MARK SCHEME

AQA Style

GEOGRAPHY

Commissioned by The PiXL Club Ltd.

Question 1

UNIT: Challenges
TOPIC: Weather Hazards
Question stem: Give (uses HAZ8 jpeg)
Refer to the satellite image. Give the range of temperatures that are present in the area affected by the tropical storm. (1mark)

Indicative Content
Mark for a correct temperature range. • Any numbers within this range - 27°C - 33°C No mark if the units of ^{o}C not given. AO4 = 1

Question 2

UNIT: Challenges
TOPIC: Weather Hazards
Question stem: State
State one physical hazard associated with a tropical storm.

Indicative Content
One of these hazards: High winds/heavy rainfall/storm surges/flooding/landslides. AO1 = 1 mark

Question 3

UNIT: Challenges
TOPIC: Weather Hazards (therapy - HAZ4)
Question stem: Identify (uses HAZ jpeg4)
Using the map provided, identify one place in the USA that was affected by Hurricane Matthew. (1m)

Indicative Content
Mark for a correct location, only one name is needed. • Wilmington • Myrtle Beach • Jacksonville • Daytona Beach • Miami AO4 = 1

Question 4

UNIT: Challenges
TOPIC: Weather Hazards (therapy - HAZ11)
Question stem: Describe
Describe the global pattern of tropical storms. (2 marks)

Indicative Content
1 Mark for each point stated. • Cyclone belt. • 5 -10° North and South of the Equator. • Warm seas (26°C) e.g. Caribbean. AO1 = 2 marks

Question 5

UNIT: NATURAL HAZARDS
TOPIC: WEATHER HAZARDS
Question stem: Describe (use jpeg12)
Using the satellite image, describe the characteristics of tropical storms. (4 marks)

Indicative Content
1 Mark for each point stated. Clear use of the image provided. • Circular/round in shape. • Clouds. • Spinning/vortex. • Large in size, diameter. • Has an eye in the centre. • Surrounding the eye is the eye wall. • Evidence that the image has been used and relevant information has been selected. AO1 = 2 marks AO4 = 2 marks

Question 6

UNIT: Challenges
TOPIC: Weather Hazards
Question stem: Suggest
Suggest one way that the government of a LIC (developing country) could help its people cope with a tropical storm. (2 marks)

Indicative Content
Only one method is needed here. • Predict – monitor and track the storm so warnings can be given, (1) this gives people time to evacuate the areas that are most at risk. (1) • Protection – build storm shelters so people have somewhere safe to go. (1) These would be raised off the ground and have strong windows and doors. (1) • Build a sea wall (1) to protect against storm surges. (1) • Build houses on stilts, so homes are protected from the storm surge. (1) • Planning – educate the people about tropical storms (1) so they know what to do if a storm hits. (1) Answers must be appropriate for a LIC (developing or NEE country). AO1 = 2 marks

Question 7

UNIT: NATURAL HAZARDS
TOPIC: Weather Hazards
Question stem: Suggest how
Suggest how HICs (developed countries) can predict and prepare for tropical storms. (4 marks)

Indicative Content
Any of these examples can be used, but they must be appropriate to a HIC (developed country). • Predict – monitor and track the storm so warnings can be given. (1) Use of satellites (1) they can make use of computer modelling to predict the storms (1) employ scientists to monitor and track storms. (1) This gives people time to evacuate the areas which are most at risk. (1) • Prepare – people can afford to build structures that can withstand strong winds and heavy rain (1) this may include shutters, reinforced glass. (1) Have neighbourhood plans so people know where to go in case of a storm. (1) Build a sea wall (1) to protect against storm surges. (1) Educate the people about tropical storms (1) so they know what to do if a storm hits (1) e.g. USA National Hurricane Preparedness Week. (1) Planning controls to reduce the amount of development in hurricane prone areas. (1) AO2 = 2 AO3 = 2

Level 2 **Clear**	**Marks** **3-4**	AO2 Shows clear understanding of how HICs can predict and prepare for tropical storms. . AO3 Applies knowledge and understanding of tropical storms and how they can be predicted and prepared for.
Level 1 **Basic**	**Marks** **1-2**	AO2 Shows limited understanding of how HICs can predict and prepare for tropical storms. AO3 Limited application of knowledge and understanding of tropical storms and how they can be predicted and prepared for.

Question 8

UNIT: Challenges
TOPIC: Weather Hazards
Question stem: Explain
Explain the formation of tropical storms. (6 marks)

Indicative Content
• Hurricanes begin with an area of low pressure. (1) • Hurricanes form over warm seas, above 27°C; this provides continuous heat to maintain rising air currents. (1) • There are intense up draughts of warm air. (1) • As the warm air is pulled upwards, cold air comes down from above to replace the warm air. (1) • Warm air is drawn into the storm in a spiralling manner. (1) • Hurricanes develop in the tropics in locations 5° to 20° North or South of the Equator in order for the Coriolis force to bring about this rotation. (1) • As the storm moves across the ocean it picks up more warm, wet air and grows in size. (1) • These violent storms usually measure 200-700km in diameter. (1) • They will exist while there is a supply of latent heat and moisture. (1) • When they reach land they release large amounts of rain, there are strong winds, and storm surges. (1) AO1 = 2 AO2 = 2 AO3 = 2

Level 3 **Detailed**	**Marks** **5-6**	AO1 Shows detailed knowledge of tropical storms. AO2 Shows detailed understanding of how tropical storms form. AO3 Applies knowledge and understanding of tropical storms to explain in detail why certain conditions are needed for a tropical storm to form.
Level 2 **Clear**	**Marks** **3-4**	AO1 Shows some knowledge of tropical storms. AO2 Shows clear understanding of how tropical storms form. AO3 Applies knowledge and understanding of tropical storms to explain why certain conditions are needed for a tropical storm to form.
Level 1 **Basic**	**Marks** **1-2**	AO1 Shows limited knowledge of how tropical storms form AO2 Shows limited understanding of the conditions needed for tropical storms to form

Question 9

UNIT: Challenges
TOPIC: Weather Hazards
Question stem: Examine the statement
"Droughts are caused by changes to weather patterns." Examine this statement. (8 marks)

Indicative Content
Knowledge and understanding of what drought is and the causes. The main causes of droughts linked to weather patterns are meteorological ones. • Definition of drought "an extended period of lower than normal levels of rainfall, this results in water shortages (1) • Meteorological causes are those that are linked to how dry the area is (1) when an area receives less precipitation than would be normally expected. (1) Changes to weather patterns such as those linked to variations in the global atmospheric circulation model or ocean currents, (1) may alter rainfall patterns. (1) • Climate change might impact weather patterns (1) and therefore cause drought. (1) • El Niño events and the impact that this has on drought. (1) • Jet streams alter their position and can impact on low pressure systems (1) and therefore rainfall patterns and drought. (1) • Use of examples such as the Sahel. (1) • Credit hydrological causes if linked to changes in weather patterns (1) AO1 = 2 AO2 = 3 AO3 = 3

Level 3 **Detailed**	**Marks** **7-8**	AO1 – Shows detailed knowledge of how droughts are caused by changes to weather patterns. AO2 - Shows detailed understanding of how droughts are caused

		by changes to weather patterns. Explanations are detailed. Examples are used to good effect to illustrate these points. AO3 - Applies knowledge and understanding of how weather patterns impact upon the frequency and severity of drought.
Level 2 **Clear**	**Marks** **4-6**	AO1 – Shows clear knowledge of how droughts are caused by changes to weather patterns. AO2 - Shows clear understanding of how droughts are caused by changes to weather patterns. Explanations are clear. Examples are used to illustrate these points. AO3 - Applies knowledge and understanding of how weather patterns impact upon the frequency and severity of drought.
Level 1 **Basic**	**Marks** **1-3**	AO1 – Shows some knowledge of how droughts are caused by changes to weather patterns. AO2 - Shows limited understanding of how droughts are caused by changes to weather patterns. Explanations are not always clear. AO3 – Little application of knowledge and understanding to show how weather patterns impact upon drought.

Question 10

UNIT: Challenges
TOPIC: Weather Hazards (therapy 22)
Question stem: Use evidence
"Climate change will impact on tropical storms". Use evidence to support this statement. (6 marks)

Indicative Content
• Candidates show knowledge of tropical storms (1) and climate change (1) and how climate change and tropical storms are linked. (1) • **Distribution** –Sea surface temperatures have increased by 0.25^{o}C – 0.5^{o}C, due to climate change. (1) More areas of ocean are now warm enough for tropical storms to form. (1) This means that the size of the cyclone belt may increase. (1) So the distribution of tropical storms will alter and a larger area will experience tropical storms (1) e.g. in 2004 there was a category 2 hurricane in Brazil, hurricanes do not normally occur here. (1) • **Intensity** – As sea temperatures increase the intense of storms will increase. (1) This will mean that there will be more category 4 and 5 storms, (1) which will mean tropical storms will be more devastating. (1) There is evidence that in the North Atlantic Ocean there has been an increase in the intensity of tropical storms over the past 20 years. (1) • **Frequency** - the evidence about how frequency may alter is not conclusive. (1) AO1 = 2 marks AO2 = 2 marks AO3 = 2 marks

Level 3 **Detailed**	**Marks** **5-6**	AO2 Shows detailed understanding of how climate change might influence the formation of tropical storms. AO3 Applies knowledge and understanding of how distribution and intensity of tropical storms will be affected by climate change. Evidence is used effectively.
Level 2 **Clear**	**Marks** **3-4**	AO1 Shows reasonable knowledge of tropical storms and climate change. AO2 Shows some understanding of how climate change might influence the formation of tropical storms. Attempts to explain how distribution and intensity of tropical storms will be affected by climate change. Some evidence is used.
Level 1 **Basic**	**Marks** **1-2**	AO1 Shows limited knowledge of tropical storms and climate change. AO2 Shows limited understanding of how climate change might influence the formation of tropical storms. Mentions how distribution and intensity of tropical storms will be affected by climate change. No evidence is used.

Question 11

UNIT: Challenges
TOPIC: weather hazards
Question stem: Use evidence to support
"There is a clear relationship between the world's weather and global atmospheric circulation." Use evidence to support this statement. (6 marks)

Indicative content
• Knowledge of the global atmospheric circulation model - cells – circular movement of air (1) air that is sinking forms high pressure (1) air that is rising forms low pressure (1) Winds move from high pressure to low pressure (1) winds are responsible for moving heat and moisture from one place to another (1) • Understanding that it is this global circulation in the atmosphere that drives the world's weather. (1) It is responsible for the circulation of water and heat. (1) Could link to the low pressure and trades winds in the tropics forming tropical storms (1) • Evidence might relate to how global atmospheric circulation influences weather in different parts of the world, such as temperate weather conditions in the UK where air masses converge. (1) Hot dry deserts where air is descending and there is high pressure, resulting in few clouds and little precipitation. (1) Equatorial climate where air is rising, and there is low pressure, resulting in clouds, and rainfall. (1) AO1 = 2 marks AO2 = 2 marks AO3 = 2 marks

Level 3 detailed	**Marks 5-6**	AO2 Shows detailed understanding of how the global atmospheric circulation works. Explanation of how global circulation causes

		weather patterns. AO3 Applies knowledge and understanding of how weather is driven by global circulation. Makes links between the weather, and the atmospheric cells. Evidence is used effectively.
Level 2 **clear**	**Marks** **3-4**	AO1 Shows reasonable knowledge of global atmospheric circulation. Theory maybe brief. AO2 Shows understanding of how global atmospheric circulation works. Attempts to explain how global circulation is linked to global weather patterns. Limited use of evidence.
Level 1 **basic**	**Marks** **1-2**	AO1 Shows limited knowledge of global atmospheric circulation. AO2 Shows limited understanding of how global atmospheric circulation works. Explanations are brief. No links made between weather patterns and global atmospheric circulation. No evidence used.

Question 12

UNIT: Challenges
TOPIC: Weather Hazards (therapy 25)
Question stem: Assess
For a place you have studied. Assess how successful predictions, planning and protection is when coping with tropical storms. (9marks)

Indicative Content
Candidates explain: predictions, planning and protection: • **Prediction –** the ability to give warnings so that actions can be taken to reduce the impact of hazardous events. Improvements in technology have allowed this to be more effective. (1) • **Planning –** having things in place before the event that will mean that people are better placed to cope with the event. (1) • **Protection** – often things that are built that will protect people from the hazard. For a storm there needs to be protection from: strong winds, heavy rain and storm surges. (1) Content will be similar to that stated for Typhoon Haiyan, Philippines, November 2013. • **Prediction:** The typhoon was tracked, (1) so people knew approx. when and where it would hit. (1) Warnings were given, (1) but they focused on strong winds and heavy rain, (1) so people were not prepared for the storm surge (1) • They are planning to put in more warning systems. (1) • **Planning:** The Philippines is affected by tropical storms every year but still people are allowed to build in high risk areas, (1) so planning could be regarded as not effective. (1) • **Protection:** The Philippines has started to invest in typhoon shelters. (1) But they are not available in all risk areas. (1) In the richer cities (Manila) people can afford to protect their own homes. (1) But in many poor rural

areas (Tacloban) structures cannot withstand the typhoon conditions. (1)

Level 3 **Detailed**	**Marks** **7-9**	AO1 Answers show detailed knowledge of planning, prediction and protection in relation to tropical storms, with well-developed ideas. There are accurate details given about a named place. AO2 Shows detailed understanding of how a place can prepare for a tropical storm. AO3 A clear judgment has been made about which approach is most successful, with reasons why. There may be mention that a combination of approaches is usually taken.
Level 2 **Clear**	**Marks** **4-6**	AO1 Answers show clear knowledge of planning, prediction and protection in relation to tropical storms, with some ideas developed. There are details given about a named place. AO2 Shows reasonable understanding of how a place can prepare for a tropical storm. AO3 Only a limited judgment has been made about which approach is most successful.
Level 1 **Basic**	**Marks** **1-3**	AO1 Answers show limited knowledge of planning, prediction and protection in relation to tropical storms. There are few details given about a named place. AO2 Shows limited understanding of how a place can prepare for a tropical storm.

Question 13

UNIT: Challenges
TOPIC: Weather Hazards
Question stem: Assess
For a place you have studied. Assess the social, economic and environmental impacts of a tropical storm. (8 marks)

Indicative Content
• Expect definitions of social, economic and environmental impacts: Social impacts – those that affect people. Economic impacts – those that affect things that make money. Environmental impacts – those that affect the natural environment. (1) • Named examples can be used and would include similar impacts to those listed below for the Typhoon Haiyan, Philippines. • Social and economic impacts – some impacts can be either social or economic depends how they are worded, so can be credited in either, but candidates should state whether they are social or economic. • Possible social impacts would be similar to those seen in the Philippines: About 6,300 people killed — most drowned by the storm surge. (1) Over 60, 0000 people displaced and 40, 000 homes damaged or flattened. (1) – 90% of Tacloban city destroyed. (1) 6 million people lost their source of income. (1) Crops flooded so there was a food shortage. (1) Shortages of water, food and shelter affected many people, (1) leading to outbreaks of disease. (1) Flooding caused landslides and blocked roads, cutting off aid to remote communities. (1) Over 400mm of rain caused widespread flooding of villages. (1) Looting and violence broke out in Tacloban. (1) • Hospitals were damaged, shops and schools were destroyed, affecting people's livelihoods and education. (1) • Economic impacts: Tacloban airport terminal badly damaged. (1) The typhoon

destroyed 30, 000 fishing boats. (1) Strong winds damaged buildings and power lines and destroyed crops. (1) 6 million people lost their source of income. (1) Power supplies in some areas cut off for a month. (1) Ferry services and airline flights disrupted for weeks, slowing down aid efforts. (1) Hospitals were damaged, shops and schools were destroyed, and this is costly to repair. (1)

- Environmental impacts: Coastal habitats flooded by storm surge (1) rivers blocked by fallen trees and landslides, resulting in more flooding. (1)

AO1 = 2 AO2 = 4 AO3 = 2

Level 3 **Detailed**	**Marks** **7-8**	AO1 - Shows detailed knowledge of the social, economic and environmental impacts of a tropical storm. AO2 - Shows clear understanding of interrelationships between a place and the event. Can explain what has happened and can sort the impacts into social, economic and environmental effectively. AO3 - Applies knowledge and understanding of tropical storms, written in a logical way and has examined the impacts thoroughly. Effective use of a named example. Clear sense of place.
Level 2 **Clear**	**Marks** **4-6**	AO1 - Shows clear knowledge of the social, economic and environmental impacts of a tropical storm. AO2 - Shows reasonable understanding of interrelationships between a place and the event. Can explain what has happened and can sort the impacts into social, economic and environmental. AO3 - Some application of knowledge and understanding of tropical storms, an attempt to assess impacts. A named example is used.
Level 1	**Marks**	AO1 - Shows some basic knowledge of the social, economic and

Basic	**1-3**	environmental impacts of a tropical storm. AO2 - Shows limited understanding of interrelationships between a place and the event. Has attempted to sort the impacts into social, economic and environmental. AO3 - Shows limited or no application of knowledge and understanding of tropical storms, impacts not assessed. No named example is used.

Question 14

UNIT: Challenges
TOPIC: Weather Hazards
Question stem: Evaluate
Question: Evaluate the immediate and long-term responses to a named tropical storm that you have studied. (9 marks)

Indicative Content

- Knowledge of tropical storms - cyclone belt, low pressure systems. Impacts - high winds, heavy rain, storm surge. (1) Definitions of immediate responses – reactions of people as the disaster happens and in the hours and days that follow. (1) Long-term responses – later reactions that occur in the weeks, months and years after the event. (1)

  A named example might be Haiyan, Philippines, 2013. Credit other examples.

- Immediate responses – search and rescue, (1) food, water, temporary shelters. (1) 1,200 evacuation centres were set up to help those that lost their homes. (1) Field hospitals are set up (1) roads are cleared to allow access for search and rescue teams. (1) Locals complained that the response was not quick enough and villages were left without water, food and shelter. (1) Access was difficult, as roads were covered in debris, which slowed the relief effort (1).
- Long-term responses – UN donated aid to help with the country's . (1) Homes, roads, bridges are rebuilt, (1) fishing and farming are re-established. (1) New planning controls are put in place so that homes are not re-built in high risk areas. (1) More cyclone shelters are built ready for the next storm. (1) The long-term recovery was slow in places due to lack of money. (1) There was lack of support to families who lost loved ones. (1)

AO1 = 3 AO2 = 3 AO3 = 3

Level 3 **Detailed**	**Marks** **7-9**	AO1 - Answers show detailed knowledge of the responses to tropical storms, with well-developed ideas. AO2 - Shows detailed understanding of the responses to tropical storms. A variety of responses are explained. Examples are used effectively. AO3 - Demonstrates an evaluative approach throughout and ends in a logical judgement.
Level 2 **Clear**	**Marks** **4-6**	AO1 - Answers show clear knowledge of tropical storms, and define immediate and long-term responses. AO2 - Shows some understanding of the responses to tropical storms. A variety of responses are outlined. Examples are used. AO3 - Demonstrates an evaluative approach and ends in a judgement.
Level 1 **Basic**	**Marks** **1-3**	AO1 - Answers show limited knowledge of tropical storms, and define immediate and long-term responses. AO2 - Shows limited understanding of the responses to tropical storms. A small number of responses are mentioned. Examples are vague or not named. AO3 - Limited or no evaluation of the responses.

Question 15

UNIT: Challenges
TOPIC: Weather Hazards (Therapy - HAZ 41)
Question stem: To what extent
Question: "Developed countries (HICs) are better placed to deal with the impacts associated with tropical storms than developing countries (LICs)". To what extent do you agree with this statement? (9 marks)

Indicative Content

- Knowledge of tropical storms - cyclone belt, low pressure systems. Impacts - high winds, heavy rain, storm surge. (1) Ways to deal with tropical storms linked to wealth/costs - prediction methods, tracking, warnings, cyclone shelters, sea walls, cyclone belt. (1-2)

Understanding and application both sides of the argument are discussed.

- Content on agree might be: Wealth – can afford technology, better infrastructure. (1) Organisation – are better able to prepare population. (1) Prediction – able to predict and warn effectively. (1) Preparation – can build storm protection, storm drains, USA National Hurricane Preparation Week. (1) Evidence/named example – Hurricane Matthew 2016 – impact on Haiti compared to USA. (1) Deaths - 546 in Haiti, 47 in the United States. (1)
- Additional evidence - Philippines - Typhoon Haiyan.

- Content on disagree might be: Some developing countries do cope with tropical storms. (1) E.g. Bangladesh early warning system, tracking, cyclone shelters. (1) 1971 – 2007 deaths related to cyclones has declined. (1) Some developed countries are still affected by high magnitude events e.g. hurricane Katrina 2005, USA 1,245 people died in the hurricane, (1) so sometimes developed countries (HICs) can't deal with these events.(1)

AO1 = 3 AO2 = 3 AO3 = 3

Level 3 **Detailed**	**Marks** **7-9**	AO1 - Answers show detailed knowledge of tropical storms, with well-developed ideas. There is obvious understanding. AO2 - Shows detailed understanding of how more developed countries (HICs) cope with tropical storms compared to developing countries. AO3 - Demonstrates thorough application of knowledge and understanding in assessing the extent to which developed nations cope with hazards compared to developing nations.
Level 2 **Clear**	**Marks** **4-6**	AO1 - Answer gives a range of accurate knowledge about tropical storms, specific events are referred to. AO2 - Shows some understanding of how more developed countries (HICs) cope with tropical storms compared to developing countries. AO3 - Demonstrates reasonable application of knowledge and understanding in assessing the extent to which developed nations cope with hazards.
Level 1 **Basic**	**Marks** **1-3**	AO1 - Answer has limited knowledge, with little or no specific detail about tropical storms. Answers are not developed. AO2 - Shows limited understanding of how more developed countries (HICs) cope with tropical storms compared to developing countries. AO3 - Demonstrates limited application of knowledge and understanding with little assessment of the extent to which developed nations cope with hazards.

Question 16

UNIT: Challenges
TOPIC: weather hazards
Question stem: To what extent
Question: To what extent do extreme weather events in the UK impact upon people and the environment? Use a named place or event to support your answer. (8 marks)

Indicative content

Credit any extreme weather event that impacts the UK, this could include: flooding, strong winds, heat waves, drought, snow and thunderstorms.

There should be a focus on the extent of the impact, this might be linked to; area affected, number of people affected, damaged caused, duration of the impacts etc. (1) There should be mention of impacts on people and the environment. (1) Named examples must be included.

- Flooding impacts –people: loss of life, damage to property and infrastructure, flooded agricultural land, power and water supplies affected, reduced access via road and rail. (2) Environment: habitats flooded, possible pollution. (2) Impacts likely to be prolonged and over a wide area, high costs. (2) Examples may include, Cumbria floods, Boscastle, Somerset levels. (1)

- Strong winds – people: damage to property and infrastructure, roads and railway tracks blocked by debris, possible loss of life, power lines down. (2) Environment: trees blown over, loss of woodland habitat. (2) Impacts likely to be short lived and localised, medium costs. (2)

- Heat waves / droughts– people: impacts on the health of the elderly and the very young, possible deaths. (2)Environment: rivers and lakes dry up or water levels are reduced, more forest fires.(2) Impacts may last a few weeks or months, large numbers of people can be affected, can be over a large area (2)
  e.g whole of UK 2003, mainly social costs. Could have a positive impact on the UK tourist industry. (2)

- Snow – people: disruption to transport e.g. roads and rail, loss of working hours as

people can't get to work, schools closed. (2) Environment: animals may not be able to get food. (2) Impacts likely to be short lived and localised, low / medium costs. (2) • Thunder storms – people flash floods causing damage to property and infrastructure, possible loss of life, death due to lightning strikes, power lines down, localised flooding (2) Environment: lightning strikes can trigger wildfires, flooding can impact on habitats. (2) Impacts likely to be short lived and localised, medium costs. (2) AO1 = 3 AO2 = 3 AO3 = 2

Level 3 **Detailed**	**Marks** **7-8**	AO1 Answers show detailed knowledge of extreme weather hazard events that can affect the UK, ideas are well developed. AO2 Shows detailed understanding of extreme weather hazard events that can affect the UK; there is a balance of impacts on people and the environment. AO3 A clear judgment has been made about the level of impact of these hazards, there may be comment on the impact with regard to financial costs, loss of life, duration, areal extent or impact on the environment. There is an evaluative approach taken.
Level 2 **Clear**	**4-6**	AO1 Answers show clear knowledge of extreme weather hazard events that can affect the UK, ideas are developed. AO2 Shows some understanding of extreme weather hazard events that can affect the UK; there is a variety of impacts on people and the environment. AO3 A judgment has been made about the level of impact of these hazards, there may be comment on the impact with regard to financial costs, loss of life, duration, areal extent or impact on the environment. There is an evaluative approach taken.
Level 1	**1-3**	AO1 Answers show limited knowledge of extreme weather

Basic		hazard events that can affect the UK. AO2 Shows limited understanding of extreme weather hazard events that can affect the UK; there may be little attempt which impacts affect people and which affect the environment. AO3 Little or no evidence of an evaluative approach.

Question 17

UNIT: Challenges
TOPIC: Hazards
Question stem: Justify your reasons
Question: "There is an increasing risk from natural hazards." Do you agree with this statement? Justify your reasons. (8 marks)

Indicative Content

There should be some knowledge and understanding shown about the natural hazards and hazard risk. (1) There should be mention of the reasons for increased risk, not merely why there is risk, changing risk over time and in certain areas.

Factors that are increasing the risk from natural hazards:

- Population – as the total number of people on the planet increases there are more people at risk, people may be forced to live in more risky areas.
- Poverty – in poorer areas of the world people may be forced to live in higher risk areas. This might include living on floodplains, coastal areas prone to tropical storms, earthquake prone areas, steep slopes or close to volcanoes.
- Urbanisation – densely populated urban areas mean that more people are at risk in a relatively small area. Examples might be Bangladesh (cyclones) or large conurbations such as Tokyo (earthquakes).
- Climate change – it is likely to have an impact on the distribution and intensity of tropical storms, therefore causing an increase in risk. There may be sea level rise which will cause increased risk for low-lying areas. There maybe changes to weather patterns resulting in more droughts/wildfires or floods.

Credit other relevant factors.

AO1 = 2 AO2 = 3 AO3 = 3

Level 3 **Detailed**	**Marks** **7-8**	AO1 - Answers show detailed knowledge of the factors increasing the risk from natural hazards, ideas are well developed. AO2 - Shows detailed understanding of the factors increasing the risk from natural hazards. A wide range of factors is used effectively. AO3 - There is clear justification throughout as to why there is an increased risk from natural hazards. It is made clear, the degree to which the statement is agreed with and an evaluative approach is taken.
Level 2 **Clear**	**Marks** **4-6**	AO1 - Answers show clear knowledge of the factors increasing the risk from natural hazards, ideas are developed. AO2 - Shows some understanding of the factors increasing the risk from natural hazards. A range of factors is used. AO3 - There is some justification as to why there is an increased risk from natural hazards. There is an attempt to show the degree to which the statement is agreed with and an evaluative approach is taken.
Level 1 **Basic**	**Marks** **1-3**	AO1 - Answers show limited knowledge of the factors increasing the risk from natural hazards. AO2 - Shows limited understanding of the factors increasing the risk from natural hazards. AO3 - There is little or no evidence of justification as to why there is an increased risk from natural hazards. There is no attempt to show the degree to which the statement is agreed.