td></tr>
</table>

		• Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)

Question Number	Answer	Mark
2 a (i)	AO1 (1 mark) Orbital Eccentricity (1) Accept all other appropriate responses	**(1)**

Question Number	Answer	Mark
2 a (ii)	AO2 (4 marks) Allow one mark for the identification of the point and a further mark for explanation. Explanations can be about either different cycles, or two points about the same cycle. Milankovitch Cycle X – Eccentricity Eccentricity shows the Earth's orbit change from circular (less elliptical) to (more) elliptical every 100000 years (1). This change to circular results in less radiation reaching the Earth leading to cooler climates. (1) Milankovitch Cycle Y – Tilt The Earth's tilt varies every 41000 years from an angle of 21.5 degrees to 24.5 degrees. Smaller tilt results in a more even distribution of heat between summer and winter (1). This causes an increase in snowfall in winter leading to cooler periods. (1) Milankovitch Cycle Z – Precession Precession is the Earth's slow wobble on its axis (from Polaris – North Star – to Vega). This will result in the northern hemisphere winter period occurring closer to aphelion (1) therefore resulting in cooler winters / greater seasonal contrasts. (1)	**(4)**

Question Number	Answer	Mark
2 b	AO1 (4 marks) Credit 1 mark for a description of the evidence and a further mark for an extended explanation. Candidates are most likely to refer to tree rings, ice and ocean core sediments, pollen records, historical sources and art as evidence. Tree Rings Trees add a growth layer annually which can be analysed to determine past temperatures. Wider rings refers to a warmer climate (1), indicating more favourable growing conditions. (1)	**(4)**

	Ice cores Air trapped in bubbles in the ice core hold information about past climates (1). It is possible to analyse the concentration of gases, e.g. carbon dioxide, to determine the atmospheric concentration in past atmospheres (1). Ocean sediment cores Ocean sediment cores contain calcium carbonate shells that will have lived near the surface in the past (1). Oxygen isotope analysis in oceans – show that as O_{16} evaporates more readily in warm weather – there will be a relative abundance of O_{18} in oceans during this period (1). Historical sources Art has been interpreted to show evidence of past climate change. Evidence of the 'Little Ice Age' or 'Frost Fairs' in London have been noted in pieces of art to show previous colder times. Accept any correct answer. Mark as 2+2	

Question number	Answer	Mark
2 (c)	**AO1 (6 marks)** **Marking instructions** Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below. **Indicative content guidance** The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include: • Companies who specialise in climate adaptation could benefit. For example, Britain has expertise in climate modelling, infrastructural changes and insurance – the adaption market is worth nearly £66bn. • Scientific organisations are developing genetically modified crops to be able to overcome the changes to climate. • Flood defence agencies could seek funding for new defences in light of the potential threat of climate change. • Development of renewable energy as companies reduce their reliance on oil. • To push for reduced GHG lifestyles (governments) to encourage people to eat healthily (use car transport less, eat more sustainably). • Farmers taking advantage of climate to produce more diverse range of farm products, e.g. viticulture. • Tourist / shipping companies are able to access previously inaccessible routes, e.g. through Arctic.	**(6)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	**1-2**	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • Understanding addresses a narrow range of geographical ideas which lack detail. (AO1)
Level 2	**3-4**	• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Understanding addresses a range of geographical ideas which are not fully detailed and/or developed. (AO1)
Level 3	**5-6**	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)

Question Number	Answer	Mark
3 a (i)	AO2 (1 mark) **C -** Chile had a greater number of 45-59 year olds in 2016 (1)	**(1)**

Question Number	Answer	Mark
3 a (ii)	AO1 (1 mark) / AO2 (1 mark) • Improvement in healthcare so people live longer (1) this could be a consequence of improvement in facilities for dementia, Alzheimer's (1). • Improvements in research into illness which affect the elderly (1) for example improved screening for cancer (1) or improvements in medication e.g. heart disease / diabetes (1). • Available services for the elderly such as homecare provision, sheltered housing (1) which results in greater supervision for elderly (1) Accept any correct reason.	**(2)**

Question Number	Answer	Mark
3 a (iii)	AO1 (3 marks) • An ageing population will need greater financial planning at a governmental level (1) as more money will be needed for greater healthcare support (1) and a greater dependency which may result in a rise in taxes (1). • A reduction in fertility rate resulting in fewer births (1) results in a greater dependency, (1) which could lead to a need to increase taxation (1). • Fewer people in the younger generations may led to a need to encourage economic migrants (1) so that the government can provide the same level of services (1) rather than increases taxes / making cuts (1). Accept any correct answer.	**(3)**

Question Number	Answer	Mark
3 (b)	AO1 (3 marks) Credit 1 mark for a reason and further marks for explanation. • Low skilled workers are pushed from the rural areas to urban areas due to the action of commercial organisations in the rural area. (1) Increases in commercial farming practices in rural areas causes local farmers to become outcompeted. (1) Therefore low economic viability in farming at a subsistence level leads to step migration towards urban areas (1). • Workers are attracted to the urban areas due to potential for greater earnings / employment in global	**(3)**

	trade (1), either directly with large organisations or to work in manufacturing which supply global brands (1). The relative earnings, while small, may be an improvement on the life they had in the rural area (1). • Advertising / internet allows people to perceive an improved lifestyle in the urban area (1). With a farther reaching infrastructure mobile technology is more widely available (1) therefore younger generations are less inclined to follow traditional family business and therefore move to the urban areas (1). Accept any correct answer	

Question number	Answer	Mark
3 (c)	**AO1 (6 marks)** **Marking instructions** Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below. **Indicative content guidance** The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include: • Malthusian predictions suggest that a rapidly rising population may lead to a lack of resources and a subsequent crash in the population. • Increasing populations may lead to water shortages, which result in the need for transfers or investment in large-scale water management projects (at great cost) to support demand. • Need to increase food production or to import a greater number of food goods which can have an impact on the fertility of soils / the erosion of soil. • Energy demands will increase with growing population increasing the need to develop new sources, or importing from neighboring countries – which could have an implication on the energy security. • Technological advances may improve with increasing populations (Boserup concept) to cope with the increased pressures on resources. Candidates can achieve maximum marks with depth or range. There is no need to cover all resources however there should be more than one for maximum marks.	**(6)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	**1-2**	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • Understanding addresses a narrow range of geographical ideas which lack detail. (AO1)
Level 2	**3-4**	• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Understanding addresses a range of geographical ideas which are not fully detailed and/or developed. (AO1)
Level 3	**5-6**	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)

Question Number	Answer	Mark
4 a (i)	AO2 (1 mark) • Sichuan. (1)	**(1)**

Question Number	Answer	Mark
4 a (ii)	AO2 (4 marks) • A general pattern of outmigration from the central Chinese provinces to the peripheral areas (1) except in the Northern provinces where there a small overall outflow. (1) • The most pronounced move is from central China to the coastal provinces of Shanghai, Zheziang and Guandong. (1) • Provinces of Ningxia and Shanxi are the only central provinces with gains. (1) • Some coastal provinces such as Shandong and Jilin have lost people. (1) Note: no marks for explanations.	**(4)**

Question Number	Answer	Mark
4 (b)	AO1 (4 marks) Credit 1 mark for a cost and a further mark for an extended explanation. Cost to source country • Loss of a young workforce which could lead to a 'brain drain' (1) resulting in a reduced employment pool for existing companies. (1) • Loss of labour may reduce the likelihood of inward investment by private organisations (1) which could have an adverse impact on the economy of the country or prevent future development. (1) • There may be an imbalance in the population pyramid which has an implication on dependency in the country (1) leading to greater need for taxation. (1) • Reduced consumption for domestic products (1) which could lead to localised economic decline / affect national GDP rates. Accept all correct responses.	**(4)**

Question number	Answer	Mark
4 (c)	**AO1 (6 marks)** **Marking instructions** Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below. **Indicative content guidance** The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include: • Numbers of migrants may be beyond control forcing the need for large scale refugee camps. This places a demand on resources in the local area and an implication on the population near the refugee camp – leading to tension. • Issue of governmental responsibility for the management of the migrants. • Implication on the receiving country for arriving migrants, e.g. Sicily / Lampedusa – how to process them – should they be allowed to travel onwards? • Issue of integration of refugees into the host country society – tensions and challenges presented, e.g. asylum. • Lack of clear documentation results in war criminals, terrorists escaping from the conflict zone. • Separation of families at refugee camps or criminal acts undertaken at camps. • The problem of managing human trafficking and the subsequent problems of continually policing this.	**(6)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	**1-2**	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • Understanding addresses a narrow range of geographical ideas which lack detail. (AO1)
Level 2	**3-4**	• Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Understanding addresses a range of geographical ideas which are not fully detailed and/or developed. (AO1)
Level 3	**5-6**	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)

<table>
<tr><td>Question number</td><td colspan="2">Explain why some places in Africa are at greater risk from global warming than others.</td></tr>
<tr><td>5 (a)</td><td colspan="2">AO1 (5 marks)/AO2 (5 marks)
Marking instructions
Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below.
Indicative content guidance
The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited.
Relevant points may include:
AO1:
• Africa is expected to suffer the greatest impacts of climate change. A temperature increase of 1-2 degrees will aid crop growth in areas but ultimately lead to food aid elsewhere.
• Sub-Saharan Africa where crop yields could decline by 22% with similar losses in Egypt – potentially losing 15% of their wheat crop.
• The west of Africa will be hit by increases in rainfall and increases in sea level which could have a significant impact on the 320 cities below 10m elevation while in eastern Africa (Sudan) there will be increased water stress..
• Areas in South Africa may benefit from a temperature increase, allowing changes in crop production.
AO2:
• The impact in Africa may be subject to the ability of regions to mitigate the problems / or not. Lack of supply could trigger an increased demand forcing up food prices, forcing countries to import more food.
• Food shortages could lead to forced migration putting greater pressure on neighbouring countries.
• Water stress could lead to greater potential for poverty and there will be potential conflict between those areas who have more and those who have less.
• Increased temperatures in some areas may lead to opportunities for new agricultural markets to develop, e.g. in South Africa – which could open up new trade opportunities.
• An increase in demand for water will lead to increased need to importing, or investment in alternative water production / conservation measures – which could result in greater borrowing and debt.

Answers may include information about places which are not feature on the Figure.</td></tr>
<tr><td>Level</td><td>Mark</td><td>Descriptor</td></tr>
<tr><td></td><td>0</td><td>No rewardable material.</td></tr>
<tr><td>Level 1</td><td>1-4</td><td>• Demonstrates isolated elements of geographical knowledge. (AO1)
• Demonstrates isolated elements of geographical understanding, some of which may be inaccurate. (AO1)
• Applies knowledge and understanding to geographical information / ideas, making limited logical connections / relationships. (AO2)
• Applies knowledge and understanding to geographical information / ideas to produce an interpretation that is not relevant and / or supported by evidence. (AO2)</td></tr>
</table>

Level 2	**5-7**	• Demonstrates geographical knowledge, which is mostly relevant and may include some inaccuracies. (AO1) • Demonstrates geographical understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Applies knowledge and understanding to geographical information / ideas logically, making some relevant connections / relationships. (AO2) • Applies knowledge and understanding to geographical information / ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)
Level 3	**8-10**	• Demonstrates accurate and relevant geographical knowledge throughout. (AO1) • Demonstrates accurate and relevant geographical understanding throughout. (AO1) • Applies knowledge and understanding to geographical information / ideas logically, making relevant connections / relationships. (AO2) • Applies knowledge and understanding to geographical information / ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)

Question number	Assess the extent to which the economic costs are the most significant impacts of natural disasters. (20 marks)
5 (b)	**AO1 (5 marks)/AO2 (15 marks)** **Marking instructions** Markers must apply the descriptors in line with the general marking guidance (page 3) and the qualities outlined in the levels-based mark scheme below. Responses that demonstrate only AO1 without any AO2 should be awarded marks as follows: • Level 1 AO1 performance: 1 mark • Level 2 AO1 performance: 2 marks • Level 3 AO1 performance: 3 marks • Level 4 AO1 performance: 4 marks **Indicative content guidance** The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include: AO1 • Economic costs associated with natural disasters are associated with damage to infrastructure, insurance payments and rebuilding projects. Economic costs could also be in the post-disaster management (preparation). • Other impacts include social impacts include the major impacts on people, including death, injury, psychological trauma, migration, the impact on human behaviour after the event or environmental or political impacts. • Economic costs can be both short-term and long-term. • The generally held perception is that areas impacted by a disaster in a less economically developed are more likely subject to social impacts whereas more developed nations are subject to economic impacts. • Difference in magnitude, areal extent, frequency or duration of the natural hazard result in variation in disastrous impacts which may determine whether economic are more prominent. AO2 • Higher magnitude events natural disasters often lead to high costs particularly when the impact is focused on an urban area. This is particularly the case in more developed nations – therefore potentially higher economic significance. • Hazard frequency will determine the likely economic cost. Economic costs may be reduced in areas which are prepared for natural hazards as high frequency leads to greater preparation, especially in economically developed areas which have invested in monitoring and mitigation measures. The frequency of events could also encourage 'agencies' setting up monitoring and research which leads to an improved understanding and response to the events – this is applicable in both less and more developed nations. Therefore frequency can increase economic significance in the short term but reduce it in the long term. • Low frequency high magnitude events often have a high economic cost and may also have a high social cost. This will be particularly significant in poorly prepared areas or areas which have disaster fatigue (i.e. none in recent history of the area). • Proximity to human populations can determine the extent of the social cost, more densely populated areas are likely to be effected by higher social impact. However nearer to population often drives up economic cost. • Economic costs tend to be higher in more developed nations affected by disasters as a greater emphasis is put on insuring infrastructure and assets.

	• A greater areal extent to a natural hazard will lead to a greater human and economic cost dependent on the number of settlements affected. The areal extent could cover national boundaries, e.g. 2004 tsunami in Asia, which can lead to a variation in the economic cost. Therefore the significance of such cost will be varied. Yet the cost to more developed / more prepared nations may increase as a consequence of other countries requiring their assistance. • Use of examples to exemplify/discuss – for example the Haiti earthquake of 2010 had a magnitude of 7.0 and was in close proximity to Port-au-Prince. This led to a high social cost – over 280,000 deaths a significant increase in homelessness and a cholera epidemic. The cost of the disaster was deemed to be $14 billion. In comparison the impact of Hurricane Matthew in 2016 was $1billion – however the magnitude of the event was relatively less and the areal extent of the event was less. Hurricanes often have a greater economic impact as they are frequent (seasonal) and often cross international boundaries.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	**1-5**	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • Applies knowledge and understanding of geographical ideas, making limited and rarely logical connections / relationships. (AO2) • Applies knowledge and understanding of geographical information / ideas to produce an interpretation with limited coherence and support from evidence. (AO2) • Applies knowledge and understanding of geographical information / ideas to produce an unsupported or generic conclusion, drawn from an argument that is unbalanced or lacks coherence. (AO2)
Level 2	**6-10**	• Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1) • Applies knowledge and understanding of geographical information / ideas with limited but logical connections / relationships. (AO2) • Applies knowledge and understanding of geographical ideas in order to produce a partial interpretation that is supported by some evidence but has limited coherence. (AO2) • Applies knowledge and understanding of geographical information / ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)
Level 3	**11-15**	• Demonstrates geographical knowledge and understanding, which is mostly relevant and accurate. (AO1) • Applies knowledge and understanding of geographical information / ideas to find some logical and relevant connections / relationships. (AO2) • Applies knowledge and understanding of geographical ideas in order to produce a partial but coherent interpretation that is supported by some evidence. (AO2)

		• Applies knowledge and understanding of geographical information / ideas to come to a conclusion, largely supported by an argument that may be unbalanced or partially coherent. (AO2)
Level 4	**16-20**	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Applies knowledge and understanding of geographical information / ideas to find fully logical and relevant connections / relationships. (AO2) • Applies knowledge and understanding of geographical information / ideas to produce a full and coherent interpretation that is supported by evidence. (AO2) • Applies knowledge and understanding of geographical information / ideas to come to a rational, substantiated conclusion, fully supported by a balanced argument that is drawn together coherently. (AO2)

Question number	Explain the contribution of Special Economic Zones have made to globalisation in countries such as India. (10 marks)
6 (a)	**AO1 (5 marks)/AO2 (5 marks)** **Marking instructions** Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below. **Indicative content guidance** The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include: AO1 • There has been an increase in employment of approximately 438,393 people in SEZs in India between 2011 and 2014. • There has been an increase in investment in the Special Economic areas of approximately £95,000,000 between 2011 and 2014. • The number of SEZs are on the rise, in 2014 185 operating, with a further 565 approved. • The impact on exports has been variable between 2011 and 2014. A 5% increase from 2011-2013, but a slight drop (3%) in the year 2013-2014. However it is still worth over a quarter of the overall exports. AO2 • The success of the SEZs in India are reflected in the increasing number of approvals for them. Therefore the net impact of the SEZs will be felt across the country. • SEZs in India are leading to greater percentage exports therefore allowing greater trade links and developing globalization. • Increased SEZs have led to increased investment which may be derived from Foreign Direct Investment. This may be due to tax holidays, exemption from duty or other financial benefits afforded by SEZs. This may lead to improvement in transport infrastructure and an improved economy in areas close to the SEZs. • Increased investment in the area will increase migration to the area, some of which may be skilled (national and international) migrants. This could have a positive impact on the quality of life, local amenities and subsequent investment in education in the area.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	**1-4**	• Demonstrates isolated elements of geographical knowledge. (AO1) • Demonstrates isolated elements of geographical understanding, some of which may be inaccurate. (AO1) • Applies knowledge and understanding to geographical information / ideas, making limited logical connections/relationships. (AO2) • Applies knowledge and understanding to geographical information / ideas to produce an interpretation that is not relevant and/or supported by evidence. (AO2)
Level 2	**5-7**	• Demonstrates geographical knowledge, which is mostly relevant and may include some inaccuracies. (AO1) • Demonstrates geographical understanding, which is mostly relevant and may include some inaccuracies. (AO1) • Applies knowledge and understanding to geographical information / ideas logically, making some relevant connections / relationships. (AO2) • Applies knowledge and understanding to geographical information / ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)
Level 3	**8-10**	• Demonstrates accurate and relevant geographical knowledge throughout. (AO1) • Demonstrates accurate and relevant geographical understanding throughout. (AO1) • Applies knowledge and understanding to geographical information / ideas logically, making relevant connections/relationships. (AO2) • Applies knowledge and understanding to geographical information / ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)

Question number	Assess the extent to which urban growth in megacities creates more challenges than opportunities. (20 marks)
6 (b)	**AO1 (5 marks)/AO2 (15 marks)** **Marking instructions** Markers must apply the descriptors in line with the general marking guidance (page 3) and the qualities outlined in the levels-based mark scheme below. Responses that demonstrate only AO1 without any AO2 should be awarded marks as follows: • Level 1 AO1 performance: 1 mark • Level 2 AO1 performance: 2 marks • Level 3 AO1 performance: 3 marks • Level 4 AO1 performance: 4 marks **Indicative content guidance** The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include: AO1 • Urban growth of megacities is a result of large internal migration and natural increase, leading to rapid urban sprawl in the cities. • Negative impacts of rapid urban growth include problems with housing, insufficient infrastructure, traffic problems, pollution and increasing levels of disparity and ethnic division. • Benefits of megacity growth include it developing infrastructure, attracting both internal and foreign investment creating an important economic hub, the development of entrepreneurial innovations. • Management of urban growth to mitigate the challenges – to include the management of housing provision, infrastructural upgrades / improvements, transport and service provision or waste management. Effective management will enhance benefits and mitigate challenges. AO2 • In developing nations the rapid growth of urban areas has led to the rise of slum dwellings and temporary 'shanty' settlements as authorities cannot develop affordable housing to keep pace with the rate of growth. . • Traffic congestion has led to the virtual standstill of urban life in 'rush hour' commutes, for example in Mumbai formal sector workers often have to endure 1-2 hour commutes in difficult circumstances. • Combustion exhaust products produce primary pollutants which are responsible for increasing rates in cancer in large cities. These primary pollutants can react with the sun producing secondary pollutants like nitrogen dioxide and ozone which are responsible for the death of vegetation – causing a further environmental problem. • The counter argument to the negative impacts are mainly economic benefits. Megacities act as hubs for direct foreign investment – tie into the fact that many of them have Special Economic Zones which promote the development of entrepreneurialism. • Such internal investment has led to the development of infrastructure such as internet connects, development of transport hubs (air and rail) and development of new road networks. • There are arguments that the work opportunities in some cases is low paid, with poor working conditions, long hours; child labour and sweatshop conditions could be raised as issues.

	• On the other hand, for many new opportunities has helped lift millions out of poverty and many people have moved into the middle class and seen improvements in quality of life.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	**1-5**	• Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1) • Applies knowledge and understanding of geographical ideas, making limited and rarely logical connections / relationships. (AO2) • Applies knowledge and understanding of geographical information / ideas to produce an interpretation with limited coherence and support from evidence. (AO2) • Applies knowledge and understanding of geographical information / ideas to produce an unsupported or generic conclusion, drawn from an argument that is unbalanced or lacks coherence. (AO2)
Level 2	**6-10**	• Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1) • Applies knowledge and understanding of geographical information / ideas with limited but logical connections/relationships. (AO2) • Applies knowledge and understanding of geographical ideas in order to produce a partial interpretation that is supported by some evidence but has limited coherence. (AO2) • Applies knowledge and understanding of geographical information / ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)
Level 3	**11-15**	• Demonstrates geographical knowledge and understanding, which is mostly relevant and accurate. (AO1) • Applies knowledge and understanding of geographical information / ideas to find some logical and relevant connections / relationships. (AO2) • Applies knowledge and understanding of geographical ideas in order to produce a partial but coherent interpretation that is supported by some evidence. (AO2) • Applies knowledge and understanding of geographical information / ideas to come to a conclusion, largely supported by an argument that may be unbalanced or partially coherent. (AO2)
Level 4	**16-20**	• Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1) • Applies knowledge and understanding of geographical information / ideas to find fully logical and relevant connections / relationships. (AO2) • Applies knowledge and understanding of geographical information / ideas to produce a full and coherent interpretation that is supported by evidence. (AO2)

		• Applies knowledge and understanding of geographical information / ideas to come to a rational, substantiated conclusion, fully supported by a balanced argument that is drawn together coherently. (AO2)