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writing tips & tricks:

This question requires a good knowledge and application of case studies. I would recommend achieving maximum marks [level 3] by focusing on two contrasting tropical storm (typhoon/cyclone/hurricane) case studies – one for and one against; and make an overall judgement as to the validity of the statement. Keep concise and STICK TO THE QUESTION POINT – this is only a 9-mark Q and therefore any time you spend going off-topic on loads of other factors could be lost marks elsewhere.

Don't forget to follow the PEEL Structure.

1.E. A very short intro **EXPLAINING** the problem or question and stating your opinion. **You must have an opinion** or be capped to limited marks.

2. Follow up with opening paragraph on one side of the argument – make a point, explain, give brief evident through the use of a named example, then **don't forget to link back** to the topic.

3. **Vice versa for 2nd paragraph** – arguing alternate point. They don't have to have equal weight if you agree one side of the argument strongly, but it is useful to show **a broad understanding of others' viewpoints**.

4. It is also crucial to be **concise** yet use a variety of **relevant terminology** and have a few lines concluding your answer.

a-level exam questions & answers:

hazards (section c) >

mark scheme | 9-mark question 4 (tropical storm surges)



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Q.:	Sp. Ref.:	Information For Markers:	B'down:	Marks:
4)	3.1.5.5	<p>Assess whether storm surges pose the greatest threat to human activity as a result of Tropical Storm events.</p> <p>AO1 – Knowledge and understanding of cause, impact, and management of tropical storm events. Knowledge and understanding of the different risks involved with storm surges and other associated primary and/or secondary events. AO2 – Application of knowledge and understanding to assess the scale of these factors including an appropriate analysis into which are more or less relevant, and an ultimate judgement appertaining to whether storm surges pose the greatest threat to human activity.</p> <p>Mark scheme</p> <p>Level 3 (7–9 marks) AO1 – Demonstrates detailed knowledge and understanding of concepts, processes, interactions and change. These underpin the response throughout. AO2 – Applies knowledge and understanding appropriately with detail. Connections and relationships between different aspects of study are fully developed with complete relevance. Evaluation is detailed and well supported with appropriate evidence.</p> <p>Level 2 (4–6 marks) AO1 – Demonstrates clear knowledge and understanding of concepts, processes, interactions and change. These are mostly relevant though there may be some minor inaccuracy. AO2 – Applies clear knowledge and understanding appropriately. Connections and relationships between different aspects of study are evident with some relevance. Evaluation is evident and supported with clear and appropriate evidence.</p> <p>Level 1 (1–3 marks) AO1 – Demonstrates basic knowledge and understanding of concepts, processes, interactions and change. This offers limited relevance with inaccuracy. AO2 – Applies limited knowledge and understanding. Connections and relationships between different aspects of study are basic with limited relevance. Evaluation is basic and supported with limited appropriate evidence.</p> <p>Notes for answers</p> <p>AO1</p> <ul style="list-style-type: none">Knowledge of the context surrounding the term 'hazard' as when a natural event poses a risk to human life or habitation.	AO1=4 AO2=5	9

- Tropical storms are a particularly devastating natural hazard (having caused more destruction in the last 50 years than any other type of hazard in a global scale.). Storms are measured according to what is known as the Saffir Simpson Scale (of categories 1-5), where 5 are the strongest storms by sustained wind speed, of over 157mph/252kmh. Credit for valid examples of storms at these levels and / or characteristics.
- Candidates should consider the nature and formation / causes, impacts and different levels of response to tropical storm (hurricane/cyclone/typhoon) events in a global context.
- Knowledge and understanding involving different specific primary and secondary events of tropical storm events to include storm surges, high winds, coastal and / or river flooding, landslides etc... and the factors affecting the incidence or severity of these in different areas.
- Storm surge events are essentially an abnormal rise in the level of water which is pushed towards the shore by the force of cyclonic winds in a tropical storm. They can be up to a few metres high and cause devastation by overcoming flood defences and dragging the storm inland.

AO2

- Analysis through the medium of AT LEAST ONE NAMED CASE STUDY 'AFFECTED AREA' in order to illustrate argument through evidence. This case study MUST involve a storm surge event of some sort or else marks will be capped to L2.
- Evaluation may include death/casualty/damage statistics, recovery signs or reference to hazard modelling such as the Park Model or Hazard Management Cycle (HMC.)
- It can be argued that in certain storm events, storm surges posed the greatest danger to
- A good case study candidates might use to illustrate the pro-argument is 2005 Hurricane Katrina (Louisiana,) where fatal flaws in 53 flood levees resulted in 300,000 destroyed homes and 80% of New Orleans being flooded. 1,800 people died, and the city has yet to recover fully. The storm surge contributed massively to this because the forces of water in motion are far greater than the hurricane especially as they deplete over land – (Katrina was a category 3/4 at this time) significantly worsening the impacts.
- On the other hand, Typhoon Haiyan in the Philippines (the second most expensive storm event after Katrina at about \$6Bn), did not have a storm surge – but the primary impacts were greater in terms of threat to human activity, with over 1.1 million homes destroyed and over 6 million people affected severely. This is a result of the strength of the storm as well as several physical and human factors, including the Philippine archipelago, the countries low human development, poor quality infrastructure and housing, predictive ability and preventative actions, for example.
- Students may take into consideration and evaluate with other factors such as landscape / topography as influencing the relevance of storm surges.
- Analysis may also be given into the validity of measuring systems such as the Saffir-Simpson Scale as being

		<p>inaccurate in representing the severity of storm events as it only takes into effect sustained wind speed and not factors such as storm surge height etc...</p> <ul style="list-style-type: none">• Valid conclusion to take into consideration numerous effects and make a judgement. <p>Credit any other valid assessment</p>		
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