

AQA Qualifications

GCE

Geography

Unit 3 Contemporary Geographical Issues (GEOG3) Exemplar Script 2

Spec no: 2030 Version: 0.1



Option 2 Weather and Climate and Associated Hazards

Total for this option: 25 marks

0 4

Study **Figure 2**, a photograph taken early on a calm summer morning in England.

Comment on the atmospheric conditions shown.

(7 marks)

Candidate's Answer

The atmospheric conditions shown are typical of an anticyclone. [Correct identification of weather system] The skies are generally clear, with little cloud. This is because as air sinks in an anticyclone, it warms, causing residual moisture to be evaporated, which results in dry conditions. Figure 2 is described as calm; this is evidenced by the hot air baloon which would generally not be out on excessively windy days. [Clear commentary here - 3 characteristics and link to subsiding air = Level 2] The wind speeds are low because of the anticyclone, it is an area of high pressure, and thus there are low wind speeds because of the low pressure gradient. [Another comment] Another feature to note is the lack of long shadows on the ground. This suggest that the sun is high in the sky; there is a high angle of incidence, which will results in warm temperatures; the sun's rays are concentrated on the area shown. Although the area shown is generally clear, there is evidence of haze. This will be the result of moisture evaporating due to the intense heat from the sun, and then remaining relatively low to the ground surface due to the high pressure, most probably over 1000mb, that the area will be experiencing (mb = millibars). [Not clear here - needs condensation for the haze to be explained]

Good description with two clear comments - 6 marks

0 5

Outline the origin of depressions affecting the British Isles.

(8 marks)

Candidate's Answer

The British Isles experiences the Cool Temperate Western Maritime Climate, because it is located near the Atlantic, roughly on the boundary between the Ferrel Cell and Polar Cell. This results in much unstable weather conditions, mostly due to low pressure systems; depressions. These depressions originate for the most part in the North Atlantic. The boundary between the Ferrel and Polar Cells in an area of low pressure, so there is a high pressure gradient resulting in air rushing in from the north and south, where pressure is higher. The air from the poles is cold, moist and dense, polar air. This creates an area of low pressure. [Basic reasons so far] In addition as the warm air rises it is removed by the jet stream which it twists due to the Coriolis Effect. [More sophisticated now - Level 2 accessed. A pity these terms are not explained a little] Closer to sea level, the cold air resultingly formed into a 'wave'. The result is that there is a cold front and warm front, with relatively strong winds moving in an anticlockwise direction towards the centre of the system, due to low pressure created by the rising warm air. [Clear understanding now] This can now be called a depression, and due to the prevailing south westerly wind it moves roughly eastwards towards and over the British Isles. The cold front eventually catches up with the warm front and underneath it so that the warm front no longer touches the ground. This is called an occlusion and may occur during, after or before the depression passes over the British Isles. [Final section not needed as this is not 'origin'.]

[A solid Level 2 response - awarded 8 marks by the original examiner - 7 marks is probably more appropriate due to the lack of explanation regarding jet streams and the Coriolis force]

0 6

With reference to **one** storm event in the British Isles that you have studied, discuss the impact of, and responses to, storm events. (10 marks)

Candidate's Answer

The 'Great Storm' of 1987 occurred on the night of 15 October. It had gusts into 150kmph, normally classed as hurricane strength and this causes extensive damage to many parts of the British Isles, but most notably the south western areas. [Example named, and brief background given]

The impacts of this storm could have been argued to be greater than they potentially could have been due to the lack of warning and precautionary measures. Meteorologists had expected the storm to pass over Spain and France; instead it veered north eastwards and hit Britain. Thus, people and emergency services were not able to prepare themselves in sufficient time to potentially lessen the impacts of the storm. [More general background. An element of discussion of impact]

The chief hazard was the strong winds. Storm surges (caused by strong winds 'piling up' waves and the sea rising due to the low pressure) did do some damage, but they were confined to coastal areas and did move far inland. Nevertheless, this is not to say they did no damage; boats were pulled from their mooring and swept onto the shore and in some cases inland, and buildings near the coast were damaged by the surge. Elsewhere, strong winds caused structural damage to properties inland, for example roofs were ripped off houses. This arguably accounted for the majority of the damage. 19 people died due to the storm. However, some believe that the death toll could have been far worse; if the storm had occurred during the rush hour chaos would have ensued. 15 million trees were uprooted and these could have crushed motorists in their vehicles.

[A largely general account of impacts - just the 19 deaths and 15 million trees are specific. The rest could be any such storm. Low Level 2 accessed]

The storm event was responded to effectively, with emergency services rescuing those in immediate danger. However, the storm had a large financial cost estimated at £1.5 billion due mainly to damage to buildings and infrastructure. Thus, large insurance claims were made. Nevertheless, as previously argued, the low death toll due to the time of the storm's occurrence meant that medical services were not inundated and could respond to cases quickly. It is difficult to predict the direction of storms, but it could also be argued that in future when the possibility of storms thereafter, meteorologists in the British Isles will be more quick and willing to issue warnings, which could perhaps lessen the impacts of such storms by precautions such as evacuation of potentially threatened areas. [More generality, and some speculation about what might happen in the future, which is not what the question wanted. However, this could be classed as 'discussion' of a sort]

In conclusion, therefore it can be observed that storm events, exemplified by the 'Great Storm' can cause extensive damage, both in human, material and financial terms to the British Isles. They are rare occurences, but that does not mean authorities should ignore them and assume they will not affect Britain. Quicker warnings should be issued and attempts at precautions made to lessen the impacts. This will make these storm events less of a hazard, although one cannot neglect the fact that the time of the storm, for instance whether it occurs at rush hour, will also affect impacts. [Nothing added here]

[The candidate has not focused on the actual impacts, and especially the responses, to this storm. However, there are some specifics, and some discussion of the lessons learnt.

Mid Level 2 - 6 marks]

Option 5 Development and Globalisation

Total for this option: 25 marks

1 3

Study **Figure 5** which shows a development by the oil company Royal Dutch Shell in a remote part of Canada. Comment on the possible socio-economic and environmental impacts of this development. (7 marks)

Candidate's Answer

The oil plant is showing that remote areas are beginning to be used more by transnational corporations in order to decrease costs of production.

The photo suggests that firstly, the environment is likely to suffer; the rivers and lakes nearby are likely to be affected or intoxicated by chemicals from the plant which could also effect the animals within the river as well as the fields. The development also suggestions a contribution to climate change, as more chemicals and fumes are being pumped into the atmosphere, therefore fossil fuels are being burnt and adding to climate change. [Evidence quoted from the photo - fumes - which links to a comment on the impact on the atmosphere and rivers. Level 2 comment]

Economic impacts of the plant include that the TNC may increase the amount of employment in the area as hundreds of people will be needed to run and manage the plant, however this also may suggest how income out of town employment which is not ideal for local people. [No evidence quoted - Level 1]

Furthermore, economic impacts may also include the company affecting local businesses; as the photo suggests Shell is incredibly powerful as a company and therefore may put local oil companies at risk in Canada, therefore creating a negative impact on Canada, economically. [Not clear how the photo suggests this]

Finally, the building of the plant may here impact negatively socially in Canada. Local resident are likely to complain about the plant being unattractive and seen as an 'eyesore' to the area as well as the noise from the plant also being annoying to those who live nearby. [A tentative link to the photo together with a comment - Level 2 comment] Moreover, the increase of traffic including heavy lorries travelling to and from the oil development will inevitably increase traffic and noise on nearby roads, which residents may not appreciate. However, due to shell producing such a huge amount of petrol in their development, the price of oil or petrol may well decrease, therefore this may impact positively on the local area. [This is unlikely, but not linked to photo, so only

Level 1]

[Two Level 2 comments - 6 marks]

Outline the spatial organisation of transnational corporations (TNCs). (8 marks)

Candidate's Answer

Transnational corporations (TNCs) are companies that have the power to produce and manufacture in two or more countries worldwide. TNCs are incredibly powerful. TNCs have the power of geographical flexibility and therefore can decide which areas will be the cheapest worldwide and from there can decide where the best location can be. For example Mattel a company producing babies changed from manufacturing over ½ their products in Taiwan to China, as Taiwan became increasingly expensive. [The candidate meant Barbie dolls, rather than 'babies'. A specific statement regarding production sites]

Secondly, TNC's can decide where to locate in terms of where there is less stringent legislation, and therefore can locate where laws are more relaxed. For example, Unilever extracted palm oil cheaply from areas that were less strict about how it was extracted, however this brought about conflict with the pressure group 'Greenpeace' in 2008 who argued they were being harmful to the environment with their extraction methods. Furthermore, TNCs had the luxury of allowing their Head Quarters to remain in countries or origin, along with their research and development headquarters, however can locate their manufacturing areas elsewhere. This is partially helpful for TNCs as they can therefore provide for the local area as well as the country of origin. Unilever has plants in more than 100 countries and over 170,000 employees and therefore can provide for a vast amount of countries. [Statements of spatial organisation regarding Unilever, but not stated the actual locations of manufacturing or HQs for that company. Disappointing so far]

Finally, TNCs can also effectively produce a 'line of manufacturing' which Honda, the car company do incredibly effectively with their manufacturing ending in China, where they can deliver there products 'just-in-time'. (JIT) Therefore, TNCs certainly organise where they are located effectively and have the power to locate in areas that are most suitable in terms of increasing their profit, as well as producing for the most amount of people and therefore developing into 'economics of scale'. [General points regarding JIT, with Honda named]

[Three companies named but without detailed outline of where exactly they spread their operations. There is some reference to China for manufacturing for both Mattel and Honda. So, there is some specificity and some understanding. Detail though is lacking. Mid Level 2 - 6 marks]

1 5

With reference to contrasting areas of the world, discuss the development issue: 'Economic sustainability versus environmental sustainability'. (10 marks)

Candidate's Answer

Sustainability is defined as meeting the needs of the present without affecting the needs of future generations. There is big debate as to whether an area can be environmentally as well as economically sustainable, as we can see from contrasting China's sustainability with that of Gambia or 'Beddington Zero' eco tour in London. [Brief introduction]

Environmentally, an area should conform in principle such as using the environment in an effective way as well as making sure the environment of other countries are not being effected by their countries' wrongdoings. Environmental sustainability is shown on the 'Environmental Sustainability Index' or ESI which takes into account how well developed a county is environmentally, not just economically. Therefore regions such as Spain are on par with areas such as some African countries, as Spain is not environmentally sustainable, despite being more developed economically than countries such as Niger or Ghana. [Sweeping statement that needs some explanation] For example, 'Beddington Zero' or Bedzed is an ecotown in Greater London that attempts to be both environmentally and economically sustainability by using methods such as promoting the idea of having a job, a home and social life all locally as well as promoting environmental issues such as using tarmac roofs to keep the heat in and recycling efficiently. [All generic points really] However, the area seems to have come to a standstill economically, and therefore arguably it is not both economically and environmentally sustainable. [Again a sweeping statement based on an actual area, but without any evidence to support why this view has been made]

On the other hand, economic principles such as developing a country by urbanisation and manufacturing shows the contrast between economic and environmental sustainability. China, labelled the 'workshop of the world' and described as being economically sustainable, is a huge consumer of oil and gas due to its industry, and therefore does not show environmental sustainability, which came to light in the 2008 Olympics, where smog clouded the Games and was criticised hugely by environmentalists. Therefore, although China produces 50% of the world's computers and 60% of the world's shoes, it is not necessarily the most environmentally sustainable, perhaps unlike that of Beddington Zero, or 'Gambia' which is a eco town provided by the 'Footsteps' organisation that attempts environmental sustainability. [A better point here - well illustrated. Level 2 accessed at this point, though the reference to Gambia is intriguing. See next.] Gambia enforces environmental sustainability by use of reeds to naturally filter swimming pools, recycling bottles and newspapers effectively as well as reusing materials such as 'grey water' to water plants. However, whilst being a sustainable tourist area, economically it is sufficient. [Another Level 2 point here, despite not being expressed well]

Overall, there is big debate as to whether an area can be environmentally as well as economically sustainable. As we can see from economic sustainability in Beddington Zero or Gambia, it is incredibly difficult to strike the balance between environmental and economic stability. [Conclusion that does not add anything]

[Two specific statements referring to China and 'Gambia' have accessed Level 2, with some discussion of the development issue. The answer is not always clear, but some understanding of the task is evident. Mid Level 2 - 6 marks]

Option 6 Contemporary Conflicts and Challenges

2 4 'Conflict has a significant geographical impact on the area(s) affected.'

To what extent do you agree with this statement?

(40 marks)

Candidate's Answer

Conflict is defined as a state of disagreement and the potential for direct action between at least two parties. Today's world is ever-increasingly recognised by conflicts, arising from disputes over the ownership of resources or even by the increasing appearance of multicultural societies. Through considering continuous conflicts between two states, such as Israel and Palestine it is clear that there is a strong argument that there may be geographical impacts, such as the development of new states and ever changing borders. However, it depends largely on the type of conflict and the development of the countries in which it occurs as to whether there is a significant geographical impact.

[Introduction to essay, with some evidence of conceptual knowledge]

Israel and Palestine are two separate states situated within the Middle East that still remain to make peace. [First case study identified] These two states are greatly culturally different. It was once, prior to the 19th century a single state of Palestine with a majority of Arabs within its population. However through the oppression of Jews in the Second World War and earlier zionist movements, they migrated to the land of Palestine that they regarded as being promised to them through the Old Testament. Consequently there has been a succession of wars and conflict between both Israel and Palestine as they both believe that the land should be theirs. Evidently this is a conflict based on geography through the formation of states and the difficult question of what area belongs to which party.

[Clear evidence of background knowledge]

The most significant geographical impact in this case has been the creation of the West Bank barrier by Israel that encroaches into Palestinian land as it creates a 725km border between both The impacts of this barrier have been devastating on Palestinians; it is both socially divisive and has practically destroyed Palestine's economy. [Knowledge and critical understanding] This can be seen through the fact that the Gross Domestic Product of Israel is \$28,000, compared to only £2900 in Palestine. The West Bank Barrier only open for an hour, three times a day, meaning that the Palestinians cannot gain work in Israel as easily as they could They are cut off from their services, hospital and schools, having extremely previously do. negative impacts on the social well being of the West Bank inhabitants. [Evidence of synopticity wider impacts] Therefore it can be argued that through this particular conflict, it is clear that there has been a devastating geographical impact as people are unable to live a quality of life they were once able to achieve. [Clear link to question] However, it is important to point out that in this instance the negative impact has only been incurred in one party. Israel have arguably benefited, both geographically through the acquisition of land by gaining the slopes of the West Bank through building homes there, but also are notably economically better off. [More evidence of critical understanding] This may be due to the fact that the barrier has meant that 95% of factories in Palestine have had to close and so Israel has gained the productive capacity that has been lost here.

[More evidence of synopticity, though 'productive capacity' could have been explained]

Another aspect of conflict may be the consideration of conflict over local resources, which arguably has minimal impacts on the areas affected. [A different context now, but with clear link to focus of question] The Climate Bill in the UK (2000) stated that by 2010, 10% of air energy should come from renewable sources, as a way to reduce air CO₂ emissions.

Arising from this is a conflict on a much smaller scale that arguably had no geographical impacts. [Background knowledge] In 2003, plans were put forward for the construction of 27 wind turbines, each 115 metres high to be situated near Tebay, Cumbria in the edge of the Lake District National Park. [Second case study] There was a lot of opposition over these plans as Cumbrian County Council objected, along with local residents, reflecting a smaller scale formal conflict. [Synopticity - the role of decision makers] However the fact that there was no geographical impact is due to the planning system with the UK. No party became hostile as the democratic process allows for all voices to be heard as a public enquiry was held in 2005. Four hundred local residents of Tebay protested but no direct evidence was taken, unlike that of the conflict within Israel/Palestine where attacks from suicide bombers continually occur, killing dozens of citizens. [Good comparative points being made]

Consequently this can be used to argue against the statement that conflict has a significant geographical impact, as it largely depends on the area in which it occurs as conflict can often be resolved in more democratic nations through a system whereby the views of both parties are heard. [Clear link to the question, with synopticity being evident]

Conflict may also arise through the idea of separatism, or balkanisation in the case of Yugoslavia. [Third context] Since World War 2, Yugoslavia had been a communist state under the leadership of Tito, made up of separate areas, all containing a mixture of different ethnicities. [Background knowledge] This example may be used to present an argument that conflict does have a significant geographical impact and this is a clear instance of it, as the conflict led to creation of 6 separate countries being formed. [Link to question] The extent of the multicultural societies within the distinct areas of the former Yugoslavia led to friction between different ethnicities such as the Slavs, Croat and Serbs. There was ongoing ethnic cleansing after the death of Tito as he was the main force holding the diversity of the region together, and so his death triggered separatist feelings. Through this process, the geographical impact has been significant in this case with the formation of six separate countries emerging. [Link to question - a pity this wasn't developed in more detail] Furthermore, this form of 'conflict' of separation has increasingly been recognised in Scotland, with its wants of devolution and further granting of authority away from Great Britain. [Fourth case study] In the last decade, Scotland was given its own parliament to make decisions on its own regional affairs such as taxes. [Synopticity] However, there is evidence to suggest that these feeling are furthering Scotland to possibly vote to become an independent nation. If this process was to be carried through, then there could be large impacts on Scotland. Scotland have the majority of North Sea Oil off their shores and believe that as an independent nation they would receive a much greater share of revenue from the oil as they would effectively own it. Therefore the geographical impact, if this conflict was to be pursued, could be extensively seen through the economy of both Scotland and England. [Clear link to question - perhaps beginning to lose a little bit of clarity but critical understanding is evident] However, as the effects of this conflict are yet to be determined, if it ever occurs, then no true judgement can yet be placed on whether separatism within the UK would have as far reaching impacts as those of the separatism of Yugoslavia. Although it is possible to say that this is largely unlike as the conflict would not be on a physical scale. [Again, a lack of clarity, but critical understanding is present]

Consequently it can be regarded that the type of conflict plays a huge part on the extent to which this argument is true. Undoubtedly, Palestine has suffered enormously, with the area of the Gaza being described as a 'refugee camp in the desert'. [Gaza not referred to before, but some critical understanding here] Furthermore Palestine has no viable economy and simply relies on monetary support from the EU and US. [Synopticity] It is also important to point out that Palestine suffers greatly through the physical environment impact, of the West Bank barrier but also through the fact it has huge water shortages as it only receives 18% of the water from the mountain aquifer it lies in and Israel simply take the

majority as they have the ability to do so through its stronger economy. [Another synoptic point - but not developed well. Candidate is running out of time]

Overall, therefore, it is clear that conflict can have a significant geographical impact, but this may only be in one party, such as Palestine. Furthermore, the area in which the conflict occurs can largely determine the extent to which this statement is true ie. a conflict area resource in the UK has no overall impact, through its fair planning system whereas in Yugoslavia people simple turned to extreme measures, such as ethnic cleansing to ensure they gained what they wanted. [Clear set of summative statements - a conclusion that expresses a view]

[A very thorough account which 'visits' a number of different conflicts at a variety of scales and locations. The theme of 'significant geographical impact' is central to the argument, and so there is a strong sense of focus. There is strong and frequent evidence of critical understanding and synopticity. Background knowledge is very strong. The account is largely a case study by case study account, so integration of case studies is limited. The argument lacks clarity at times - probably due to writing at speed. This student answered this question last in the examination and may have been running out of time.]

[Knowledge - Level 4 (higher)
Critical understanding - Level 4
Case studies - Level 4 (lower)
Synopticity - Level 4
Quality of argument - Level 4 (lower)]

[Overall Level 4 (lower) - 35 marks.]