



Mark Scheme (Results)

Summer 2017

Pearson Edexcel IAL in
Geography (WGE01)
Paper 1: Global Challenges

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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 Number	Answer	Mark
1 a (i)	<p style="text-align: center;">AO2 (1 mark)</p> <p>Correct Answer: B - South Asia (correct answer as high / very high risk level)</p> <p>Incorrect answers: A - North America (Has high and low risk level) C - Oceania (Has mainly moderate risk level) D - Europe (Has moderate and low/very low risk level)</p>	(1)

Question Number	Answer	Mark
1 a (ii)	<p style="text-align: center;">AO2 (2 marks)</p> <ul style="list-style-type: none"> • Very high risk in the east / east coast / south (1) • Very low / low risk in central area and west / west coast / north east (1). • Moderate or varied risk in north / north coast (1). • Risk decreases east to west broadly (1), but there are anomalies e.g. Niger. <p>Accept other correct descriptions of pattern; may include named countries. Do not credit explanation; or reference to single locations without reference to pattern.</p>	(2)

Question Number	Answer	Mark
1 a (iii)	<p style="text-align: center;">AO1 (2 marks)</p> <p>Credit 1 mark for a reason / explanation and a further mark for a linked extension point. Answers need to explain the causes of drought (abnormally low precipitation/ water availability), not aridity:</p> <ul style="list-style-type: none"> • Area X has highly seasonal rainfall / situated within the seasonal ITCZ zone (1) and seasonal rains frequently fail leading to drought (1). • Long-term rainfall trends in this area show a downward trend, which can lead to progressive drought (1) which has been linked to global warming (1). • Global climate perturbations such as El Nino / ENSO (1) can cause disruption to seasonal rainfall, which if it fails can lead to drought (1). <p>Causes must be physical in focus. Accept other correct physical explanations including global warming / climate change linked to changing physical processes.</p>	(2)

Question Number	Answer	Mark
1 (b)	<p style="text-align: center;">AO1 (4 marks)</p> <p>Award 1 mark for identifying a specific human activity that can increase flood risk and a further expansion mark explaining how, up to a maximum of 2 marks each.</p> <ul style="list-style-type: none"> • Deforestation can expose slopes to surface runoff / reduce interception (1) which means flood water reaches rivers more quickly and in higher volume (1). • Urbanisation can lead to an expansion of impermeable surfaces (1) leading to increased surface runoff so rivers react faster to heavy rainfall (1). • Poor management / governance of catchments and / or response / construction on high risk locations (1) can increase vulnerability of people and increase disaster risk (1). • Global warming leading to rising sea levels / thermal expansion of the oceans (1) leading to increased risk of coastal flooding (1). <p>NB Do not mark as 3 + 1.</p>	(4)

Question number	Answer	Mark
1 (c)	<p style="text-align: center;">AO1 (6 marks)</p> <p>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.</p> <p>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:</p> <ul style="list-style-type: none"> • Volcanoes are found close to plate margins where upwelling magma breaches the crust • The majority are found at destructive margins, because of melting magma at subduction zones and these tend to be the most violent • 80% of active volcanoes are in the Pacific Ring of Fire because this is dominated by subduction zones • Less violent, but more frequently erupting volcanoes are found at constructive plate margins where plates pull apart allowing molten magma to rise • Conservative plate margins have no volcanic activity • There are also hot spots such as Hawaii and the Galapagos where mantle plumes generate mid-plate eruptions, not related to plate margins • Differences in magma type and temperature of eruption explain the contrast between effusive (constructive) and explosive (destructive) volcano types. <p>For Level 3, answers should focus on distribution i.e. the pattern of volcanoes.</p>	(6)
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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
2 a (i)	<p style="text-align: center;">AO1 (1 mark)</p> <ul style="list-style-type: none"> • Methane (CH₄) (1) • Nitrogen oxide / dioxide (NO_x / NO/ NO₂) (1) • Credit CFCs / HFCs (1). • Water vapour (1) <p>Do not accept:</p> <ul style="list-style-type: none"> • Argon, sulphur dioxide (SO₂), oxygen 	(1)

Question Number	Answer	Mark
2 a (ii)	<p style="text-align: center;">AO2 (4 marks)</p> <p>Credit 1 mark per comparative point, whether or not it is supported by data:</p> <ul style="list-style-type: none"> • Highest emitter in 1993 was the USA (5200) whereas in 2013 it is China (10500) (1) • Emissions have fallen in USA and Germany (1), but risen in China and India (1) • The reduction in emissions in Germany is larger than that for the USA, relatively (1) • China's emissions have increased fourfold (1), with India showing a similar level of increase (1) • Total emissions from the four countries were around 9000 in 1993, but China alone exceeds this in 2013 (1), plus total emissions are around 17000 (1). <p>Accept other comparative points.</p>	(4)

Question Number	Answer	Mark
2 a (iii)	<p style="text-align: center;">AO1 (4 marks)</p> <p>Credit 1 mark for a reason and a further mark for an extended explanation.</p> <p>Germany (falling emissions)</p> <ul style="list-style-type: none"> • Environmental concerns / concerns about climate change have led to a focus on emissions reduction (1) such as the use of renewable energy / technology to reduce transport emissions / energy efficient buildings (1). • Joining Kyoto / Paris COP21 (1) and setting targets for emissions reductions as a result (1) • Economic change / change in sectors (1) such as the impact of the economic downturn reducing emissions / high energy costs reducing demand (1). <p>China (rising emissions)</p>	(4)

	<ul style="list-style-type: none"> • Rapid industrialisation (1) meaning a large rise in fossil fuel use to meet demand from factories / exporters (1). • Increasing affluence / urbanisation of the population (1) meaning individual energy consumption has risen and so have per person emissions (1). 	
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Question number	Answer	Mark
2 (b)	<p style="text-align: center;">AO1 (6 marks)</p> <p>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.</p> <p>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:</p> <ul style="list-style-type: none"> • Physically some coasts are vulnerable because they are very close to sea level, such as Bangladesh's Sundarban area, meaning a small rise leads to large losses • Some areas such coral atolls (Maldives, Vanuatu, Tuvalu) have no higher land at all so people have nowhere to relocate to • Areas suffering from subsidence / sinking face a double problem of sinking land and rising seas – making adaption costs very high • Environmental refugees, i.e. those with no relocation options represent a major challenge • Areas with very high population densities but low economic potential – the costs of adapting may be very hard to meet • Low income locations in the developing world will struggle to pay for adaptation such as sea defenses due to the very high costs • Wealthier places will be able to pay, made easier by existing flood defenses that can be raised and adapted, e.g. Netherlands, and have better governance and management structures. • Natural occurrences of mangroves and reefs, which mean some areas have natural protection, whereas in other places these have been destroyed by human actions. 	(6)
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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)
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Question Number	Answer	Mark
3 a (i)	<p style="text-align: center;">AO2 (1 mark)</p> <p>Correct Answer: C - Most components are made in developed countries (because all countries are developed apart from Korea meaning 16 out of 17 components are from developed countries).</p> <p>Incorrect Answers: A – Most components are made in Japan (only 3 of 17 components are made in Japan therefore less than components from developed countries). B – Most components are made in emerging countries (Korea is the only emerging country on Figure 3 which makes only 1 out of the 17 components and therefore less than components from developed countries). D – Most components are made by Boeing (Boeing only makes 3 of the 17 components and therefore less than components from developed countries).</p>	(1)

Question Number	Answer	Mark
3 a (ii)	<p style="text-align: center;">AO1 (1 mark) / AO2 (1 mark)</p> <p>Credit 1 mark for a reason / explanation and a further mark for a linked extension point.</p> <ul style="list-style-type: none"> • Logistics / communication (1) between Boeing and its parts suppliers aboard (1); tracking / ordering supplies (1). • Sharing designs ideas / changes to designs / production targets (1) without the need for physical copies / physical meetings (1). <p>Accept other suggestions with appropriate extensions.</p>	(2)

Question Number	Answer	Mark
3 a (iii)	<p style="text-align: center;">AO1 (2 marks)</p> <p>Credit 1 mark for a reason / explanation and a further mark for a linked extension point.</p> <ul style="list-style-type: none"> • Jet aircraft transport people around the world (1) contributing to globalisation through tourism creating cultural mixing / transport of TNC business people / economic migration (1). 	(2)

	<ul style="list-style-type: none"> • Some trade in goods is carried on such aircraft (1) especially when it is high value / low weight and / or perishable (1). • The speed of aircraft reduces the friction of distance (1) and makes it easier for TNCs to operate global production chains / reduces costs (1). 	
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Question Number	Answer	Mark
3 (b)	<p style="text-align: center;">AO1 (4 marks)</p> <p>Credit 1 mark for a reason and a further mark for an extended explanation.</p> <ul style="list-style-type: none"> • Free trade blocks have tariff-free trade between members (1) reducing the cost of trade between them and leading to a higher volume of total trade (1) • Some businesses may be able to find a cheaper location for production within the bloc (e.g. Mexico or Eastern Europe) (1) reducing costs and increasing competitiveness / higher profits (1). • Barrier free trade between countries encourages flows by TNCs (1) and may make FDI into other members easier (1). • Some trade blocs such as the EU include free movement of labour (1) making it easier for businesses to fill skills gaps / workers to find work (1); trade bloc may promote broader political stability / good relations between members (1). 	(4)

Question number	Answer	Mark
3 (c)	<p style="text-align: center;">AO1 (6 marks)</p> <p>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.</p> <p>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:</p> <ul style="list-style-type: none"> Concerns over local air pollution from factories, especially in outsourcing locations such as the Pearl River Delta, where local emissions regulations may be weak Health issues linked to poor air quality, especially in cities affected by high rates of industrialisation, e.g. Mumbai, Shanghai High levels of water pollution from industrial runoff; eutrophication of rivers and lakes from factory waste, e.g. in China Dereliction in 'rustbelt' locations, which have lost industry due to the global shift, reducing the environmental quality of former industrial cities Pressure on local natural resources, e.g. depletion of groundwater and / or surface water supplies due to over-extraction for industrial use, e.g. Coca-Cola in India A point could be made about improving environmental issues in some developed countries that have lost industry due to the global shift. <p>Answers must have a local focus on environmental issues / impacts, do not credit content related to global warming unless it is rooted in local impacts.</p>	(6)
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Demonstrates accurate and relevant geographical knowledge and understanding throughout. (AO1)

		<ul style="list-style-type: none"> Understanding addresses a broad range of geographical ideas which are detailed and fully developed. (AO1)
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Question Number	Answer	Mark
4 a (i)	<p style="text-align: center;">AO2 (1 mark)</p> <ul style="list-style-type: none"> Sri Lanka (1). 	(1)

Question Number	Answer	Mark
4 a (ii)	<p style="text-align: center;">AO2 (3 marks)</p> <ul style="list-style-type: none"> A positive correlation / as income rises so does % urbanisation (1) Sri Lanka is anomaly (1) as its urbanisation % would be expected to be 40-50% / Hong Kong is anomalous at 100% urbanisation (1) may develop a comparative point (1). Non-linear above \$40000 / above \$40000 there is less change in % urbanisation (1) Small increases in income lead to large % rises in urbanisation between \$3000 and \$8000 (1). Credit analytical points that identify country groups in a similar situation e.g. South Asian ones (1). <p>Note: no marks for explanations.</p>	(3)

Question Number	Answer	Mark
4 a (iii)	<p style="text-align: center;">AO1 (1 marks) / AO2 (1 marks)</p> <p>Credit 1 mark for a reason / explanation and a further mark for a linked extension point.</p> <ul style="list-style-type: none"> Incomes rise as countries industrialise / industrialisation (1) and most factories / offices are located in urban areas so urban population rises as workers live in cities (1). Countries with higher incomes have higher secondary / tertiary employment located in cities (1) which encourages rural-urban migration to cities so urban population rises (1). 	(2)

Question Number	Answer	Mark
4 (b)	<p style="text-align: center;">AO1 (3 marks)</p> <p>1 mark for a basic impact, plus a further mark for an extended point, up to a maximum of 2 marks each.</p> <ul style="list-style-type: none"> • Brain drain of skilled workers from the countryside (1) leading to lower economic growth potential there (1). • Younger people migrate leaving an ageing population (1) so there is no-one left to look after the elderly (1). • Physical resources such as food and water sourced cheaply from the countryside (1) perpetuating rural poverty (1). • Loss of land as a result of urban sprawl as the city spreads physical into surrounding rural areas (1) reducing the quality of the environment / destroying ecosystems / causing pollution (1). • Accept urban-rural movement / counter-urbanisation (1) and impacts such as congestion/ high housing demand (1). <p>Impacts must be about rural areas.</p>	<p>(3)</p> <p>2+1 or 1+1+1</p>

Question number	Answer	Mark
4 (c)	<p style="text-align: center;">AO1 (6 marks)</p> <p>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.</p> <p>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:</p> <ul style="list-style-type: none"> • The sheer number of new arrivals from RUM / new children due to high birth rates means that the scale of housing demand is very high • Existing and new slums mean that in many cities such as Lagos and Mumbai millions of housing units are below acceptable standards • Many developing cities suffer from uncontrolled urban development and have no clear urban plan, so housing develops in a haphazard way with no service provision, e.g. water / sewage – expensive to later install • Poor housing leads to other problems such as disease, and possibly crime, which are equally difficult and expensive to tackle • Many developing cities lack the finance needed to tackle housing shortages / existing slums • NGOs are often relied on to help but they are small compared to the scale of the problem and their impact is often minor. 	(6)
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-2	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	Explain why some countries are more willing to take greater actions to reduce emissions. (10 marks)	
5 (a)	<p align="center">AO1 (5 marks)/AO2 (5 marks)</p> <p>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.</p> <p>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:</p> <p>AO1:</p> <ul style="list-style-type: none"> • No countries are 'role models' implying that no country on Earth has been prepared to do what scientists deem necessary to mitigate against climate change. • The 'sufficient' countries are all developing / emerging rather than developed countries. • Some might note that the 'medium' group contains large, powerful and important economies that account for most of global GDP but that they are not prepared to take much action. • The 'inadequate' group is mixed – although they are all major fossil fuel producers / exporters, which provides a common thread between them despite political / cultural divergence. • Willingness to act might depend on development stage (pre industrialization, industrializing, post-) and ability to afford to take action. <p>AO2:</p> <ul style="list-style-type: none"> • Willingness to accept the idea of 'dangerous' climate change and act on it. • Climate (hot/ cold) or other aspects of physical geography may mean high resource use (heating / air-con) that could be hard to reduce / replace with less polluting alternatives. • 'Role model' could be seen as simply too expensive, and involve very high costs, e.g. abandoning fossil fuels that would lead to a lack of global competitiveness or be unacceptable to voters. • The 'sufficient' countries are perhaps the most under threat, i.e. depend on farming, have forests to protect, already suffer climate extremes – and are therefore the most prepared to act. • 'Medium' countries may try and balance calls for environmental protection with demands for economic growth, so go so far but not further; most are developed and emerging countries who may be able to afford to mitigate. • The inadequate countries could be seen to be simply protecting their economies, which depend on fossil fuels; jobs and prosperity depend on exporting oil and gas so these countries won't take action. • Russia could be seen as unwilling to cooperate with the 'west' on emissions reductions due to other political tensions. 	
Level	Mark	Descriptor
	0	No rewardable material.

Level 1	1–4	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 prediction and monitoring technology can help reduce the impacts of natural disasters. (20 marks)
5 (b)	<p style="text-align: center;">AO1 (5 marks)/AO2 (15 marks)</p> <p>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:</p> <ul style="list-style-type: none"> • Level 1 AO1 performance: 1 mark • Level 2 AO1 performance: 2 marks • Level 3 AO1 performance: 3 marks • Level 4 AO1 performance: 4-5 marks <p>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:</p> <p>AO1</p> <ul style="list-style-type: none"> • Prediction of natural hazards means being able to state, with actionable certainty, when and where they will strike. • This is done through monitoring technology that can be used on volcanoes (tiltmeters, seismometers) and for hydro-met hazards such as cyclones (satellites). • Impacts include both economic losses (insured and uninsured) and human losses (trends) in terms of deaths and numbers affected / homeless. • There are other ways of reducing impacts, including preparation and response – both short and long term. <p>AO2</p> <ul style="list-style-type: none"> • Cyclones and other storms are routinely monitored using aircraft, satellites and weather stations and the data is used to make landfall and parameter predictions, which is the basis for warning and evacuation - this has the potential to drastically reduce human losses although economic impacts often remain very high. • In order to reduce economic losses costly storm and flood protection is needed, so in developing countries prediction is especially important. • Volcanic activity is increasingly monitored using sophisticated equipment and many volcanic eruptions can be predicted with accuracy and warnings issued; this is critical as the hazards themselves cannot be stopped so moving people out of harm's way is very important. • The hazard least likely to be managed by prediction is earthquakes, which cannot be predicted; it can be argued that for this hazard the best management method is preparation, i.e. hazard resistant design and land use zoning for instance. • Conversely tsunami can be predicted and monitored over the period of hours following the initial earthquake and warnings issued – reducing human impacts but probably not economic losses. • Drought and flood risk can also be monitored, although in these case defences and adaptations are often more important as the hazards are

	<p>more frequent, e.g. flood defences, farming adaptations to cope with water supply falls.</p> <ul style="list-style-type: none"> Other parts of the Hazard Management Cycle, e.g. immediate response, recovery, could be considered as important (even more important) as part of a wider evaluation of the role of monitoring and prediction.
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Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–5	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> • 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	Suggest reasons for the distribution of international migrants shown in Figure 6. (10 marks)	
6 (a)	<p align="center">AO1 (5 marks)/AO2 (5 marks)</p> <p>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.</p> <p>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:</p> <p>AO1</p> <ul style="list-style-type: none"> • Large increase in total international migrants 2000-2015, up 71 million. • Both Europe and North America have large number of immigrants which exceed their emigrant population, by a margin of 50 million in the USA – much closer to balance in Europe. • The majority of immigrants are found in Asia, Europe and North America. • Most emigration is from LAC, Asia and Africa, which in all cases has emigration exceeding immigration. • Oceania has small numbers in both categories, but immigration exceeds emigration. <p>AO2</p> <ul style="list-style-type: none"> • The large volume of immigration to Europe could be explained by the EU's open borders making migration very easy, and possibly balancing immigration / emigration within the continent. • Higher immigration numbers in Europe can be related to post-2011 refugee migration from the Middle East and North Africa. • Regions with large emigrating populations are generally lower income ones, so economic migration could be seen as a key explanation. • In North America the large immigrant stock could be put down to Mexican and other LAC migration to the USA, as well as the USA attracting high skill migrants from across the world to its big cities and TNCs. • Population size could explain the small numbers in Oceania and large ones in Asia, i.e. migrant stock is relative to population. • Total volume of the global migrant stock might be explained by globalization and related factors, plus recent developments such as refugee crises in the Middle East; post 2004 EU expansion. 	
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–4	<ul style="list-style-type: none"> • Demonstrates isolated elements of geographical knowledge. (AO1) • Demonstrates isolated elements of geographical understanding, some of which may be inaccurate. (AO1)

		<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 costs and benefits of globalisation for both workers in developed and developing countries. (20 marks)
6 (b)	<p style="text-align: center;">AO1 (5 marks)/AO2 (15 marks)</p> <p>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:</p> <ul style="list-style-type: none"> • Level 1 AO1 performance: 1 mark • Level 2 AO1 performance: 2 marks • Level 3 AO1 performance: 3 marks • Level 4 AO1 performance: 4-5 marks <p>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:</p> <p>AO1</p> <ul style="list-style-type: none"> • Globalisation involves widening and deepening connections between countries and economies, making the world more interdependent and interconnected; it has economic, cultural and technological facets. • Costs can be economic – jobs, income, security, prosperity – as well as social, cultural and even environmental. • In the developed world workers once worked in manufacturing, and in some cases service industries, which have moved abroad due to outsourcing. • In emerging countries / NICs there has been a large gain in terms of employment as a result of outsourcing. <p>AO2</p> <ul style="list-style-type: none"> • In developed countries there have been big job losses in traditional manufacturing, which has led to economic decline; this tends to be concentrated in certain cities like Detroit and other 'rustbelt' cities in the US and locations such as Sheffield in the UK. • In some cases job losses have led to serious urban decline and high unemployment; on the other hand some cities like NY and London have continued to prosper through globalised services – so the negatives may affect only some locations. • It could be argued that certain types of worker – male, low skills, middle-aged – have been affected most with the young and skilled taking the opportunities globalisation offers. • A counter-argument is that many outsourced jobs are low pay, low skill ones that allow workers in the developed world to get better work – although this may not be true for all workers and all places. • In emerging locations jobs have been gained and incomes have risen in outsourced factories and offices in China, India and elsewhere, so the overall impact of outsourcing could be viewed as positive. • There are arguments that the outsourced work in some cases is low paid, with poor working conditions, long hours; child labour and sweatshop conditions could be raised as issues.

	<ul style="list-style-type: none"> On the other hand, outsourcing has helped lift millions out of poverty and many people have moved into the middle class and seen improvements in quality of life.
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Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–5	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> • 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)
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