

Mark Scheme (Results)

January 2021

Pearson Edexcel International Advanced Level In Geography (WGE01)

Paper 1: Global Challenges

## **Edexcel and BTEC Qualifications**

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at <a href="https://www.edexcel.com">www.edexcel.com</a> or <a href="https://www.edexcel.com">www.btec.co.uk</a>. Alternatively, you can get in touch with us using the details on our contact us page at <a href="https://www.edexcel.com/contactus">www.edexcel.com/contactus</a>.

## Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

January 2021
Publications Code WGE01\_01\_2101\_MS
All the material in this publication is copyright
© Pearson Education Ltd 2020

## **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.

| Question | Answer                                  | Mark |
|----------|---|------|
| Number   |   |      |
| 1 a (i)  | AO2 (1 mark)                            | (1)  |
|          |   |      |
|          | C – Evacuation route to high ground (1) |      |

| Question | Answer   | Mark |
|----------|--|------|
| Number   |  |      |
| _        | AO1 (2 marks) / AO2 (2 marks)  Award 1 mark for identifying an explanation of role and a further expansion mark up to a maximum of 2 marks.  • Tsunami wall protects against frequent low magnitude tsunami (1) this will reflect the force of the tsunami / is a physical barrier to flooding (1).  • Use of forested embankments act as a natural barrier to the impact (1) dissipating the energy of the tsunami waves (1).  • Roads built above ground level to prevent their flooding and destruction (1) to allow for continued population movement / access for emergency services (1).  • Residential land placed furthest from coastal tsunami threat zone (1) this will limit vulnerability of local populations (1)  • Sirens are used to warn people of immediate danger | (4)  |
|          | <ul> <li>(1) these are placed near infrastructure to maximise coverage (1).</li> <li>Evacuation route is only for the worst tsunami (1) and allows people to escape to high ground (1).</li> </ul>   |      |
|          | Accept other correct explanations.   |      |

| Question  | Answer  | Mark |
|-----------|---|------|
| Number    |   |      |
| 1 a (iii) | AO1 (2 marks)   | (2)  |
|           | Award 1 mark for identifying an explanation and a further expansion mark up to a maximum of 2 marks.              |      |
|           | <ul> <li>Submarine earthquakes (1) cause the movement /<br/>displacement of the sea / ocean floor (1).</li> </ul> |      |

| <ul> <li>Some earthquakes cause displacement / rise of the ocean water column (1) which causes a tsunami wave (s) on the ocean surface (1).</li> <li>Earthquakes can trigger coastal / submarine landslides (1) which can displace water leading to tsunami waves (1).</li> </ul> |  |
|---|--|
| Accept other correct explanations.  |  |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 1 (b)              | AO1 (2 marks) Award 1 mark for correct identification of a scale and a further extension mark for explaining what it measures.   | (2)  |
|                    | <ul> <li>Moment magnitude scale / Richter scale (1) a<br/>logarithmic scale that measures the energy released<br/>during an earthquake (1).</li> <li>N.B. – Mercalli is not appropriate as this is an intensity scale</li> </ul> |      |

| Question<br>number | Answer   | Mark |
|--------------------|--|------|
| 1 (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: | (6)  |
|                    | <ul> <li>Increasing populations has led to poor land use practices resulting in people living in vulnerable areas e.g. building on flood plains, unstable slopes and coastlines.</li> <li>Rising urbanisation has led to increased population density in areas which are often at risk from earthquakes, floods and hurricanes.</li> </ul>   |      |

| [       | 1  |   |  |
|---------|--|---|--|
|         | resu<br>fred<br>dro<br>• Gov<br>effe<br>eva<br>wel<br>• Inte<br>disa<br>rem<br>• Haz | unsustainable use of fossil fuel is warming the planet, ulting in a changing climate. This has increased the quency and severity of weather-related hazards (e.g. floods, ughts).  Vernment policy can reduce the onset of events through extive planning e.g. preparedness through early warning cuation, training of emergency services, public awareness; as a las hazard proof infrastructure such as aseismic buildings. Ernational relief efforts now occur quickly in response to easters, reducing the death toll, whilst the numbers affected main high.  Eards can be predicted more accurately due to improved annology such as satellites and seismology equipment. |  |
| Level   | Mark   | Descriptor  |  |
|         | 0  | No rewardable material.   |  |
| Level 1 | 1-2  | <ul> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Understanding addresses a narrow range of geographical ideas which lack detail. (AO1)</li> </ul>   |  |
| Level 2 | 3-4  | <ul> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Understanding addresses a range of geographical ideas which are not fully detailed and/or developed. (AO1)</li> </ul>  |  |
| Level 3 | 5-6  | <ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)</li> </ul>  |  |

| Question | Answer                                | Mark |
|----------|---------------------------------------|------|
| Number   |                                       |      |
| 2 a (i)  | AO2 (1 mark)                          | (1)  |
|          | • B (1958)                            |      |
|          |                                       |      |
|          | All of the other dates are incorrect. |      |

| Question | Answer   | Mark |
|----------|--|------|
| Number   |  |      |
| _        | AO2 (4 marks)  Award 1 mark for each correct descriptive point that makes reference to the relationship between the two lines on Figure 2.  Overall, there is a link between sunspots and temperature anomalies / the lines are fairly close in terms of overall trend / pattern (1).  There is a positive relationship / correlation from 1900-1960 / both lines rise at similar rates (1).  There is a negative relationship 1960-2005 / sunspots are in decline whereas temperature | (4)  |
|          | <ul> <li>increases (1).</li> <li>Post 1960 temperature rises steadily whereas sunspot numbers fluctuate (1).</li> <li>1910-1920 is an anomalous period / sunspots increase but temperature dips (1)</li> <li>Credit other valid descriptions.</li> </ul>   |      |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 2 (b)              | <ul> <li>AO1 (4 marks)</li> <li>Award 1 mark for a basic explanation and a further mark for a development of the explanation.</li> <li>Tree rings width records periods of warm / cool weather (1), sequences of rings can be used to determine climate changes over a longer period (1), the tree ring record extends back to about 6000 BP (1).</li> <li>Pollen can be extracted from peat and other sediments and the pollen volume and type counted (1); plant species can be linked to climate in the past due to know growing conditions (1).</li> </ul> | (4)  |
|                    | Accept other correct explanations.   |      |

| Mark as 2+2 |  |
|-------------|--|
|             |  |
|             |  |

| Question | Answer  | Mark |
|----------|---|------|
| number   |   |      |
| 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:  Developed countries can afford to implement mitigation policies as a priority and therefore are less reliance on adaptation strategies.  Developed countries are often the least directly affected and therefore the level of adaptation they require is reduced.  Developed countries can afford to build sea defenses to counter sea level rise e.g. London Thames Barrier.  Developing countries need international assistance to support adaptation and funding needs to be sustained in the long-term.  Small island developing states (SIDS) need special consideration due to their extreme vulnerability and they have low adaptive capacity due to the fact adaptation costs are high relative to GDP.  Africa has a low adaptive capacity due to existing developmental challenges including; low GDP per capita, low levels of education, limited access to technology and infrastructure.  In Asia, adaptative capacity varies between countries depending on the economic capacity, geography and level of environmental degradation. In Bangladesh and the Philippines there are successful early warning systems for extreme events, but adaptive capacity is reduced to inequalities in income and poor technology.  In South America, the lack of modern observation equipment and climate monitoring hinders their ability to adapt. They are also tackling other issues such as life expectancy, high infant mortality rates.  Accept any other valid responses. | (6)  |

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

| Question<br>Number | Answer       | Mark |
|--------------------|--------------|------|
| 3 a (i)            | AO2 (1 mark) | (1)  |
|                    | London (1)   |      |

| Question | Answer  | Mark |
|----------|---|------|
| Number   |   |      |
| 3 a (ii) | AO1 (1 mark) / AO2 (1 mark)  Award 1 mark for a basic reasons linked to the information on Figure 3, plus a further 1 mark for an extension explanation.  • Increased tourism could result from the connections to high-income Europe (1), increasing incomes in the service sector e.g. hotels and linked services (1).  • Air connections to China and Asia could increase volumes of trade in high-value goods (1) boosting import / export revenues (1).  • Connections to the developed and emerging world and their TNCs (1) make FDI more likely as business travel is easier. (1)  Accept other correct explanations. | (2)  |
| 1        | Accept other correct explanations.  |      |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 3 (b)              | AO1 (3 marks)  Award 1 mark for a basic explanation and further marks for extended explanations of linked points up to a maximum of 3 marks.  • Global hubs have increasing levels high skill employment (1) due to high levels of FDI by TNCs (1); many foreign nationals are employment in high paid management positions (1).  • Elite migrants set up companies in global hubs (1) to take advantage of booming local economy and high growth rates (1) for example high tech computing / programming (1).  • As global hubs are highly accessible especially by air (1) they attract mobile business people for leisure and business purposes (1) such as the UAE or Singapore (1).  Accept other correct explanations. | (3)  |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 3 (c)              | AO1 (3 marks)  Award 1 mark for a basic explanation and further marks for extended explanations of linked points up to a maximum of 3 marks.  • Rapid growth of the secondary sector / transport in global hubs (1) leads to increasing levels of local air pollution (1) which has serious human health impacts e.g. respiratory problems (1).  • Industry and urbanisation in hubs grows rapidly (1) which leads to water pollution as most waste is untreated (1) damaging river and sea ecosystems / creating a human health hazard (1).  • Urbanisation and industrial growth expand over rural areas / leads to deforestation (1) which reduces local biodiversity (1) and degrades the landscape and environmental quality (1).  Accept other correct explanations. | (3)  |

| Question number | Answer   | Mark |
|-----------------|--|------|
| 3 (d)           | 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:  Developing countries:  Work of NGOs – targeting housing needs in poorest or most vulnerable areas. Examples Red Cross working to improve living conditions, or WaterAid working to employ clean water supply.  Self-help groups – work with local community – developments in areas of need – shanty / slum / favelas – communal togetherness to improve living standards.  Local government – issues of dealing with slum developments / shanty developments/ favelas – need to supply water / electricity – work with local service groups to establish infrastructure – also work to provide local resources for self help groups  National government – may have country wide policy e.g. SEZ to develop housing (but perhaps for the higher income bracket) | (6)  |

|         | <ul><li>Lc<br/>m<br/>af</li><li>Na<br/>cr<br/>pl<br/>lo</li></ul> | loped countries: coal government – role of housing associations in managing and aintaining homes to allow low income families to access fordable housing. ational government – role in monitoring housing demand and eating policies/strategies to meet this demand e.g. granting anning permissions for house building (this filters down to the cal government). Also, in supporting people in gaining access to be housing market e.g. Help to Buy. |
|---------|---|--|
| Level   | Mar<br>k  | Descriptor   |
|         | 0   | No rewardable material.  |
| Level 1 | 1-2   | <ul> <li>Demonstrates isolated elements of geographical knowledge<br/>and understanding, some of which may be inaccurate or<br/>irrelevant. (AO1)</li> <li>Understanding addresses a narrow range of geographical ideas<br/>which lack detail. (AO1)</li> </ul>  |
| Level 2 | 3-4   | <ul> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and may include some inaccuracies.         (AO1)</li> <li>Understanding addresses a range of geographical ideas which are not fully detailed and/or developed. (AO1)</li> </ul>   |
| Level 3 | 5-6   | <ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)</li> </ul>   |

| Question<br>Number | Answer  | Mark |
|--------------------|---|------|
| 4 a (i)            | AO2 (1 mark) Nicaragua (1)  Reasons for the correct answer: Nicaragua has the highest % of remittances as a percentage of total GDP (10.1%) | (1)  |

| Question | Answer  | Mark |
|----------|---|------|
| Number   |   |      |
| 4 a (ii) | AO1 (1 mark) / AO2 1 mark   | (2)  |
|          | Award 1 mark for each correct description of the relationship,      |      |
|          | and an additional mark for data support.                            |      |
|          | <ul> <li>The higher the income per person, the lower are</li> </ul> |      |
|          | remittances as a percentage of GDP (1).                             |      |

| There is a negative relationship between the two columns of data (1).   |  |
|---|--|
| <ul> <li>Argentina might be seen as anomalous as it has a<br/>much higher income but the same % as Brazil (1).</li> </ul> |  |
| Doubling income roughly decreases remittances   |  |
| by 2-3%.  |  |
| Accept other correct explanations.  |  |

| Question  | Answer  | Mark |
|-----------|---|------|
| Number    |   |      |
| 4 a (iii) | AO1 (2 marks)   | (2)  |
|           | Award 1 mark for a basic reason, plus a further 1 mark for an             |      |
|           | extension explanation.  |      |
|           | <ul> <li>Dependence on income from a foreign source which</li> </ul>      |      |
|           | could lead to financial problems if stopped (1) due to                    |      |
|           | changes in migration policy or economic crises (1).                       |      |
|           | <ul> <li>Creation of apathy on behalf of receivers (1) who may</li> </ul> |      |
|           | choose not to work as a result (1).                                       |      |
|           | Remittances are subject to fluctuations in exchange                       |      |
|           | rates (1) so could sharply decline with no alternative                    |      |
|           | income source available (1).  |      |
|           | Accept other correct explanations.  |      |

| Question<br>Number | Answer  | Mark |
|--------------------|---|------|
| 4 (b)              | AO1 (4 marks)  Credit 1 mark for a reason and a further mark for an extended explanation.  Governments can join free trade blocs / sign trade agreements such as the EU (1) which tend to increase overall trade volumes and connections between countries (1).  Encouraging free market liberalisation and reduced regulation / developing SEZs or FTZs (1) which in turn encourages FDI by TNCs from abroad (1).  Privatisation to reduce government spending and control of industry (1) which allows former nationalised companies to globalise (1).  Promotion of entrepreneurial programmes (1) to develop skill base and local commercial economy (1). | (4)  |

| Open door immigration policies (1) which attracts |  |
|---|--|
| people from around the world and creates          |  |
| economic and cultural globalisation (1).          |  |
| Accept other correct explanations.                |  |
| Mark as 2+2                                       |  |

| A01 (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:  Social  Unemployment – can lead to mental health issues and increased reliance on government support such as universal credit.  Less income for services, leading to closures of shops etc. This then impacts councils as less income is being received meaning less funding for local projects etc.  Shutting of key services such as schools / hospitals as the population of the area declines and these services struggle to attract high-skilled workers.  Out-migration from an area / population imbalance as people seek employment opportunities elsewhere.  Crime rates increase leading to a growing reputation as the area declines which can put off people moving there.  Environmental:  Land pollution from contaminated industrial land will require remediation before it can be reused.  Reduced environmental quality (or improved depending on outlook) leading to derelit thousing (concentrated of poor | Question<br>number | Answer   | Mark |
|--|--------------------|--|------|
| <ul> <li>and/or vulnerable families)</li> <li>Improvement in air or water quality if source of pollution stopped.</li> <li>The area could be regenerated in the future, leading to cleaner land use.</li> </ul> Accept any valid responses.  | 4 (c)              | 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:  Social  Unemployment – can lead to mental health issues and increased reliance on government support such as universal credit.  Less income for services, leading to closures of shops etc. This then impacts councils as less income is being received meaning less funding for local projects etc.  Shutting of key services such as schools / hospitals as the population of the area declines and these services struggle to attract high-skilled workers.  Out-migration from an area / population imbalance as people seek employment opportunities elsewhere.  Crime rates increase leading to a growing reputation as the area declines which can put off people moving there.  Environmental:  Land pollution from contaminated industrial land will require remediation before it can be reused.  Reduced environmental quality (or improved depending on outlook) leading to derelict housing (concentrated of poor and/or vulnerable families)  Improvement in air or water quality if source of pollution stopped.  The area could be regenerated in the future, leading to cleaner land use. | (6)  |

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

| Question |  |
|----------|--|
| number   |  |
| 5 (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:   |
|          | <ul> <li>The countries with the greatest number of people affected are mostly in East Asia which contains China with a population of 1.3 billion.</li> <li>Cost of adaptation in some areas which be greater and will depend on the development level of the country.</li> <li>The geography of areas means that populations are in vulnerable locations, for example the low-lying river deltas in Myanmar, India and Bangladesh.</li> <li>The impact of sea level will potentially be more greatly felt in areas where low-lying land is used for agriculture.</li> <li>The Pacific islands are small islands states which have the potential to be inundated with a sea level rise of 1m by 2100.</li> <li>Countries with a high proportion of their population living in low lying coastal areas such as China and Japan, are highly vulnerable to rising sea levels.</li> </ul> |

- Countries such as Japan and China have access to high technology and will therefore be able to build sea defenses in response to the rising sea-levels.
- More developed countries such as China, India and Japan have a high GDP and can afford to implement adaptation strategies to protect their populations and coastal areas.
- A country's vulnerability will depend on the awareness and response of the government. Some country's governments may see short term issues as more important to respond to rather than focusing on issues which may not impact the country for many more years.
- Countries dependent on coastal agricultural will face encroaching seawater and increased salinity in groundwater tables. This will impact both the water supply and the country's ability to grow crops.
- Some coastal locations are not as low-lying as other areas and therefore will face differing levels of vulnerability.
- There will be an intensification of cyclonic storm surges as sea level rise elevates storm surges and reduces coastal protection from the loss of mangroves.

Answers may include information about places which are not featured on the Figure.

|         | i igai c. |  |
|---------|-----------|--|
| Level   | Mark      | Descriptor   |
|         | 0         | No rewardable material.  |
| Level 1 | 1-4       | <ul> <li>Demonstrates isolated elements of geographical knowledge. (AO1)</li> <li>Demonstrates isolated elements of geographical understanding, some of which may be inaccurate. (AO1)</li> <li>Applies knowledge and understanding to geographical information / ideas, making limited logical connections / relationships. (AO2)</li> <li>Applies knowledge and understanding to geographical information / ideas to produce an interpretation that is not relevant and / or supported by evidence. (AO2)</li> </ul> |
| Level 2 | 5-7       | <ul> <li>Demonstrates geographical knowledge, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Demonstrates geographical understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding to geographical information / ideas logically, making some relevant connections / relationships. (AO2)</li> <li>Applies knowledge and understanding to geographical information / ideas to produce a partial but coherent</li> </ul>  |

|         |      | interpretation that is mostly relevant and supported by evidence. (AO2)  |
|---------|------|--|
| Level 3 | 8-10 | <ul> <li>Demonstrates accurate and relevant geographical knowledge throughout. (AO1)</li> <li>Demonstrates accurate and relevant geographical understanding throughout. (AO1)</li> <li>Applies knowledge and understanding to geographical information / ideas logically, making relevant connections / relationships. (AO2)</li> <li>Applies knowledge and understanding to geographical information / ideas to produce a full and coherent interpretation that is relevant and supported by evidence. (AO2)</li> </ul> |

| 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  |
| Hydrometerological hazards can be defined as 'an atmospheric,  |
| hydrological or oceanographic event that may cause loss of life, social  |
| and economic disruption'   |
| <ul> <li>Hydrometeorological hazards include floods, droughts, cyclones,<br/>landslides, avalanches and heat waves.</li> </ul> |
| , , , , , , , , , , , , , , , , , , ,  |
| <ul> <li>A disaster can be defined as 'a sudden event which causes great damage<br/>or loss of life'.</li> </ul>               |
| Hydrometerological disasters account for over 75% in terms of damages including casualties and economic losses.                |
|  |

- Asia suffers the most hydrometerological hazards compared to other continents.
- Summary of the different physical factors which lead to hydrometerological hazards such as ocean temperature, latitude, ITCZ, El Nino etc
- Indication of the human factors which may lead to them such as the vulnerability of a population, level of government intervention and level of awareness of the risk.

## AO2

- Tropical cyclones have a very specific hazard geography, because of physical conditions required e.g. 27°c sea surface temperature, low pressure systems, role of the Coriolis effect.
- Tropical cyclone disasters can occur in any of these locations i.e. developed world (Katrina) and developing / emerging world – but the disaster impacts tend to be greater in the developing world (could contrast economic losses with human ones)
- Flood hazards are much more widespread because they can have many different causes, and disasters can occur in almost any location but again the nature of the disaster is related to human vulnerability as much as physical factors (governance, preparation etc.)
- Drought could be argued as more of a developing world 'disaster' as it tends to be managed more effectively in developed countries.
- Some candidates may discuss whether tectonic disasters are similarly related to physical factors or not.
- Overall candidates might argue that whilst hazards are related to physical geography, disasters are more often about human factors
- Level 3 and Level 4 answers should address 'to what extent' i.e. how far are the physical factors the main reason for the global pattern of hydrometerological disasters.

| Level   | Mark | Descriptor  |
|---------|------|---|
|         | 0    | No rewardable material.   |
| Level 1 | 1-5  | <ul> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding of geographical ideas, making limited and rarely logical connections / relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information / ideas to produce an interpretation with limited coherence and support from evidence. (AO2)</li> <li>Applies knowledge and understanding of geographical information / ideas to produce an unsupported or generic</li> </ul> |

|         |       | conclusion, drawn from an argument that is unbalanced or lacks  |
|---------|-------|---|
|         |       | coherence. (AO2)  |
| Level 2 | 6-10  | <ul> <li>Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding of geographical information / ideas with limited but logical connections / relationships. (AO2)</li> <li>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)</li> <li>Applies knowledge and understanding of geographical information / ideas to come to a conclusion, partially supported by an unbalanced argument with limited coherence. (AO2)</li> </ul> |
| Level 3 | 11-15 | <ul> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and accurate. (AO1)</li> <li>Applies knowledge and understanding of geographical information / ideas to find some logical and relevant connections / relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical ideas in order to produce a partial but coherent interpretation that is supported by some evidence. (AO2)</li> <li>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)</li> </ul>                       |
| Level 4 | 16-20 | <ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding of geographical information / ideas to find fully logical and relevant connections / relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information / ideas to produce a full and coherent interpretation that is supported by evidence. (AO2)</li> <li>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)</li> </ul>            |

| Question<br>number |   |
|--------------------|---|
| 6 (a)              | AO1 (5 marks)/AO2 (5 marks)   |
| (u)                | 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   |
|                    | <ul> <li>Youthful populations tend to be linked to level of development, with developing and emerging countries having a lower average age (below 30). The exception to this is China where the average age is 37.</li> <li>Average age can be seen to be linked to the level of globalisation. Highly globalised countries such as Japan, China and Australia have higher average ranges. The exception to this is India, who has a low average age range (20-29) but is highly globalised.</li> <li>Island nations have a low average age (below 29), particularly Papua New Guinea at 22.</li> <li>Afghanistan has the lowest average age at 18, significantly lower than any of its surrounding countries.</li> </ul> |
|                    | AO2   |
|                    | Opportunities:  |
|                    | <ul> <li>Countries with youthful populations such as India have the presence<br/>of a large workforce. This can boost economic and social development<br/>as more people are paying taxes, helping to fund healthcare and<br/>education.</li> </ul>   |
|                    | <ul> <li>A youthful population it is also attractive to TNCs who are looking to<br/>offshore production to the region, increasing the level of foreign direct<br/>investment (FDI).</li> </ul>  |
|                    | <ul> <li>In countries such as Australia and Japan where average age is higher,<br/>there is a high level of expertise contained in the population and this<br/>ensures that they can maintain their economic position in the Asia-<br/>Pacific region as well as globally.</li> </ul>   |
|                    | <ul> <li>Countries with youthful populations will in the long term be able to<br/>reduce their dependency increasing its potential to develop in the<br/>future.</li> </ul>   |
|                    | Challenges:   |
|                    | <ul> <li>Countries such as Afghanistan face short term educational provision<br/>problems, as the number of young people requiring education</li> </ul>   |

| Level   | the A I Th so Th de co rec In de dis | elong term slow down economic development.  large youthful population can create high levels of unemployment.  is can be a drain on the government's funding or can result in high cial deprivation.  ere can be concern over large scale outmigration for low velopment areas such as rural provinces in China to the wealthier astal regions. This can cause regional imbalance and result in duced agricultural output in the rural regions.  countries with a youthful population and low economic velopment there is a potential for health issues such as infectious seases and malnutrition. This will potentially lead to high death rates d infant mortality. |
|---------|--------------------------------------|--|
| Level   |                                      | Descriptor  No rewardable material.  |
|         | 0                                    |  |
| Level 1 | 1-4                                  | <ul> <li>Demonstrates isolated elements of geographical knowledge. (AO1)</li> <li>Demonstrates isolated elements of geographical understanding, some of which may be inaccurate. (AO1)</li> <li>Applies knowledge and understanding to geographical information / ideas, making limited logical connections/relationships. (AO2)</li> <li>Applies knowledge and understanding to geographical information / ideas to produce an interpretation that is not relevant and/or supported by evidence. (AO2)</li> </ul>   |
| Level 2 | 5-7                                  | <ul> <li>Demonstrates geographical knowledge, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Demonstrates geographical understanding, which is mostly relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding to geographical information / ideas logically, making some relevant connections / relationships. (AO2)</li> <li>Applies knowledge and understanding to geographical information / ideas to produce a partial but coherent interpretation that is mostly relevant and supported by evidence. (AO2)</li> </ul>  |
| Level 3 | 8-10                                 | <ul> <li>Demonstrates accurate and relevant geographical knowledge throughout. (AO1)</li> <li>Demonstrates accurate and relevant geographical understanding throughout. (AO1)</li> </ul>   |

| • | 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   |  |  |  |  |
| 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  |  |  |  |
|          | <ul> <li>Globalisation is the process by which people, culture, finance, goods and<br/>information transfer between countries.</li> </ul>  |  |  |  |
|          | <ul> <li>Globalisation can be viewed as economic, cultural, political, environmental or</li> </ul>   |  |  |  |
|          | demographic.   |  |  |  |
|          | <ul> <li>Introduction to the different drivers of globalisation – technology, investment,</li> </ul>   |  |  |  |
|          | government activity.   |  |  |  |
|          | The level of resource base of a country can encourages countries to link with  |  |  |  |
|          | other countries as they are seeking raw materials.   |  |  |  |
|          |  |  |  |  |
|          | AO2  |  |  |  |
|          | <ul> <li>Developments in communications and transport have reduced the</li> </ul>  |  |  |  |
|          | importance of distance.  |  |  |  |
|          | Communication technology:  |  |  |  |
|          | The advent of broadband internet in the 1980s and 1990s meant that large   |  |  |  |
|          | amounts of data could be moved quickly through cyberspace. This sped up  |  |  |  |
|          | financial flows and business decisions.  |  |  |  |
|          | The internet has also increased connectivity between people and places      The internet has also increased connectivity between people and places      The internet has also increased connectivity between people and places.  The internet has also increased connectivity between people and places. |  |  |  |
|          | through interfaces such as Facebook and Instagram.   |  |  |  |
|          | <ul> <li>Developing countries have also been predominately globalised through<br/>communication technology due to leapfrog technology such as mobile</li> </ul>  |  |  |  |
|          | phones. Countries such as Egypt have around 70% of their population  |  |  |  |
|          | accessing the internet through mobile phones only.   |  |  |  |
|          | The role of communication technology in promoting globalisation can  |  |  |  |
|          | depend on how well a country manages the installation of technology. For   |  |  |  |
|          | example, in the UK, the government has been rolling out faster broadband   |  |  |  |
|          | across all areas, particularly previously isolated rural locations.  |  |  |  |
|          |  |  |  |  |
|          | Other factors:   |  |  |  |
|          |  |  |  |  |

- Containerisation has reduced shipping costs and has been key in allowing TNCs to outsource their centre of production from Europe towards Asia, this is particularly evident in China.
- Political decisions can promote globalisation such as China's creation of the Special Economic Zones (SEZs) which encouraged TNCs to offshore their production.
- Transport has increased the level of tourism and volume of links between countries at all levels of wealth due to the onset of budget airlines such as Easylet.
- The level of globalisation is dependent on how switched on or switched off you are. Countries such as North Korea and to some extent China have limited the impact of globalisation in their respective countries by censoring the internet through firewalls and government policy.
- Globalisation can be limited due to historical issues, for example the Cuban embargo created by the USA which prohibited American telecommunication companies from providing services to the island.
- Countries joining trade blocs leads to increasing connectivity between and within countries.
- Climate change in the future could this mean that places are more / less likely to be a target for globalisation.
- Level 3 and Level 4 answers should address 'to what extent' i.e. do they agree that communications technology is the most important factor promoting globalisation.

| Level   | Mark | Descriptor  |
|---------|------|---|
|         | 0    | No rewardable material.   |
| Level 1 | 1-5  | <ul> <li>Demonstrates isolated elements of geographical knowledge and understanding, some of which may be inaccurate or irrelevant. (AO1)</li> <li>Applies knowledge and understanding of geographical ideas, making limited and rarely logical connections / relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information / ideas to produce an interpretation with limited coherence and support from evidence. (AO2)</li> <li>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)</li> </ul> |
| Level 2 | 6-10 | <ul> <li>Demonstrates geographical knowledge and understanding, which is occasionally relevant and may include some inaccuracies. (AO1)</li> <li>Applies knowledge and understanding of geographical information / ideas with limited but logical connections/relationships. (AO2)</li> <li>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)</li> </ul>   |

|         |       | <del>-</del>   |
|---------|-------|--|
|         |       | 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 | <ul> <li>Demonstrates geographical knowledge and understanding, which is mostly relevant and accurate. (AO1)</li> <li>Applies knowledge and understanding of geographical information / ideas to find some logical and relevant connections / relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical ideas in order to produce a partial but coherent interpretation that is supported by some evidence. (AO2)</li> <li>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)</li> </ul>            |
| Level 4 | 16-20 | <ul> <li>Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)</li> <li>Applies knowledge and understanding of geographical information / ideas to find fully logical and relevant connections / relationships. (AO2)</li> <li>Applies knowledge and understanding of geographical information / ideas to produce a full and coherent interpretation that is supported by evidence. (AO2)</li> <li>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)</li> </ul> |