

Mark Scheme

Summer 2021

Pearson Edexcel IAL
In Geography (WGE04 01)
Paper 4 Geographical Research (Results)

Edexcel and BTEC Qualifications

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

Pearson: helping people progress, everywhere

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

Summer 2019
Publications Code xxxxxxxx*
All the material in this publication is copyright
© Pearson Education Ltd 2019

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 1 **'Economic losses from tectonic disasters will increase in the future.' Discuss.**

- Research the reasons why the economic impact of tectonic disasters varies.
- Research a range of locations at different levels of development to examine the changing trends in the impacts of tectonic disasters.

Indicative content

The focus of this title is the proposition that economic losses are likely to increase in the future although note the lack of qualification which allows candidates some latitude in developing a counter-view

The framework chosen may be by the following.

1. Scale of disaster – case-study led using various measurements of economic impact mapped against increased vulnerability because of economic development and population changes.
2. Disaster by disaster review of case-study – a narrative with ongoing evaluation
3. Short term/Long term contrasts also using increasing vulnerability

Key analytical points

- It is important to differentiate between the direct costs of disasters but also the long-term consequences which should also include the impact of death and injury and resources lost through this both in the short and long term
- Increasing costs in the future could be a function of an increasing frequency of hazardous tectonic events for which there is very little evidence despite McGuire or..
- ..increasing vulnerability of populations because of their growth, especially in hazardous global regions e.g. ASEAN countries or..
- …increasing value of property and national GDP which will generate higher losses simply because societies become wealthier
- A clear understanding of the complexity of economic impacts which should include the immediate damage but also longer-term impacts
- The definitions need to include an overview of 'economic' costs and how they are evaluated both in terms of measurable impacts on GDP but also – expect Fukishima to feature here
- Inevitably is obviously a step too far – highly likely might be better but 'inevitably', no.

In summary

- The basic proposition is not defensible but a modified version is. The argument should be based on a clear understanding of

economic development and the complexities involved in measuring impact as well as understanding how it varies with the state of development

Case studies used are likely to include:

1. Tohuku and Fukishima
2. Haiti v Chile
3. Iceland – Eyjafjallajökull
4. Hawaii
5. Asian, Japanese and Chilean tsunami events.

Question 2 – Evaluate the view that food security is improving everywhere.

- Research the multiple causes of food insecurity.
- Research a range of locations at different scales from local to national to examine how effectively food insecurity has been managed.

Indicative content

The focus of this title is the **proposition** that fewer people are undernourished or malnourished that at some unidentified time in the past but 'everywhere' is the obvious hook from which to develop a counter-argument

The framework chosen may be by the following.

1. Different causes of food insecurity across a range of countries at different stages of development including examples from both the developed and the developing world
2. Different types/levels of food insecurity and how these may be changing
3. A 'case-study' approach by area/region with different examples illustrating variations in the effectiveness of strategies to address food insecurity and their impact on levels of food insecurity

Key analytical points

- 'Declining' needs deconstructing because this could be expressed in either absolute terms (total numbers in the global population) or relative terms (as a % of global population)
- On most counts the former is increasing that the latter declining although that is patchy
- Food insecurity is not restricted to the LIDCs and varies over time as well as geographically.
- Growing inequalities at both a global level and a national level make 'everywhere' an untenable position to hold – some will use US and Uk food bank evidence to support that as well as more conventional materials on, for example, Sahel countries
- These issues are exacerbated by the overarching problem of climate change and a catastrophic decline in biodiversity which places major constraints on future food supply. The significance of this will grow!
- Evidence for this might be drawn from sub-Saharan Africa and almost any ocean, with well-known 'case-study' led material on desertification in the Sahel and the impact on their communities
- Political decisions may be exacerbating differences in food supply and thus food security, both within countries and between them – this might be illustrated with the land-grabs in Ethiopia and the globalisation of land ownership.

In Summary

'Everywhere' is clearly not defensible but more tellingly the growth of inequalities throws the whole contention into doubt. It is possible to take an optimistic line but probably harder to defend.

Case studies are likely to include:

1. Land ownership issues – Ethiopia/Saudi Arabia
2. Growing inequalities and growth of food banks -UK and USA
3. Uneven impact of both Green Revolution and GM crops – India and USA

Question 3 – 'Indigenous cultures are both marginalised and under threat in most countries.' Discuss.

- Research the reasons why attitudes to indigenous cultures are often negative.
- Research a range of countries to examine why the threats to indigenous cultures vary.

Indicative content

The focus of this title is whether or not it is defensible to argue that indigenous cultures are left out, exploited and/or ignored in modern states. 'Most countries' is the hook to propose a counter argument.

The framework chosen may be by the following.

1. Case studies of different societies/places with contrasting values with contrasting values attributed to their indigenous people.
2. Case studies to illustrate how different indigenous cultures (and their associated landscapes) are protected by international agencies (UNESCO) national and local governments and thus not marginalised or threatened.
3. Some might take a theoretical approach to discuss the possibility of affording protection – hyperglobalisers both positive and negative, sceptics and transformationalists.

Key analytical points

- Marginalisation includes exclusion from the usual political processes including disenfranchisement whilst the threats are direct in patronising infantilization of the cultures and physical occupation and exploitation of the cultural landscapes.
- There is a very long history of colonial and neo-colonial exploitation of indigenous peoples and a rejection of their cultures although these are sometime exploited for commercial reasons – Machu Pichu.
- This has been carried on in post-colonial states where the ruling elite are drawn form majority groups; sometimes themselves subjected to exploitation in pre-independence times.
- Historic attitudes were based on a mixture of economic interests and racial bias built on eugenics – this translated into the occupation of ancestral lands based on different attitudes to land ownership.
- In modern times there has been significant tension between the cultures and landscapes of indigenous peoples and internally colonising (largely European) peoples – these include ancestral lands in Alberta, Alaska and Australia, under pressure form oil companies.
- However, the pressure on them has been exacerbated by globalisation with little obvious protection from global institutions
- There is an ambiguous relationship between the preservation of some cultures and globalisation

In summary

- The keywords in the title are 'marginalised' and 'threat' both of which need deconstructing.
- 'Most' is challenging; not all countries/states have significant 'indigenous' elements but those that do have a very patchy history of the treatment of indigenous peoples and their landscapes,

Case studies used are likely to include:

1. The indigenous cultures and landscapes of North America.
2. Indigenes in Australia and Canada
3. Rohingya Muslims in Myanmar

Question 4 – Evaluate the view that health risks vary as much within countries as they do between countries.

- Research the reasons why contrasting health risks differ from place to place.
- Research a range of locations both between countries and within them to explore differences in their health risks.

Indicative content

The focus of this title is the inequalities in health risk within societies as well as between them. The hook here is the phrase 'as much within' allowing an argument and counter-argument about the geography of health risk.

The framework chosen may be by the following.

1. Case study led contrasting histories of health risk from the developed and the developing world embedding different causes of health risk within these countries.
2. In both cases these will include **environmental factors** which might provide the framework (including air and water pollution) socio-economic status, poverty and geographic factors such as climate, and how these are changing.

Key analytical points

- Global life expectancy is 72 years at birth and has been rising - People are living much longer worldwide than they were two decades ago, as death rates from infectious diseases and cardiovascular disease have fallen; the rate of improvement is greatest in African and south-Asia closing the national data 'ga'
- At the same time, countries have made great strides in reducing mortality from diseases such as measles and diarrhea, with 83% and 51% reductions, respectively, from 1990 to 2018
- However, there remain very significant national variations with the range currently for 52 to 84.
- Even with big improvements in longevity in low-income countries, the types of health challenges faced by countries such as Bolivia, Nepal, and Niger are far different from those faced by countries such as Japan, Spain, and the United States.
- Local variations within countries have been increasing and are largely driven by variations in wealth/income within countries – there is a direct relationship between levels of deprivation and mortality rates as evident in Glasgow as it is in Mumbai or Lagos.
- These latter variations are closely related to levels of development and the availability and costs of inoculation/treatment (e.g. AIDs/HIV) but whatever the cause pollution may play a central role

- There are significant threats to positive trends in life expectancy , not least the increasing struggle to maintain effective antibiotics, dietary challenges and the rise of environmentally related premature deaths

In summary

- The most easily defended answer is 'no' but…..
- The depth and detail of the qualifications and an acknowledgement that the current trends in many countries are widening the gap whilst internationally the gap is closing.

Case studies used are likely to include:

1. National contrasts Japan v Sierra Leone
2. Contrasts within countries – UK/USA
3. Contrasts within cities – 'life on the line' (London)

Pearson Education Limited. Registered company number 872828
with its registered office at 80 Strand, London, WC2R 0RL, United Kingdom