



EPSOM

COLLEGE

Epsom College Geography Department

Scholarship Assessment – Practice Paper and Mark Scheme

There are **four** options in this assessment:

Geography of Hazards

Coastal Geography

Urban Geography

Population Geography

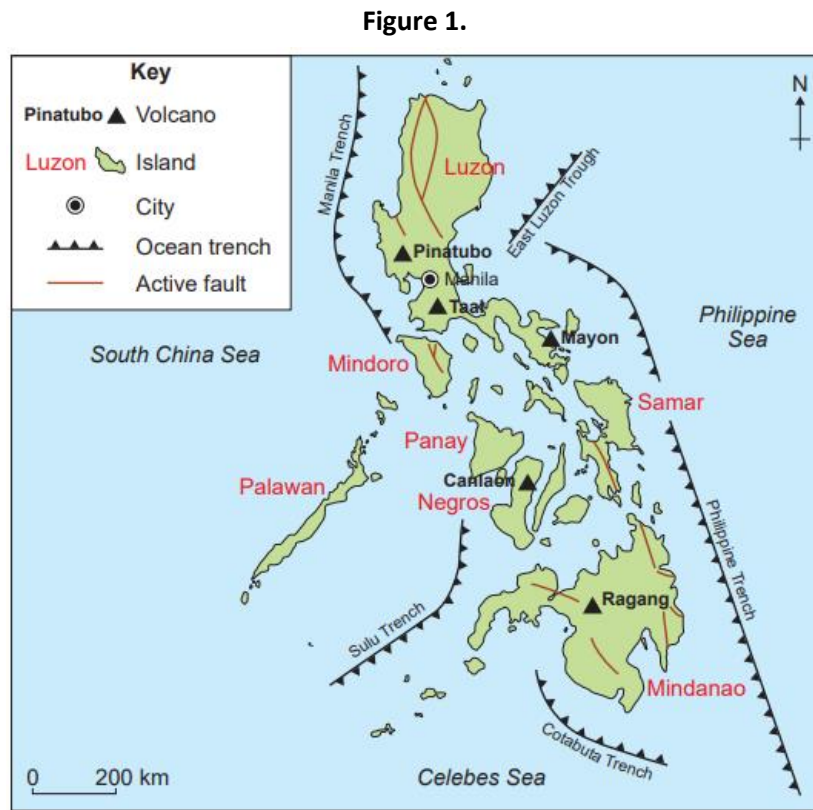
Each option contains **three** questions, worth 50 marks in total.

Choose **one** option and answer **all** questions in that option.

These are A Level questions, we do not expect you to be able to answer them perfectly. Show off your Geographic language, evaluation skills, and thinking skills. We would happily accept answers that say : If I knew more about this topic I would like to explore xxxxx and compare it to xxxxx. The main objective is to show us how you think and to a certain extent show off your abilities as a geographer.

Option 1: Geography of Hazards

- a) Study **Figure 1**. Explain the degree to which the area of the Philippines might be subject to tectonic hazards. [10 Marks]



- b) Explain how **three** secondary hazards caused by earthquakes. [10 Marks]

- c) Discuss, with reference to examples, the reasons why some communities are more vulnerable than others to tectonic hazards. Your answer should take the structured form of an essay, with an introduction, main body and conclusion. [30 Marks]

Option 2: Urban Geography

- a) Study **Figure 2**. Explain the characteristics of the urban landscape shown.

[10 marks]

Figure 2.



Source: photograph by JONAS BENDIKSEN, Magnum Photos

- b) Explain the extent to which retailing is still located in the central areas of urban settlements

[10 marks]

- c) Discuss the statement below.

“Addressing socio-economic issues is more important than dealing with environmental challenges in the management of urban areas.”

To what extent do you agree with this view? With reference to at least one named location discuss if management strategies should focus on improving socio-economic challenges or environmental challenges. Your answer should take the structured form of an essay, with an introduction, main body and conclusion.

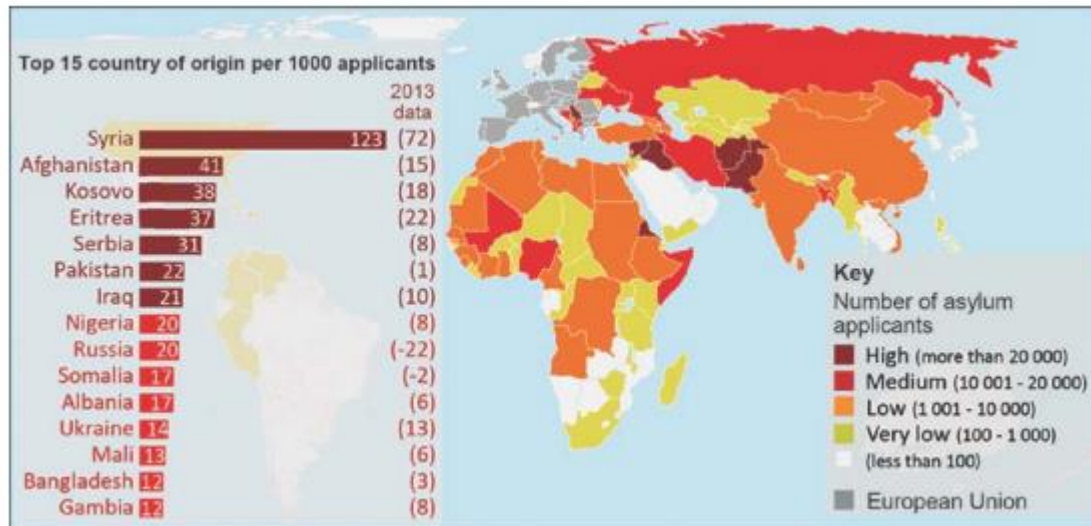
[30 marks]

Option 3: Population Geography

- a) Study **Figure 3**. Explain the spatial variation of asylum seekers to the European Union.

[10 marks]

Figure 3.



- b) For a chosen case study of one country's population policy, explain the nature of the population problem(s) experienced by the country.

[10 marks]

- c) Discuss, with the aid of examples, the challenges for countries at Stage 5 of the demographic transition model.

Use specific countries to help you answer this question. Your answer should take the structured form of an essay, with an introduction, main body and conclusion.

[30 marks]

Option 4: Coastal Geography

a) Study **Figure 4**. Outline evidence that suggests marine erosion is occurring along this coastline

[10 Marks]

Figure 4



b) Explain the factors that create an erosional coastline.

[10 Marks]

c) Discuss the statement below.

'No amount of coastal intervention by people can halt the natural processes which continue to present potentially serious risks to coastal communities now and even more so in the future.'

To what extent do you agree with this view? Your answer should take the structured form of an essay, with an introduction, main body and conclusion.

[30 Marks]

Option 1: Geography of Hazards Mark Scheme

- a) The Philippines are a hazardous area in terms of tectonic activity. The islands are surrounded by a series of ocean trenches (names could be given) which are formed at destructive plate margins. Subduction and the subsequent creation of earthquakes are therefore possible.

The islands have a series of volcanoes (names again given), each of which present hazards from eruptions, pyroclastic flows and lahars. Students may be aware of previous events at Pinatubo and Mayon.

Associated with these, there are a series of active faults running north/south across the island; again the possibility of plate movement and earthquakes.

- b)
- Tsunami ❶ when earthquakes displace the water column creating a bulge of water / waves which ripple outwards ❶
 - Landslides / slope instability ❶ when ground shaking dislodges / destabilises slope material causing it to slide / topple ❶
 - Liquefaction ❶ when ground shaking causes sediment to behave like a liquid / solid surface start to slide or flow ❶
 - Submarine landslides ❶ which might then create a tsunami ❶
 - Aftershocks ❶ because the initial earthquake put stress on surrounding faults / crust ❶
 - Fires ❶ because the earthquake ruptured gas/electricity lines ❶
 - Building collapse ❶ because the ground shakes / landslides ❶
 - Spread of disease ❶ because of a lack of sanitation / living in close proximity in rescue centres ❶
 - Mantle fracturing ❶
- c)
- The vulnerability of a community to tectonic hazards can be the result of the tectonic setting of the location which affects the likely magnitude and frequency of the tectonic event.
 - Vulnerability is also influenced by human geographical factors such as population density, isolation and accessibility, degree of urbanisation as well as socio-economic factors such as inequality of access to education, housing, healthcare and income opportunities.
 - Governance at both a local and national scale are important in understanding the vulnerability of communities to tectonic events as governance can modify vulnerability through hi-tech monitoring, prediction, education, and community preparedness to hazards through the development of adaptation and mitigation strategies.
 - A key reason in determining the vulnerability of communities to tectonic events is the tectonic setting of the community as this determines the nature of the tectonic hazard. 90% of all tsunamis are recorded in the Pacific Ocean making communities in this region more vulnerable than communities situated on other seaboard.
 - The frequency of tectonic events are, however, also important as the more frequent the event the higher the vulnerability. Mount Merapi in Indonesia is a Decade Volcano and has frequent pyroclastic flows affecting the vulnerability of the communities living on the flanks of the volcano.
 - Vulnerability is also affected by human geographical factors such as communities which are isolated such as those in Afghanistan or Nepal having a greater vulnerability to the earthquake hazard than those in California.
 - The socio-economic characteristics of the community can also be a vital reason as communities that are poor and have poor housing are more vulnerable than those with higher incomes and better housing.
 - Governance can, however, modify the vulnerability of communities to tectonic hazards. Land use zoning in San Francisco coupled with strict building codes reduces the vulnerability of these communities to the earthquake hazard.

Option 2: Urban Geography Mark Scheme

- a) This is a photograph of the Dharavi slum in Mumbai from the National Geographic magazine. It writes of the photo: 'Failed urban renewal attempts stick out above a warren of metal-roofed shacks. Built to provide more modern facilities, the towers became dilapidated after only a few years because of poor maintenance. A current redevelopment plan calls for razing all slum housing in Dharavi and replacing it with more high-rises. But the free housing promised will house only a fraction of those losing their homes.'

Candidates are likely to recognise the classic signs of shanty town development, with its high density of population, poor sanitation and other service provision, etc. All of this will be creditworthy at Level 1. Commentary will access Level 2. Improvements given could include self-help schemes, sites and services schemes, total redevelopment.

- b) Functional zoning is both horizontal (notion of inner and outer cores to CBD/ grouping of functions such as retailing) and vertical. There is no requirement to cover both aspects.

Indicative content:

- ∞ competition for the most accessible sites e.g. bid-rent, land values
- ∞ complementarity – support each other e.g. estate agents and legal
- ∞ mutual repulsion e.g. high class shops and clubs
- ∞ comparison activities e.g. clothes shops
- ∞ historical factors e.g. tourist areas near a castle/cathedral
- ∞ accessibility e.g. near to ring road for delivery, near parking
- ∞ planning controls/land use zoning e.g. entertainment areas

c)

- | | |
|---|---|
| <ul style="list-style-type: none">• An understanding of the key ideas, 'socio-economic' and 'environmental' should be expected. The idea of urban 'management' will be important as the focus of the question.• Knowledge and understanding of issues associated with economic inequality, social segregation, and cultural diversity.• Inequalities tend to exist in terms of access to job opportunities, education, housing and basic public services such as water and sanitation. Knock-on impacts of this are poorer health, higher unemployment and a lack of social mobility. The poor get stuck in a cycle of poverty from which it is hard to escape.• Ethnic communities have become isolated from wider society as they have maintained their own language and beliefs and limited their interaction with others, leading to segregation.• Awareness of strategies to manage socio-economic issues such as improved provision of schools, enforcing a living wage, giving access to affordable housing, greater provision of public transport.• Measures to deal with social variations eg health care such as spatial availability of clinics; health education programmes eg access to healthy living eg sports and leisure facilities.• Segregation may be reduced by legislation on anti-racism, employment rights and opportunities to combat discrimination, prejudice and racism and encouraging greater political involvement of different cultural groups. | <ul style="list-style-type: none">• Issues of cultural diversity: local authorities provide English lessons or bilingual literature. Hospitals cater for specific illnesses and schools may alter their curricula and holiday patterns to cater for different ethnic groups.• Knowledge and understanding of environmental challenges in urban areas, including atmospheric pollution, water pollution, dereliction and urban sprawl, urban waste disposal.• Pollution controls on industry and traffic; dealing with legacy of an industrial past - land remediation strategies designed to remove contaminants from the ground; waste related legislation, education and financial incentives; improvements to housing built when standards were lower eg heating, damp.• Water pollution strategies, for instance, may entail construction of water-treatment facilities and wastewater plants; and regulations aimed at 'point source' polluters such as industries, which discharge water pollution into receiving waters or sewer systems that flow into treatment plants.• Knowledge and understanding of specific government and local strategies designed to manage social and environmental challenges.• Knowledge and understanding of the different approaches used to tackle socio-economic and environmental issues, partially dependent on national economic context. |
|---|---|

Option 3: Population Geography Mark Scheme

- a)
- Knowledge and understanding of the characteristics of asylum seekers, people who claim to be at risk of persecution but who have not yet been determined to be refugees. Most asylum seekers come from low income countries and some newly emerging economies.
 - Knowledge and understanding of the factors affecting decisions of people seeking asylum. Push factors include political persecution, ethnic persecution and gender-based violence, and geographical hardship in the region such as flooding or drought. Pull factors include attitudes and policies of recipient countries, and economic opportunities available at destination.
 - Transport factors: accessibility, practicalities of distance and transport including available travel routes, flights and accessible land borders, role of people smugglers and agents.
 - Where asylum seekers are able to exercise choice in determining their destination country, factors such as the presence of social networks, historical ties between the countries of origin and destination including colonial ties, the knowledge or belief that a certain country is democratic, where human rights and the rule of law are likely to be respected, are highly influential, as is the perceived attitude of people in destination countries toward asylum applicants.
 - Awareness of areas of conflict, including civil war and international conflict, especially areas in the Middle East and south west Asia, such as the countries of Iraq, Syria, Pakistan and Afghanistan. Similarly countries in the Horn of Africa such as Eritrea and Somalia are areas of political instability.
 - Levels of poverty and wealth in source and destination countries. Low income countries are concentrated in many parts of Africa, western and southern Asia.

- b)
- Indicative content could include problems stemming from:
- ∞ high birth rate
 - ∞ low birth rate
 - ∞ high infant mortality rate
 - ∞ ageing population
 - ∞ excessively youthful population
 - ∞ migration (out or in)
 - ∞ an unbalanced population structure e.g. sex ratios
 - ∞ population related problems such as famine, unemployment, poverty

- c)
- Candidates are free to develop their own approach to the question and responses will vary depending on the approach chosen. Whichever route is chosen, essays which discuss challenges and support their argument with relevant examples will be credited. There may be detailed consideration of one or more examples, or a broadly conceived response, drawing on several examples to illustrate the factors involved.

Candidates may describe Stage 5, an ageing population and reduction in total population over time. Birth rate is consistently lower than death rate – negative natural increase rate.

Demographic, social, economic and political challenges including:

- sustainability of the population
- care for elderly and implications of cost required
- family commitments
- shortage of young, vigorous, innovative workers
- future shortage of workers and economic stagnation
- tax burden on small working age group
- strain on certain resources e.g. hospitals
- government policies on immigration, tax, retirement age, pensions.

Candidates may assess the scale of the challenge and make reference to government policy aimed at reducing the impact of these challenges.

Option 4: Coastal Geography Mark Scheme

- a) Evidence should relate to the land area – two houses gone on the left of the photo and one at bottom plus outbuildings of another property (1). Gardens are shorter (1). Road ends abruptly (1) presence of revetments (1).
The shape of the coast is different with a bay-like feature being present on the left (1).
The coastal protection/revetments have been washed away (1) and there appears to be more debris on the beach to the left of the photo, indicating greater activity (1).
Lack of vegetation on cliff face (1). Cliff line has moved inland/retreat of coastline (1). Any valid point.
- b) 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:
- Rock hardness - Softer and uncemented sediment and rock are vulnerable to cliff retreat. Igneous rocks have a stronger crystalline structure that joints and fractures in the rock result in more complex coastal landforms – e.g. faults can be exploited to form caves, which cut through to form arches, the tops of which collapse to form stacks, which over time are undermined and collapse to form stumps.
- Geological orientation - A discordant coasts have different rates of erosion, resulting in headlands and bays. Headlands concentrate wave energy (refraction) resulting in more complex erosion features.
- Wave type / wave energy – water is driven into cracks in rocks, compressing air that is already there, creating an explosive blast.
- Bombardment and blasting is made worse by sediment thrown up in the waves. The average pressure of storm waves in the UK can be 3x higher than winter waves.
- Rock breakdown and erosional processes: operate on coastlines (e.g. hydraulic action / attrition / abrasion), often together with other subaerial. Some mechanical processes (solution and salt) expose the coastline to wave and sub-aerial processes.
- Rock layers – differences within the cliff face affects level of resistance, different rates of erosion, and over time cause landslides.
- When cliffs are worn back, a shore (wave-cut) platform is left, which can be covered by the sea at low tide, resulting in further abrasion, limestone solution and marine organisms creating a rocky foreshore (e.g. Glamorgan Heritage Coast). As the platform becomes longer, wave attack on the cliff base will decrease.
- c)
- A range of processes affecting coastlines. Expect to see reference to: waves (constructive and destructive); prevailing currents; the role of wind its connection to fetch.
 - Erosional processes and associated landforms – abrasion, attrition, hydraulic action and solution – landscapes of erosion may feature.
 - Transportation processes of traction, saltation, solution and suspension. Links to longshore drift are likely. Some may connect wave action and longshore drift.
 - Deposition should feature in relation to a variety of landforms such as beach, dunes, spits and bars.
 - The contribution of these processes (erosion, transport and deposition) to the development of low and high energy environments may also feature. Expect to see stronger focus upon high energy environments with links to erosional coastlines and those at risk of flooding.
 - Coastal management strategies to include hard engineering soft engineering and other approaches such as managed retreat.
 - Alternative possible futures should emerge and include the potential impact of sea level change upon both process, landform, but also how this impacts upon attitudes to coastal management.
 - Risks associated with living along coastlines under threat from erosion and flooding.
 - Learned case study support may be used to exemplify.