MATRICULATION AND SECONDARY EDUCATION CERTIFICATE
EXAMINATIONS BOARD

**ADVANCED MATRICULATION LEVEL
2023 SECOND SESSION**

SUBJECT:	**Geography**
PAPER NUMBER:	I
DATE:	30th August 2023
TIME:	9:00 a.m. to 12:05 p.m.

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

1. With the help of an annotated diagram, describe, in detail, the characteristics of the global atmospheric circulation model. Include the following terms in your description: trade winds; Intertropical Convergence Zone; Polar Front; Jet Stream. (25)

(Total: 25 marks)

2. "Environmental change is inextricably linked to environmental hazards. As human population grows, and is more concentrated in cities, often along coastal areas and floodplains, a larger number of people are vulnerable to environmental hazards such as earthquakes"

(Source: Holden and McDonald, 2017, p. 719)

(a) How did the study of earthquakes contribute to more evidence about the theory of plate tectonics? (9)

(b) With reference to the statement above (2.), define and discuss the **TWO** types of effects or hazards associated with earthquakes and for **each** type of effect or hazard, describe the impacts associated with it. (16)

(Total: 25 marks)

3. Two thirds of the world's population live within a few kilometres of the coast. But the coastline is a vulnerable place, at risk from storms, erosion, deposition and sea-level rise.

(a) With reference to the above statement (3.), discuss the effectiveness of **TWO** hard and **TWO** soft engineering solutions for coastal defences. (16)

(b) Land reclamation can possibly be the solution to Malta's landfill problem when one takes into account that about 80 per cent of waste that is generated is derived from the construction industry. (Source: www.timesofmalta.com).
With reference to this statement (b), discuss the most important benefits and negative impacts of land reclamation for the Maltese Islands. (9)

(Total: 25 marks)

4. (a) With the help of an annotated diagram, explain the main transfer components in a drainage basin system. (16)

(b) With reference to **THREE** examples, discuss how human activities may alter these transfer processes in a drainage basin system. (9)

(Total: 25 marks)

5. Soils do not occur by chance but usually form a pattern in the landscape and develop as a result of the interplay of various factors. Discuss in detail **FIVE** soil-forming factors. (25)

(Total: 25 marks)

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6. Karst features are strongly associated with limestone landscapes such as those of the Maltese Islands.

   (a) Which Maltese rock layers develop into karst terrain? Explain why karst is best developed in or on these rock strata. (15)

   (b) Describe the type of landforms typically associated with karst processes in limestone regions. Provide **ONE** example of such features in the Maltese Islands and explain the processes that led to its formation. (10)

   (Total: 25 marks)

L-Università
ta' Malta

SUBJECT:	**Geography**
PAPER NUMBER:	II
DATE:	31st August 2023
TIME:	9:00 a.m. to 12:05 p.m.

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

1. "It is already possible to describe the mass flight from Ukraine as one of the largest exoduses in Europe since 1945. The continent experienced its largest ever forced migration at the end of World War II." (Source: Migration Awareness, 2022*)*

   (a) Define forced migration and describe **THREE** push factors that force people to migrate. (8)

   (b) Discuss **THREE** impacts of migration on the receiving (host) countries. (9)

   (c) Describe the difference between an asylum seeker and a refugee. Discuss in relation to the situation in Malta. (8)
   (Total: 25 marks)

2. Agriculture is one of the main land uses in Europe, dominated by livestock products, grains, vegetables, wine and fruits.

   (a) With reference to the above statement (2.), describe **TWO** of the following agricultural systems and their distribution in Europe:
   (i) Mixed farming (or intensive commercial);
   (ii) European peasant farming (or subsistence agriculture);
   (iii) Mediterranean agriculture. (10)

   (b) List and describe **TWO** human factors influencing the growth of agricultural activities. (8)

   (c) Describe the principal aims of the Common Agricultural Policy (CAP) of the European Union. (7)
   (Total: 25 marks)

3. Europe's energy system is facing an unprecedented crisis as supplies of Russian gas, critical for heating, industrial processes and power, have been cut by more than 80% in 2022.
   (Source: Zettlemeyer et al., 2022)

   (a) With reference to the above statement (3.), explain the difference between energy surplus and energy deficit. (4)

   (b) Describe the formation and extraction of natural gas. (6)

   (c) Discuss **TWO** advantages of the use of natural gas for energy production. (6)

   (d) Discuss **THREE** environmental impacts of the use of natural gas. (9)
   (Total: 25 marks)

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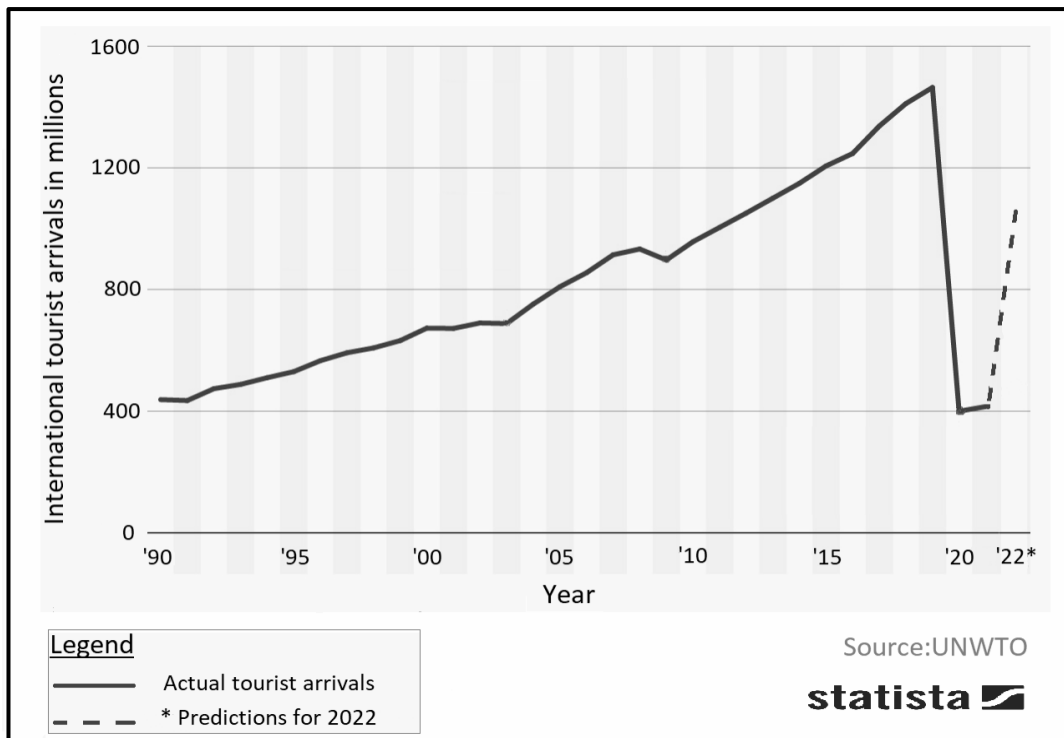4. Figure 1 shows the global international tourist arrivals, actual from 1990 till 2021 and predictions for 2022.

Figure 1. International tourist arrivals worldwide from 1990 to 2022
(Adapted from: https://www.statista.com/)

(a) Describe the key trends and predictions of Figure 1. (7)

(b) As international tourism nearly stopped entirely during the COVID-19 pandemic, the domestic tourism market presented an opportunity for the recovery of the tourism sector. Define domestic tourism and name **TWO** of its benefits. (6)

(c) Tourism in Malta is an important sector of the country's economy. Discuss **THREE** positive and **THREE** negative economic or social impacts of tourism in Malta. (12)

(Total: 25 marks)

5. Table 1 shows the total population of the Maltese Islands and the population in urban areas from 1980 till 2020.

Year	Total Population	Urban population	Urban Percentage of total population
1980	333,587	284,300	89.79%
1990	365,392	320,102	90.38%
2000	399,212	360,316	92.37%
2010	418,755	389,936	94.07%
2020	515,358	488,246	94.74%

Table 1: Total population and the urban population in the Maltese Islands from 1980 till 2020
(Adapted from: https://datatopics.worldbank.org/)

   (a) Describe the key findings of Table 1. (5)

   (b) Define urban sprawl and describe its effects in the Maltese Islands. (10)

   (c) Describe the role of the following **TWO** designations in the Maltese Islands:
      (i)   Urban Conservation Areas (UCAs); and (5)
      (ii)   Outside Development Zones (ODZs). (5)

(Total: 25 marks)

6. The New International Division of Labour is based on the globalisation of production, whose creators are the multinational corporations (MNCs) or transnational corporations (TNCs).

   (a) Describe what is a multinational corporation (MNC) and provide **TWO** examples. (6)

   (b) Explain the role of MNCs in the process of globalisation. (6)

   (c) Discuss **TWO** advantages and **TWO** disadvantages of MNCs. (8)

   (d) Describe the concept of the New International Division of Labour (NIDL). (5)

(Total: 25 marks)