

# MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

# SECONDARY EDUCATION CERTIFICATE LEVEL 2022 MAIN SESSION

SUBJECT:	Geography
PAPER NUMBER:	Ι
DATE:	18 <sup>th</sup> May 2022
TIME:	9:00 a.m. to 11:05 a.m.

#### Answer **ALL** questions.

- 1. Examine Figure 1, the map extract for the area of Żurrieq on page 2 and answer the following questions. The map scale is of 1:25,000. The map's key/legend is given on page 3. The map contours are in metres.
  - a) In which grid square is Hal Safi located? \_\_\_\_\_ (1)
  - b) Give the six-figure grid reference of the building marked with the letter **A**.
- (2)

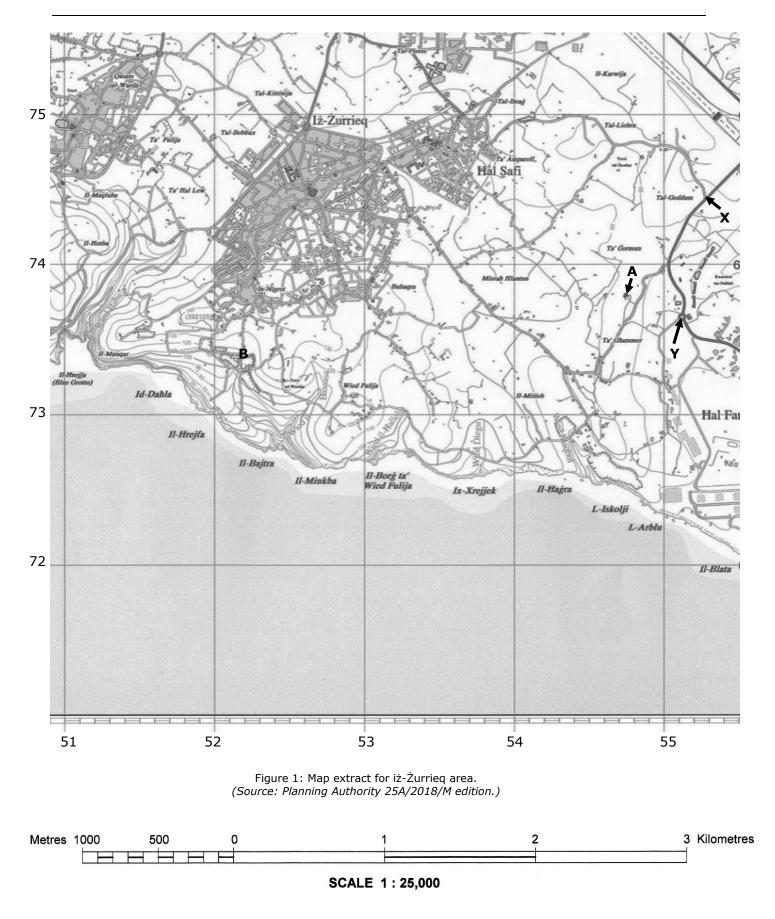
c) Give the compass direction of Hal Safi from Id-Daħla.

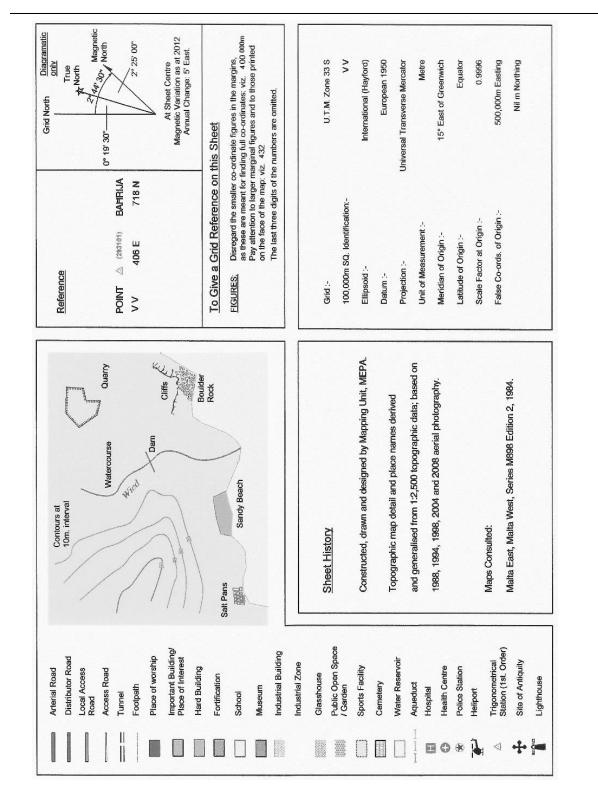
(2)

- d) Underline the correct answer from those in brackets:
  - i. The main economic activity in the area marked **B** is (quarrying, mining, forestry). (1)
  - ii. The main economic activity to the south of Hal Safi is (quarrying, fishing, farming). (1)
  - iii. Along the coastline there are a number of (stacks, valleys, sandy beaches). (1)
  - iv. The sea at id-Daħla is likely to be rough when the wind blows from the (South-west, North, North-east). (1)
- e) Estimate in kilometres the length of the stretch of road between points **X** and **Y**.
  - \_\_\_\_\_(3)
- f) Using the contour lines in Figure 1 and the key of the map on page 3 describe the topography in grid square 5173.

\_\_\_\_ (4)

(Total: 16 marks)





# DO NOT WRITE ABOVE THIS LINE

Key/Legend to Figure 1: Map extract for iż-Żurrieq area. (Source: Planning Authority 25A/2018/M edition.) 2. Examine the world map in Figure 2 (page 4) and answer the following questions:

a) Name the volcanoes numbered **1** to **3**.

2 3 1 (3)b) Match the following fold mountains with their respective locations marked 4 to 6. Alps Andes Mountains Himalayas (3)c) Match the following rivers with their respective locations marked 7 to 9. Nile Mississippi Amazon (3) d) Name the oceans numbered 10 to 12. 10 11 12 (3) e) Match the ports numbered with their respective location marked 13 to 15. (3) Rio de Janeiro Melbourne Los Angeles In which continent is port 15 located? \_ f) (1)

<sup>(</sup>Total: 16 marks)

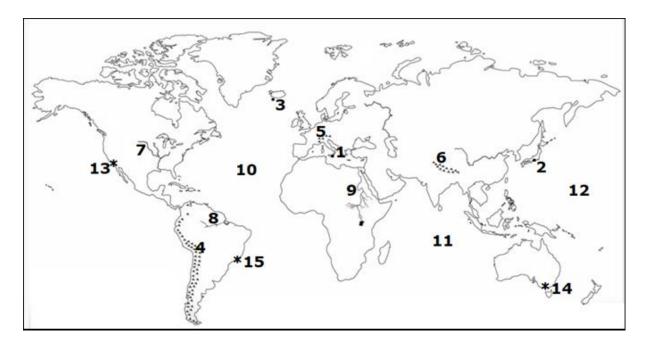


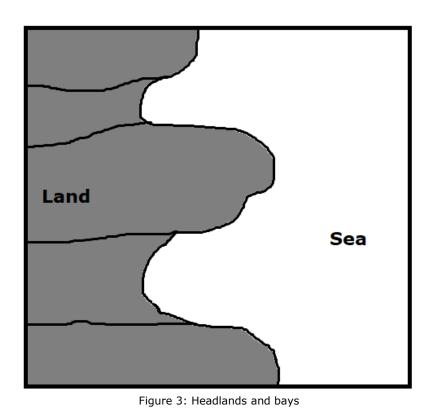
Figure 2: Map of the World. (Source: https://blankworldmap.net)

b) There are many types of sedimentary rock. Name ONE type of sedimentary rock.  C) Briefly explain how sedimentary rocks form.  (() C) Briefly explain how sedimentary rocks form.  (() C) Total: 6 mark  4. Flooding occurs when a river overflows its banks.  a) Mention TWO factors that may cause flooding.  (() b) What does flood control mean?  (() c) Describe ONE flood control method.  (() b) Control method. (()	3.	Ro	cks are classified into three main groups. One type is sedimentary rock.	
b) There are many types of sedimentary rock. Name ONE type of sedimentary rock.  ( ( C) Briefly explain how sedimentary rocks form.  ( ( C) Briefly explain how sedimentary rocks form.  ( ( ( ( ( Total: 6 mark  ( ( ( ( ( ( ) Describe ONE flood control method.  ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (		a)	Name the other <b>TWO</b> main types of rock.	
<ul> <li>c) Briefly explain how sedimentary rocks form.</li> <li></li></ul>				(2)
<ul> <li>c) Briefly explain how sedimentary rocks form.</li> <li>(1) (Total: 6 mark</li> <li>4. Flooding occurs when a river overflows its banks.</li> <li>a) Mention TWO factors that may cause flooding.</li> <li>(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)</li></ul>		b)	There are many types of sedimentary rock. Name <b>ONE</b> type of sedimentary rock.	
<ul> <li>(Total: 6 mark</li> <li>(Total: 6 mark</li> <li>4. Flooding occurs when a river overflows its banks.</li> <li>a) Mention TWO factors that may cause flooding.</li> <li>(b) What does flood control mean?</li> <li>(c) Describe ONE flood control method.</li> <li>(c) Describe ONE flood control method.</li> </ul>				(1)
<ul> <li>(Total: 6 mark</li> <li>Flooding occurs when a river overflows its banks.         <ul> <li>a) Mention TWO factors that may cause flooding.</li> <li></li></ul></li></ul>		c)	Briefly explain how sedimentary rocks form.	
<ul> <li>(Total: 6 mark</li> <li>Flooding occurs when a river overflows its banks.         <ul> <li>a) Mention TWO factors that may cause flooding.</li> <li></li></ul></li></ul>				
<ul> <li>4. Flooding occurs when a river overflows its banks.</li> <li>a) Mention TWO factors that may cause flooding.</li> <li></li></ul>				_ (3)
a) Mention <b>TWO</b> factors that may cause flooding.			(Total: 6 m	arks)
b) What does flood control mean? (( c) Describe <b>ONE</b> flood control method. ((	4.	Flo	oding occurs when a river overflows its banks.	
<ul> <li>b) What does flood control mean?</li> <li></li></ul>		a)	Mention <b>TWO</b> factors that may cause flooding.	
c) Describe <b>ONE</b> flood control method.				(2)
c) Describe <b>ONE</b> flood control method.		b)	What does flood control mean?	
c) Describe <b>ONE</b> flood control method.				
(				_ (2)
		c)	Describe <b>ONE</b> flood control method.	
				(2)
•			(Total: 6 m	. ,

Please turn the page.

5. Headlands and bays are formed along coastlines made up of rocks of different hardness. Label the diagram in Figure 3 to explain the formation of headlands and bays. Use the following labels:

Hard rock	Erosion is slower on hard rock	Headland is formed on hard rock
Soft rock	Erosion is faster on soft rock	Bay is formed on soft rock
		(6)



# (Total: 6 marks)

- 6. The tropics experience some of the most destructive tropical storms on Earth.
  - a) Define tropical storms.



Describe <b>TWO</b> destructive effects of a tropical storm.
(4)
(Total: 6 marks)
List <b>THREE</b> pull factors of migration.
(3)
List <b>THREE</b> push factors of migration.
(3)
(Total: 6 marks)
iefly describe <b>THREE</b> urban problems in less economically developed countries (LEDCs).
(6)
(Total: 6 marks)
Briefly explain footloose industries.
(4)
)

# This question continues on next page.

b) Give an example of an area where there is a concentration of footloose industries.

(2)

# (Total: 6 marks)

10. Figure 4 shows the North-South divide on a map of the world.

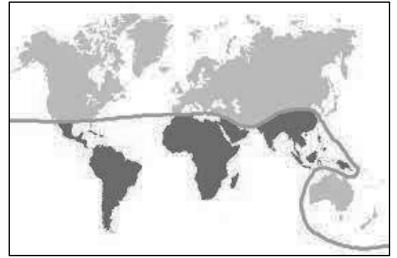


Figure 4: The North-South Divide (Source: https://www.rgs.org)

a) Briefly explain the North and South divide.

b) Give **ONE** example of a country that forms part of the Global North and **ONE** example of a country that forms part of the Global South.

\_\_\_\_\_(2)

(Total: 6 marks)

\_\_\_\_\_(4)



# MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

# SECONDARY EDUCATION CERTIFICATE LEVEL 2022 MAIN SESSION

SUBJECT:	Geography	
PAPER NUMBER:	IIA	
DATE:	20 <sup>th</sup> May 2022	
TIME:	9:00 a.m. to 11:05 a.m.	

Answer **any FOUR** questions.

Answers are to be written on the booklet provided.

Each question carries a total of 25 marks. Marks allocated to parts of the questions are indicated.

Good use of language and orderly presentation are important. Credit will be given for relevant illustrations. The use of non-programmable calculators and geometric instruments is permitted.

#### SECTION A

- 1. Earth makes one rotation on its own axis every 24 hours.
  - a) Explain how this rotation causes day and night. Include a diagram to better explain your answer. (10)
  - b) What are lines of longitude?
  - c) How are lines of longitude used to calculate time of day in any place on earth? (6)
  - d) Figure 1 shows the four different time zones in the United States of America, with a one-hour difference between one time zone and the next. If the time in Los Angeles is 8 a.m., what is the time in Miami?(3)

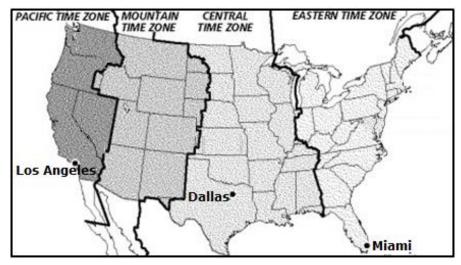


Figure 1: Time zones in the United States of America (Source: https://www.brainly.com)

(Total: 25 marks)

(6)

- 2. Igneous, sedimentary and metamorphic rocks are the three main categories of rocks found on Earth.
  - a) Explain how igneous and metamorphic rocks were formed. (12)
  - b) Name **TWO** types of igneous rock and **TWO** types of metamorphic rock. (4)
  - c) Give the meaning of: porous rocks, permeable rocks and impermeable rocks. (6)
  - d) Give **ONE** example for **each** of the following: a porous rock, a permeable rock, and an impermeable rock.(3)

# (Total: 25 marks)

3. Figure 2 shows the distribution of earthquakes around the world.

a) Describe the internal structure of the Earth. Include a diagram to bett answer.	er explain your (11)
b) Describe the global distribution of major seismic (earthquake) zones.	(6)

c) Briefly explain what causes earthquakes.

(8)

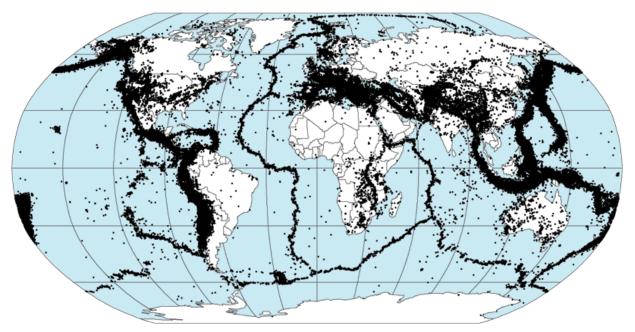


Figure 2: Distribution of seismic activity (Source: https://www.researchgate.net)

(Total: 25 marks)

- 4. Figure 3 is a climate graph showing the main characteristics of tropical continental climate that is typical of the tropical savanna grassland.
  - a) With reference to Figure 3, describe **FIVE** features of the tropical continental climate. (10)
  - b) Explain **TWO** adaptations of the savanna vegetation.
  - c) The Sahel region in Africa is found at the transition between the desert and savanna biomes.
     Describe **THREE** causes of desertification in the Sahel region. (9)

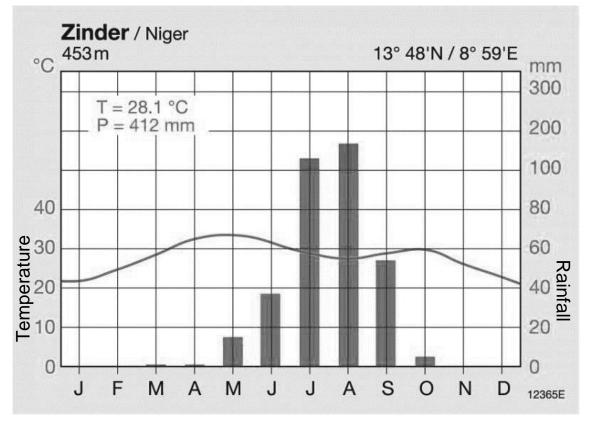


Figure 3: Climate graph for a Tropical Continental Climate (Source: https://www.teleskola.mt)

(Total: 25 marks)

(6)

Please turn the page.

# SECTION B

- 5. The demographic transition model describes the changes in population growth rates over a period of time through four stages.
  - a) Draw a sketch of the **FOUR** stages of the demographic transition model and label the following features:
  - i. birth rate; and(10)ii. death rate.
  - b) Briefly explain the birth rates and death rates in **each** stage. (8)
  - c) Mention a country which is said to have entered stage 5 of the model and provide **TWO** reasons for its declining population.
     (7)

#### (Total: 25 marks)

6. a) What is a Transnational Corporation (TNC)?	(5)
b) Discuss <b>TWO</b> advantages and <b>TWO</b> disadvantages of a TNC to the host country.	(16)

c) Define the term globalisation.

#### (Total: 25 marks)

- 7. a) Drilling and transportation of crude oil in Alaska involve many difficulties. Describe **TWO** of these difficulties.
   (4)
  - b) Discuss **FOUR** impacts of the Exxon Valdez oil spill on the sea wildlife and environment.

(12)

(4)

c) Explain **THREE** impacts of sea pollution on the industry of Alaska. (9)

# (Total: 25 marks)

- 8. Courmayeur is a mountain resort in the Alps.
  - a) Briefly discuss the economic benefits that tourism brings to Courmayeur. (5)
  - b) Briefly discuss **TWO** social problems created by tourism in Courmayeur. (10)
  - c) Briefly discuss **TWO** negative environmental impacts that are experienced in Courmayeur because of tourism. (10)

# (Total: 25 marks)



# MATRICULATION AND SECONDARY EDUCATION CERTIFICATE EXAMINATIONS BOARD

# SECONDARY EDUCATION CERTIFICATE LEVEL 2022 MAIN SESSION

SUBJECT:	Geography
PAPER NUMBER:	IIB
DATE:	20 <sup>th</sup> May 2022
TIME:	9:00 a.m. to 11:05 a.m.

Answer **any FOUR** questions.

Answers are to be written on the booklet provided.

Each question carries a total of 25 marks. Marks allocated to parts of the questions are indicated.

Good use of language and orderly presentation are important. Credit will be given for relevant illustrations. The use of non-programmable calculators and geometric instruments is permitted.

# SECTION A

- a) The internal structure of the Earth consists of three main layers: the core, the mantle and the crust. Draw a well-labelled diagram to show these layers.
   (7)
  - b) Give **TWO** characteristics of **each** layer.
  - c) Figure 1 shows the areas where most earthquakes occur. Name **THREE** areas where earthquakes are common. (6)
  - d) Briefly explain how convection currents cause earthquakes. (6)

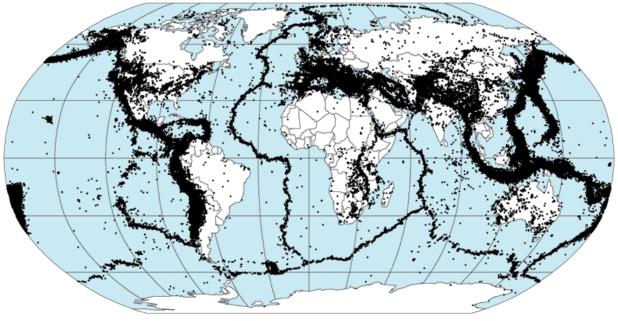


Figure 1: Distribution of seismic activity (Source: https://www. researchgate.net)

(Total: 25 marks)

(6)

2. Earth rotates on its own axis causing day and night, as shown in Figure 2.

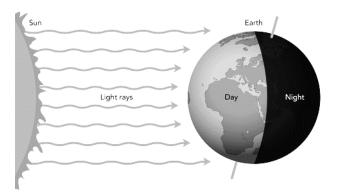


Figure 2: Day and night on Earth (Source: https://www.blendspace.com)

- a) How long does it take for Earth to make **ONE** rotation on its axis? (2)
- b) With reference to Figure 2, explain how this rotation causes day and night. (8)
- c) Briefly describe **THREE** characteristics of lines of longitude.
- d) Figure 3 shows the four different time zones in the United States of America, with a one-hour difference between one time zone and the next. If the time in Los Angeles is 8 a.m., what is the time in Denver?

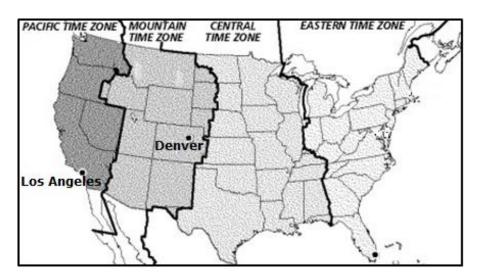


Figure 3: Time zones in the United States of America (Source: https://www.brainly.com)

#### (Total: 25 marks)

(6)

(12)

- 3. Igneous, sedimentary and metamorphic rocks are the three main categories of rocks found on Earth.
  - a) Give **THREE** characteristics of igneous rocks. (6)
  - b) Give **THREE** characteristics of metamorphic rocks.

- c) Name **TWO** types of igneous rock and **TWO** types of metamorphic rock. (4)
  d) Define porous rocks, permeable rocks and impermeable rocks. (6)
- e) Give **ONE** example **each** of a porous rock, a permeable rock and an impermeable rock.

#### (3) (Total: 25 marks)

4. Figure 4 shows the climate graph of the tropical savanna grasslands of Bamako in Mali, Africa which experiences a tropical continental climate.

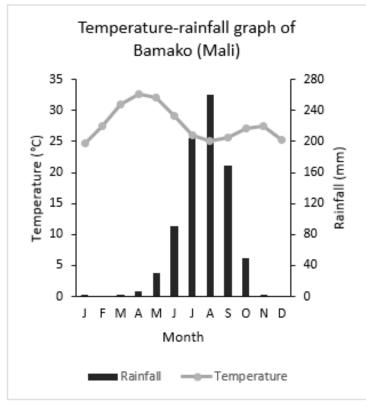


Figure 4: The temperature and rainfall graph of Bamako in Mali (Source: https://en.climate-data.org/africa/mali/)

- a) Using Figure 4, describe **FOUR** characteristics of the tropical continental climate. (8)
- b) Name **ONE** region where this climate is found.
- c) Describe **TWO** adaptations by which the vegetation of the savanna is adapted to its climate.

(6)

(2)

- d) Some regions with a tropical climate are experiencing desertification. Choose **THREE** of the following factors and explain how they lead to desertification:
  - i. unreliable rainfall;
  - ii. climate change;
  - iii. overgrazing;
  - iv. overcultivation;
  - v. deforestation.

(9) (Total: 25 marks) Please turn the page.

# SECTION B

5	. a) What is the difference between forced and voluntary migration?	(4)
	b) Mention <b>TWO</b> push factors of <b>ONE</b> named example of forced migration.	(3)
	c) Describe <b>THREE</b> effects of migration on the receiving country.	(9)
	d) Describe <b>THREE</b> effects of emigration in the mother country.	(9)

# (Total: 25 marks)

(12)

6. a) Define **each** of the following economic activities and give **ONE** example of **each**:

- i. primary industry;
- ii. secondary industry;
- iii. tertiary industry; and
- iv. quaternary industry.
- b) Briefly explain how any **TWO** physical and **TWO** human factors listed in Table 1 influence the location of secondary industries.
   (8)

Table 1: The Physical and Human factors which influence the location of secondary industries

Physical Factors	Human Factors
Raw Materials	Labour
Natural Routes	Transport Routes
Site and Situation	Market
Climate	Financial Aid

c) Deindustrialisation is the decline in primary and secondary industries. Explain why deindustrialisation is happening. (5)

# (Total: 25 marks)

7. a) Name <b>THREE</b> different types of tourism.	(3)
b) Briefly explain <b>THREE</b> benefits of tourism.	(6)
c) Describe <b>FOUR</b> problems created by tourism in the receiving country.	(12)
d) Briefly explain <b>ONE</b> way how a host country can encourage sustainable tourism (Total	m. (4) <b>: 25 marks)</b>
8. Less economically developed countries (LEDCs) receive aid from more economical countries (MEDCs).	lly developed
a) List and briefly explain <b>THREE</b> types of aid. Give <b>ONE</b> example for each.	(9)
b) Explain <b>TWO</b> advantages and <b>TWO</b> disadvantages of aid. (Total:	(16) : <b>25 marks)</b>