



SUBJECT:	Geography
PAPER NUMBER:	I
DATE:	18 th May 2022
TIME:	9:00 a.m. to 12:05 p.m.

Answer **FOUR** questions in total. Questions carry 25 marks each.

1. Intense tectonic activity may often result in the development of oceanic islands and island arcs.
 - (a) With reference to **ONE** example, describe the tectonic processes responsible for the development of oceanic island arcs. Annotated diagram/s should be included to better support your answer. (15)
 - (b) Explain why volcanoes are often formed along such island arcs. (10)

2. Weather events, linked to a changing climate, brought misery to millions around the world in 2021 according to a new report by charity organisation Christian Aid. The report identified 10 extreme events that each caused more than \$1.5 billion of damage. The biggest financial impacts were recorded from Hurricane Ida which hit the US in August 2021. (BBC, 2022)
 - (a) With reference to the above statement, describe the atmospheric processes responsible for the development of cyclones. (5)
 - (b) Explain the differences in the origin and development of 'temperate cyclones' (depressions), when compared to 'tropical cyclones' (hurricanes). (15)
 - (c) In what way is climate change being forecasted to impact on the development of the cyclones mentioned in (b)? (5)

3. (a) Explain the processes of the following within the context of soil formation:
 - (i) leaching;
 - (ii) podsolisation; and
 - (iii) mechanical downwash. (9)

- (b) Describe a method used to measure the size of soil particles. Explain how the size of soil particles would affect the ability of soils to hold moisture. (16)

4. Figure 1 illustrates four different river hydrographs.

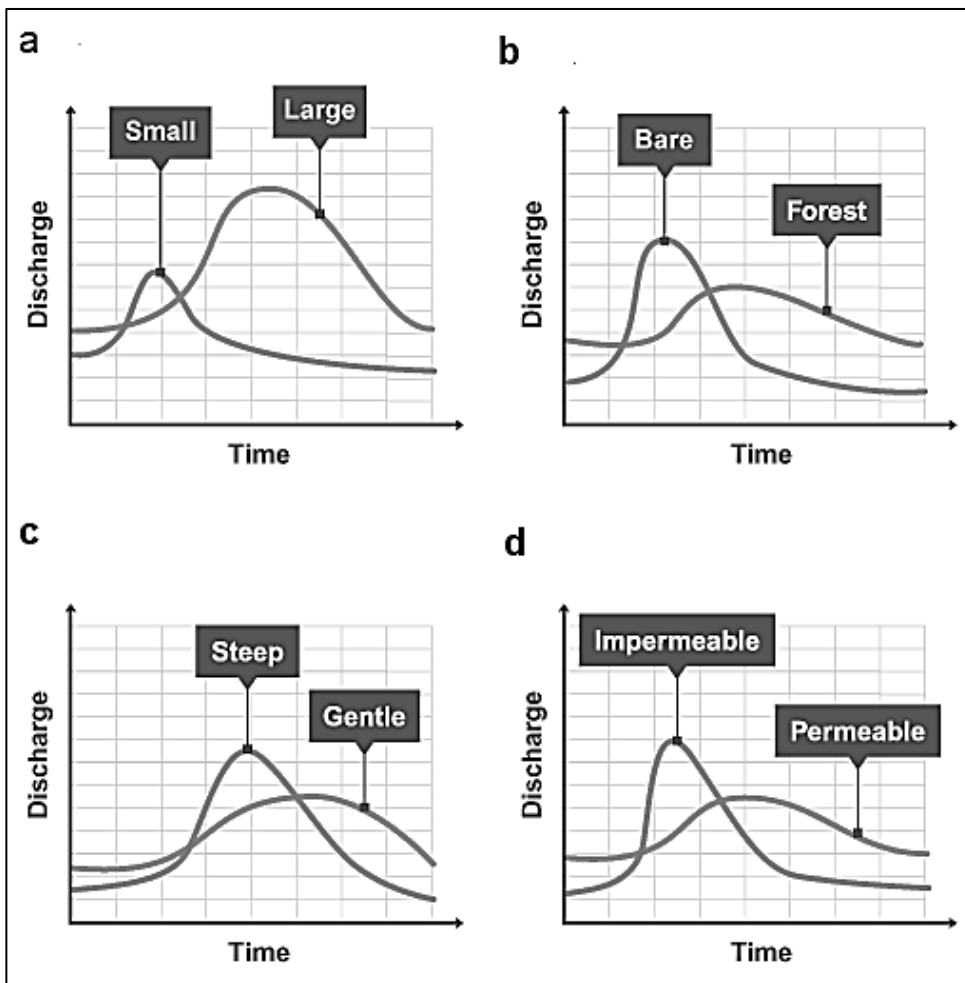


Figure 1: Four different river hydrographs
 (Source: Adapted from: Alevelrivers.weebly.com)

- (a) Define 'river hydrograph' and with the help of an annotated diagram, explain the key components of such a hydrograph. (9)
- (b) Describe which factor/s present in a drainage basin contribute to **each** of the different hydrographs (a-d) as illustrated in Figure 1. Provide an explanation of the processes responsible for **each** river hydrograph. (16)

5. (a) Explain **THREE** different methods employed in coastal land reclamation schemes. You can include annotated diagrams to better support your answer. (9)
- (b) With reference to **TWO** coastal cities or countries, discuss how coastal land reclamation projects have:
- (i) helped to resolve specific issues related to their socio-economic development; and (8)
 - (ii) created negative consequences which often are not easy to resolve. (8)
6. (a) The coastal zone is generally divided into three major zones. With the help of an annotated diagram, illustrate these **THREE** different coastal zonations and explain the physical characteristics of **each** zone. (9)
- (b) In Malta, two coastal ecosystems have developed on our soft coasts. With reference to **ONE** local example, answer the following questions:
- (i) explain the main coastal processes responsible for its development; and (8)
 - (ii) discuss the major threats endangering its future existence. (8)
7. The physical landscape is an assemblage of slopes and each slope profile may consist of different forms.
- (a) Explain the main physical processes responsible for slope development. (10)
- (b) Name the **THREE** main slope forms and describe the origin of **each**. (15)
8. Malta is currently protecting 30% of all the marine waters under its jurisdiction and hence has achieved more than the set national target established by one of the Sustainable Development Goals (United Nations, 2021).
- (a) Name the **THREE** marine ecosystems present in the Maltese Islands and describe their characteristics. (9)
- (b) Explain how the establishment of Marine Protected Areas (MPAs) supports the protection of local marine ecosystems. (16)



SUBJECT: **Geography**
 PAPER NUMBER: II
 DATE: 20th May 2022
 TIME: 9:00 a.m. to 12:05 p.m.

Answer **FOUR** questions in total. Questions carry 25 marks each.

1. Figure 1 is a shanty settlement near Cape Town in South Africa.

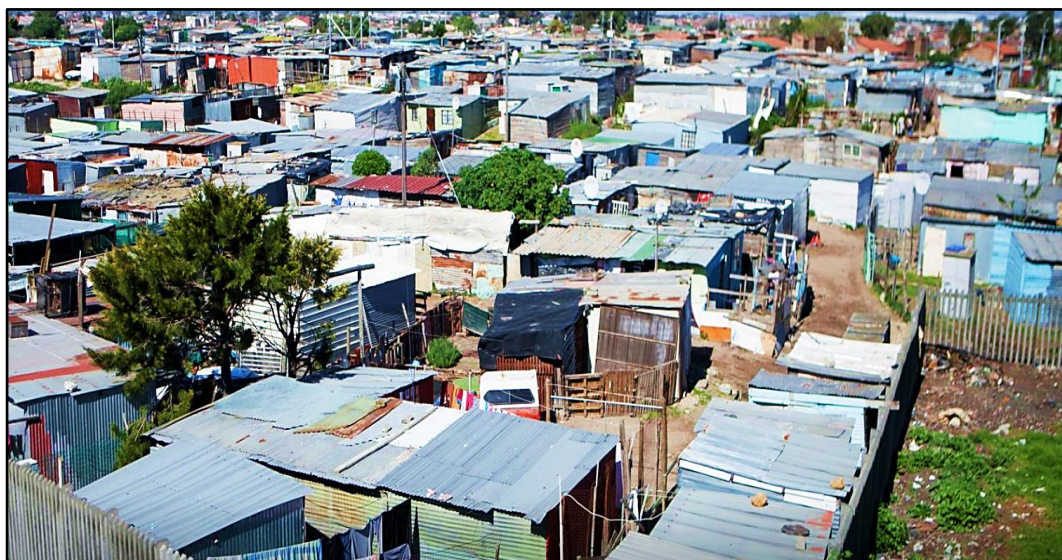


Figure 1: Shanty settlement near Cape Town, South Africa.
 (Source: <https://www.reuters.com/article/uk-safrica-slums-upgrading-idUKKBN14310M>)

- (a) Explain **FOUR** causes that lead to the development of shanty settlements. (8)
- (b) Explain **FOUR** key consequences of shanty settlements. (8)
- (c) Discuss **THREE** ways how shanty settlements can be improved. (9)
2. Forests cover 31% of the global land area. Approximately half of the forest area is relatively intact while more than one-third is primary forest (i.e. naturally regenerated forests of native species, where there are no visible indications of human activities and the ecological processes are not significantly disturbed). Yet, forest degradation is continuing at an alarming rate (FAO, 2020).
- (a) Discuss the importance of forest resources. (5)
- (b) One key detriment to forests is acid rain. Explain **TWO** causes and **FOUR** consequences of acid rain on forests. (12)
- (c) Discuss **FOUR** ways how forests can be managed. (8)

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3. Health geography is a sub-discipline of human geography, which deals with the interaction between people and the environment (Dummer, 2008).

- (a) Explain **TWO** ways how geographical factors affect health. (4)
- (b) Figure 2 shows the COVID-19 vaccine doses that have been administered from 1 January 2021 till 6 March 2022 in each continent. Describe the key characteristics of Figure 2. (6)
- (c) Explain **FOUR** main causes of health inequity. (12)
- (d) List **THREE** techniques that can help reduce health inequity. (3)

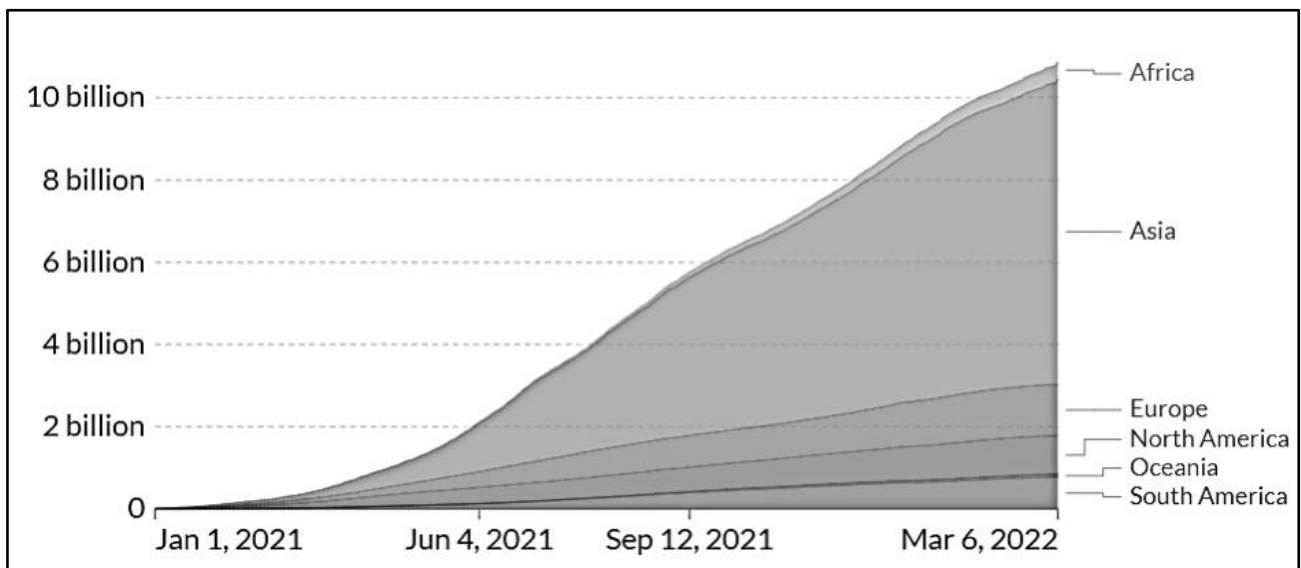


Figure 2: COVID-19 vaccine doses administered by continent.
 (Source: <https://ourworldindata.org/>)

4. Figure 3 shows the share of nights spent by international guests in the respective tourism destinations in 2019.

- (a) Give a brief interpretation and describe the key characteristics of Figure 3. (5)
- (b) Explain the most important characteristics of the following types of tourism:
 - (i) ecotourism;
 - (ii) heritage tourism; and
 - (iii) wilderness tourism. (6)
- (c) With the use of examples, discuss some of the key land use conflicts associated with tourism. (8)
- (d) Besides land use conflict, describe **THREE** other environmental impacts of tourism. (6)

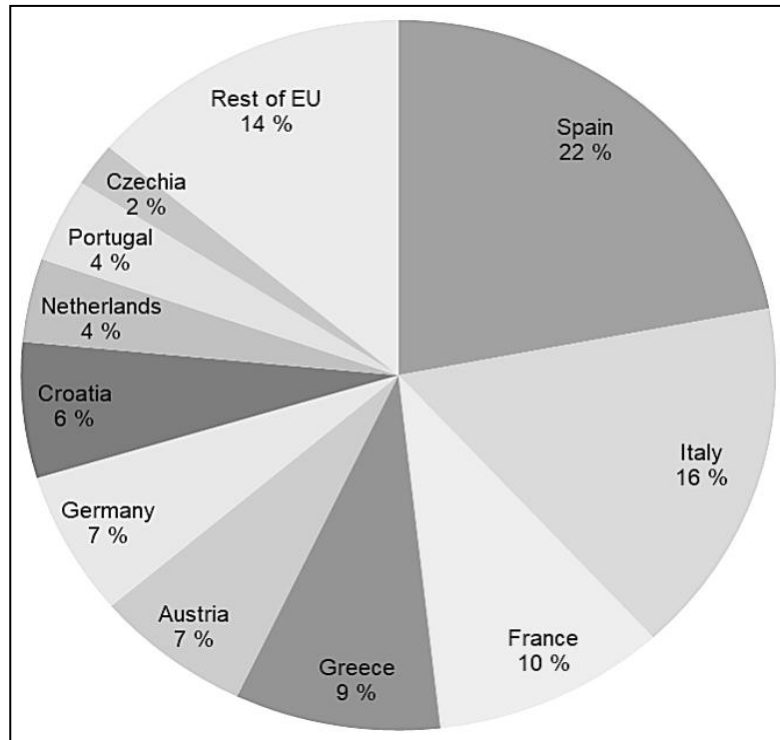


Figure 3: Tourism destinations – Share of nights spent by international guests, 2019 (% of all nights spent at EU tourist accommodation by tourists travelling outside their own country of residence)
(Source: Eurostat (online data code: tour_occ_ninat), 2019)

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5. Figure 4 shows two population pyramids in 2019: one for Malawi and one for Sweden.

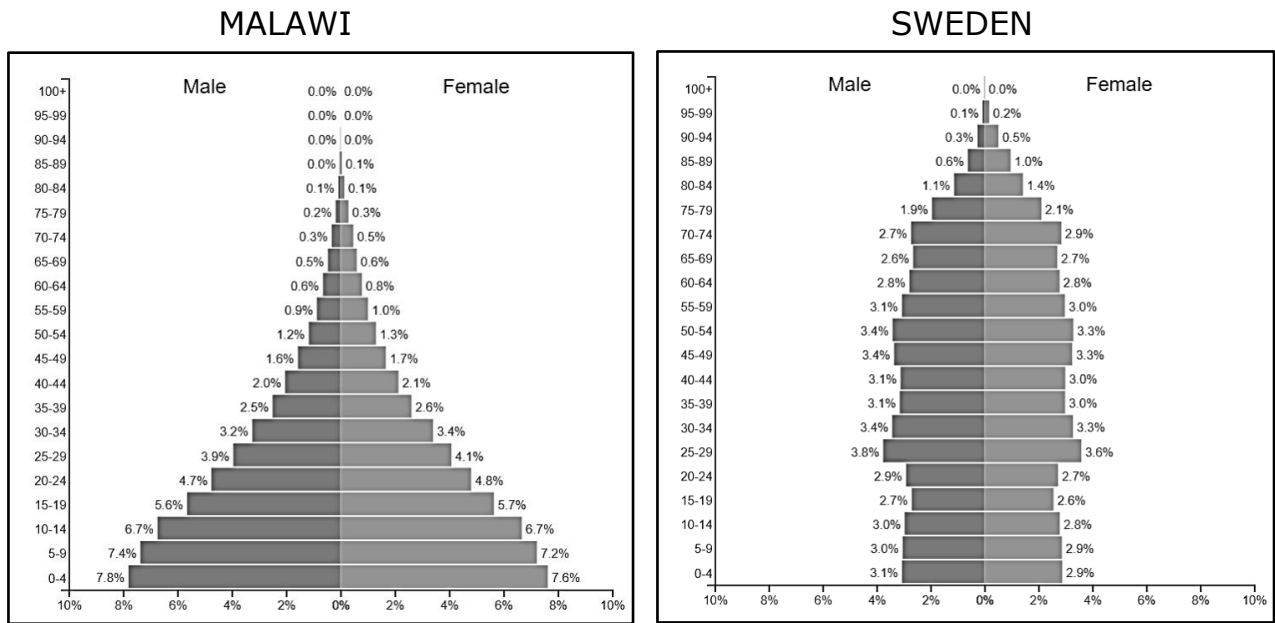


Figure 4: Population pyramids for 2019.
(Source: <https://www.populationpyramid.net/>)

- (a) Explain the purpose of population pyramids. (3)
 - (b) Discuss the key characteristics of the **TWO** population pyramids in Figure 4. (8)
 - (c) Draw a simplified population pyramid of the current Maltese population and highlight which of the two population pyramids discussed in question (b) it resembles most. Give reasons for your answer. (8)
 - (d) Discuss **THREE** effects of the changing demographic trends in Malta. (6)
6. Environmental factors that influence the extent of arable farming are terrain, climate, soil properties and soil water. It is the combination of these four factors that allow specific crops to be grown in certain areas (Baker and Capel, 2011).
- (a) Explain the impact soil, climate and relief have on agricultural activities. (6)
 - (b) Give an overview of the agricultural sector in Malta. (7)
 - (c) Discuss the key environmental and social constraints facing the agricultural sector in Malta. (12)

7. We must work closely together to make this year a year of global action, one that will be remembered as the dawn of a new era of sustainable development (United Nations Foundation, 2015).

- (a) Explain the origin and the key concept behind Sustainable Development. (4)
- (b) Describe the principle views of the Club of Rome and Lovelock’s Gaia Theory on resource use. (6)
- (c) Explain the key purpose of the UN Sustainable Development Goals (SDG’s) and briefly discuss the main aims of **FOUR** SDGs. (15)

8. Figure 5 shows the United States international aid in 2019 in million U.S. dollars.

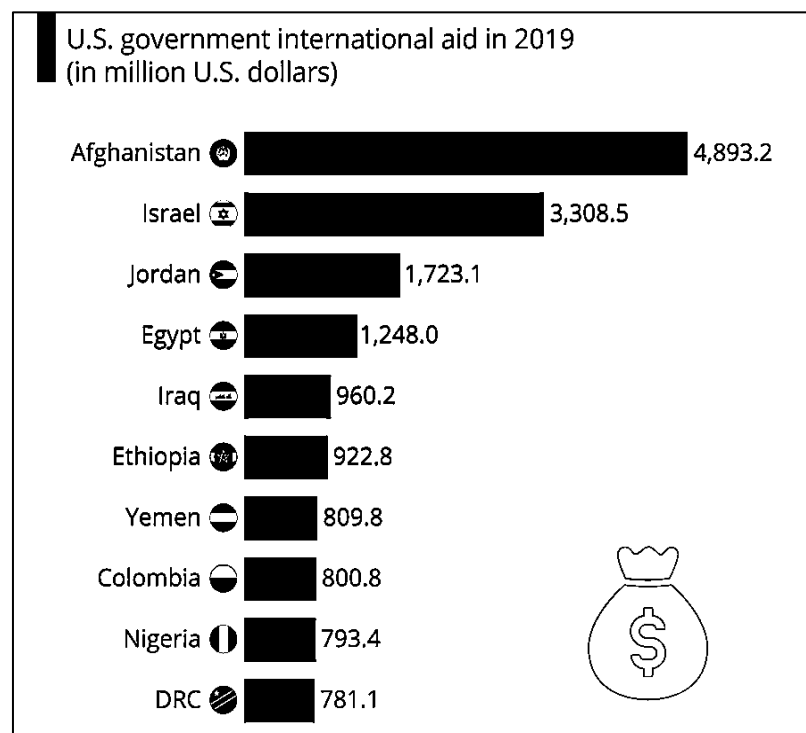


Figure 5: Where US foreign aid was going in 2019.
 (Source: <https://www.statista.com/chart/17610/countries-receiving-us-foreign-aid/>)

- (a) Explain the main findings of Figure 5. (7)
- (b) Aid programmes are a potentially useful resource to tackle various issues and difficulties in a country. However, there can also be problems associated with such programmes.
 - (i) Explain **TWO** types of aid programmes. (4)
 - (ii) Briefly describe **THREE** problems associated with such programmes. (6)
- (c) Explain the principle roles and key purposes of the United Nations. (8)