



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Cycle Final Examination 2023

Geography

Common Level

Thursday 8 June Afternoon 1:30 - 3:30

360 marks

Examination Number

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Day and Month of Birth

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For example, 3rd February is
entered as 0302

Centre Stamp

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Instructions

There are **ten** questions in this paper.

Answer all questions.

The questions do not all carry equal marks.

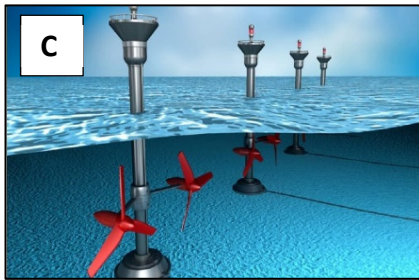
Write your answers in blue or black pen. You may use pencil and colouring pencils for sketches, graphs and diagrams only.

Write your answers in the spaces provided in this booklet. There is space for extra work at the end of the booklet. Label any such extra work clearly with the question number and part.

There is an Ordnance Survey map and legend supplied separately to this paper.

Question 1

(a) Examine the images below and answer each of the following questions.

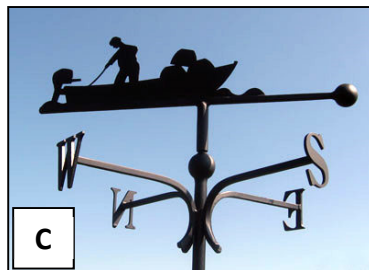


(i) Match each of the images **A**, **B**, **C** and **D** with the energy type that best matches it in the table below.

Energy Type	Letter
Coal	
Solar	
Tidal	
Oil	

(ii) State what is meant by the term *finite energy*.

(b) The instruments shown below are used to gather weather data.



(i) Which of the following is measured using the instrument in image **A**?
Tick (✓) the correct box.

Wind speed ☐

Wind direction ☐

Rainfall ☐

(ii) What is the name of the instrument in image **B**?

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(iii) Examine the Ordnance Survey map and legend accompanying this paper. Planning permission has been granted to build a wind farm at X 20 89.

Explain **two** reasons why the site chosen at X 20 89 is suitable for a wind farm. Use evidence from the Ordnance Survey map to support your answer.

Reason 1:
Reason 2:

Question 2

- (a) Examine the satellite photograph below showing part of Dungarvan Harbour and answer each of the following questions.



- (i) Which of the following is the name for the part of a river that is tidal, labelled **A** above? Tick (✓) the correct box.

Source ☐

Estuary ☐

Tributary ☐

- (ii) What is the name for a bend or turn in a river, labelled **B** above?

- (iii) The feature labelled **C** on the satellite photograph above is known as a sand spit. What is the name of the process of coastal transportation that led to its formation?

(b) (i) Name **one** river that you have studied.

--

(ii) List **two** features that are formed by the process of river deposition.

1.
2.

(iii) Explain how the process of deposition forms **one** river feature that you have studied. Use a labelled diagram(s) in your answer.

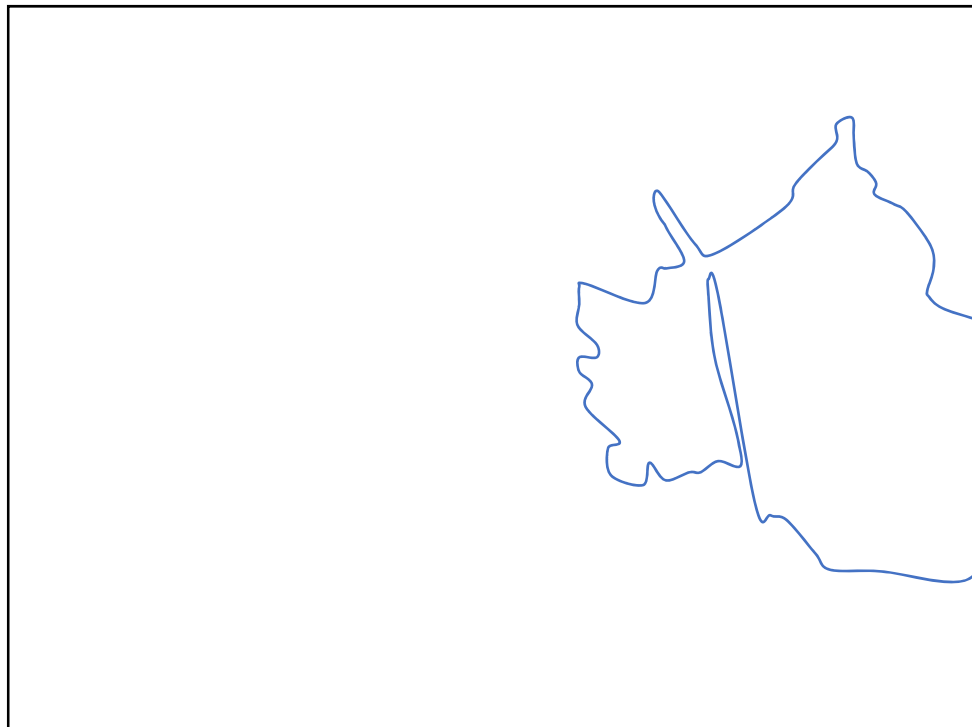
[illegible]

Space for diagram

(c) Use the Ordnance Survey map and legend supplied with this paper to answer the following questions.

(i) Complete the sketch map of the Dungarvan area by showing and labelling each of the following:

- The Colligan River
- **Two** different historical sites
- The N72 road
- An area of linear settlement along the N72 road.



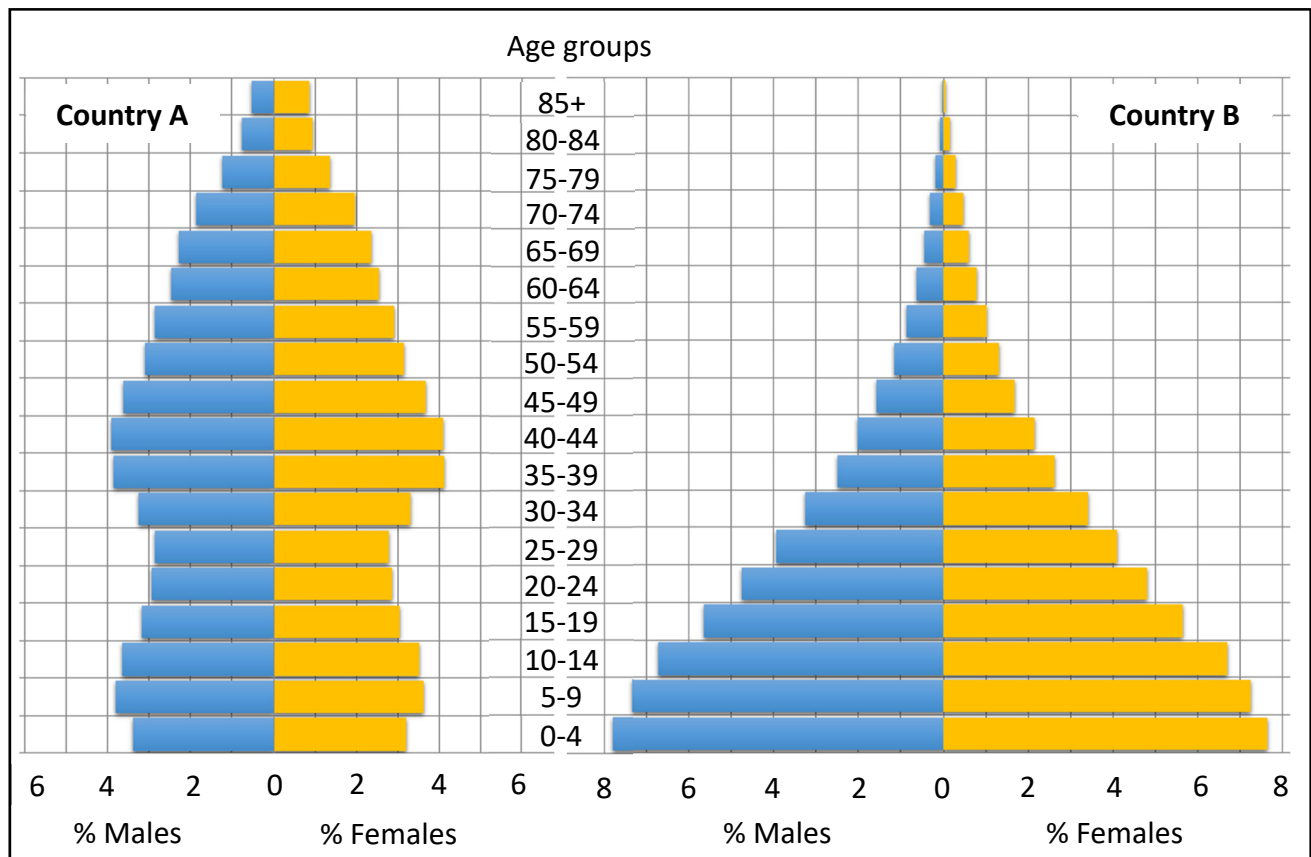
 = Coastline

- (ii) Explain **two** reasons why the town of Dungarvan developed at this location. Use evidence from the map to support each reason.

Reason 1:
Reason 2:

Question 3

(a) Examine the population pyramids below and answer each of the following questions.



Indicate whether each of the following statements is true or false by ticking (✓) the correct box.

(i) The percentage of males in the 0-4 age group in **Country A** is 4%.

True ☐

False ☐

(ii) **Country B** has a high birth rate.

True ☐

False ☐

(iii) The lowest percentage of people in **Country A** are in the 85+ age group.

True ☐

False ☐

(iv) The evidence in this population pyramid shows that **Country B** is a developed country.

True ☐

False ☐

- (v) Explain **one** way the life of young people is different in developed and developing countries.

- (b) Read the article below and answer each of the following questions.

Since 2007 the Irish Government has sent aid to Malawi. This has helped women in Malawi to introduce a new variety of the sweet potato crop to help reduce food poverty. This crop is nutritious and rich in Vitamin A, this is important because 73% of children in Malawi do not get enough Vitamin A.



The women have been educated on how best to grow and manage the crop. They have also learnt to process the sweet potatoes to make cakes, juice, sweet beer, fritters and doughnuts which they can sell.

- (i) What percentage of children in Malawi do not have enough Vitamin A in their diet?

--

- (ii) Name **two** items made from sweet potatoes that are mentioned in the article.

1.
2.

(iii) Which of the following types of aid is outlined in the article?

Tick (✓) the correct box.

Bilateral aid

☐

Non-Governmental Organisation (NGO)

☐

Emergency aid

☐

(iv) Will aid to developing countries cause the population in these countries to rise or fall?

Tick (✓) the box beside your choice and justify your answer in the space below.

Rise

☐

Fall

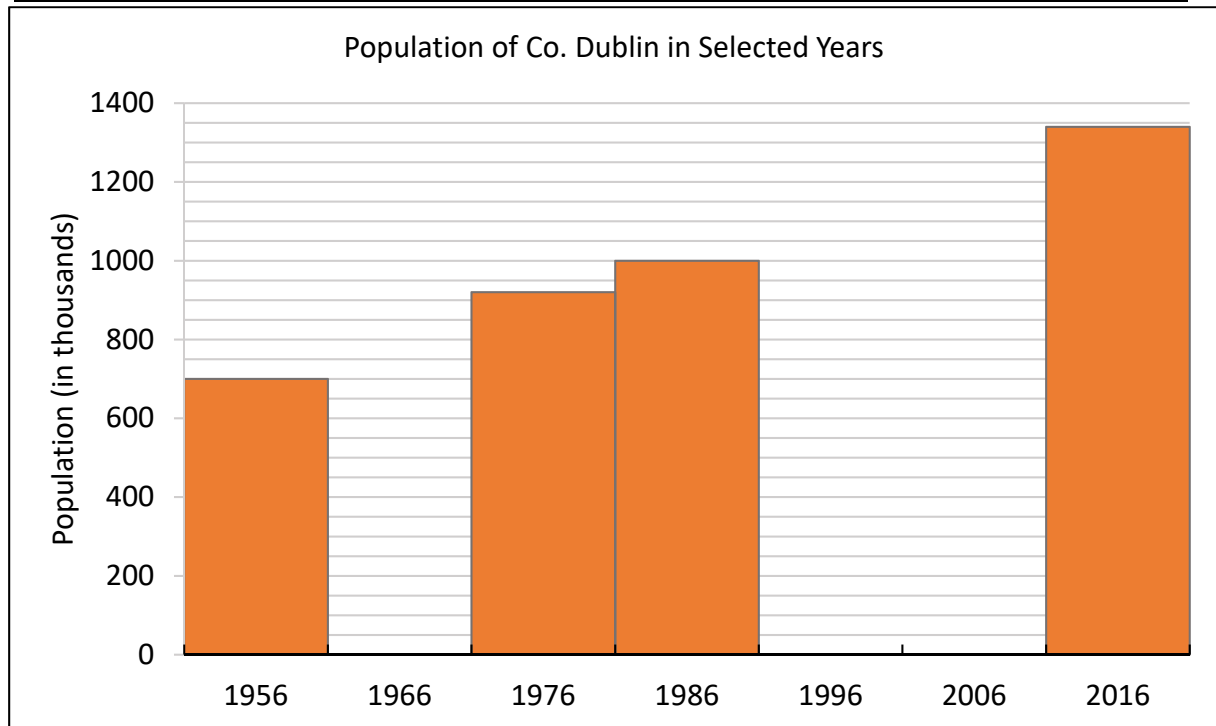
☐

Question 4

- (a) Examine the table below showing how the population of Co. Dublin has changed from 1956 to 2016 and answer the following questions.

Population of Co. Dublin in Selected Years

Year	1956	1966	1976	1986	1996	2006	2016
Population (in thousands)	700	800	920	1,000	1,100	1,200	1,340



- (i) Complete the graph **above** using the information from the table for the years 1966, 1996 and 2006.

- (ii) What was the population (in thousands) of Co. Dublin in 1956?

- (iii) In which year did the population (in thousands) reach 1,100 in Co. Dublin?

- (iv) Calculate the difference in population (in thousands) in Co. Dublin between 1956 and 2016.

Optional rough work

Answer:

(b) (i) Name **one** town or city in Ireland that you have studied.

--

(ii)



Explain **one** problem that is found in a town or city that you have studied.

Question 5

- (a) Examine the headline and the aerial photograph below about the closure of bogs and peat burning power stations and answer each of the following questions.



- (i) In which of the following areas of the photograph can an area of bog be seen?
Tick (✓) the correct box.

The left foreground ☐
The left background ☐
The right middleground ☐

- (ii) The extraction (removal) of peat from a bog is an example of which type of economic activity:

Tick (✓) the correct box.

Primary ☐
Secondary ☐
Tertiary ☐

- (iii) Describe **one** factor that influenced the location of the peat burning power station shown in the photograph on the previous page.

(b)



- (i) Use the terms in the box to complete the paragraph below.

Fossil fuels	Deforestation
Climate change	Carbon dioxide

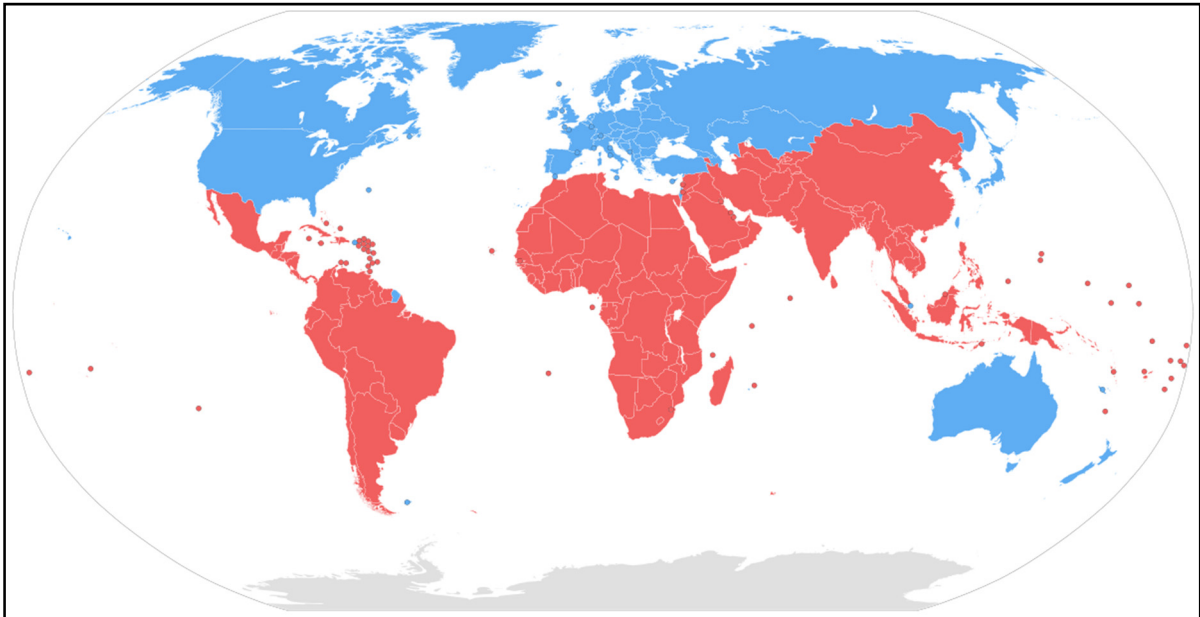
The average temperature of the earth is rising due to increased greenhouse gases in the atmosphere, this is causing _____. When _____ are burned in our homes, factories and by travelling in cars and planes gases, for example _____, are released into the atmosphere. The removal of trees, known as _____, is also making this problem worse.

(ii) Explain **two** impacts of climate change.

1.
2.

Question 6

- (a) Examine the map below which shows the world divided into economically developed and economically developing countries and answer each of the following questions.



- (i) The area in blue is commonly referred to as the Global North.
Tick (✓) the correct box.

True ☐

False ☐

- (ii) The area in red is made up of developed countries.
Tick (✓) the correct box.

True ☐

False ☐

- (iii) Ireland is an example of an economically developed country.
Tick (✓) the correct box.

True ☐

False ☐

- (iv) One reason multinational companies (MNCs) are attracted to build factories in the countries in red is because of cheaper wage costs.
Tick (✓) the correct box.

True ☐

False ☐

- (b) A large multinational company is planning to build a supermarket on the edge of a town in Ireland.

(i) The table below lists possible impacts of this plan. Indicate whether each is a positive impact or a negative impact by ticking (✓) the correct box for each statement.

Impacts	Positive	Negative
The proposed supermarket will provide jobs for people in the surrounding area.		
Local, family-owned shops will not be able to compete and may be forced to close.		
A new supermarket could provide a new market for local food producers.		
People employed at the new supermarket will pay tax and this money will be used for essential services like hospitals and schools.		
People will not travel to shops in the town centre causing a loss of business.		

(ii) Are job opportunities push factors or pull factors?

Tick (✓) the correct box.

Push factors ☐

Pull factors ☐

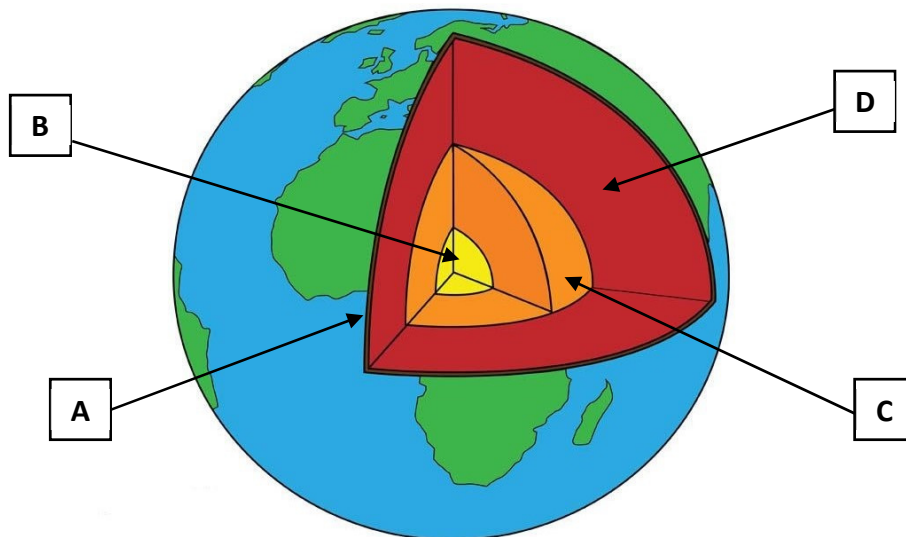
- (c) When people move to live in a new place it can have an impact on the place they leave and the place they move to.

Explain **one** impact of migration.

Question 7

(a) Examine the diagram showing the different layers of the earth.

Match each of the letters **A**, **B**, **C** and **D** with the term that best matches it in the table below.



Term	Letter
Inner core	
Crust	
Outer core	
Mantle	

(b) (i) Which of the following terms best describes a volcano that has not erupted in a long time but may erupt again?

Tick (✓) the correct box.

- Active volcano ☐
- Dormant volcano ☐
- Extinct volcano ☐

- (ii)** Using the terms in the box below, explain how a volcano is formed. Use a labelled diagram(s) to support your answer.

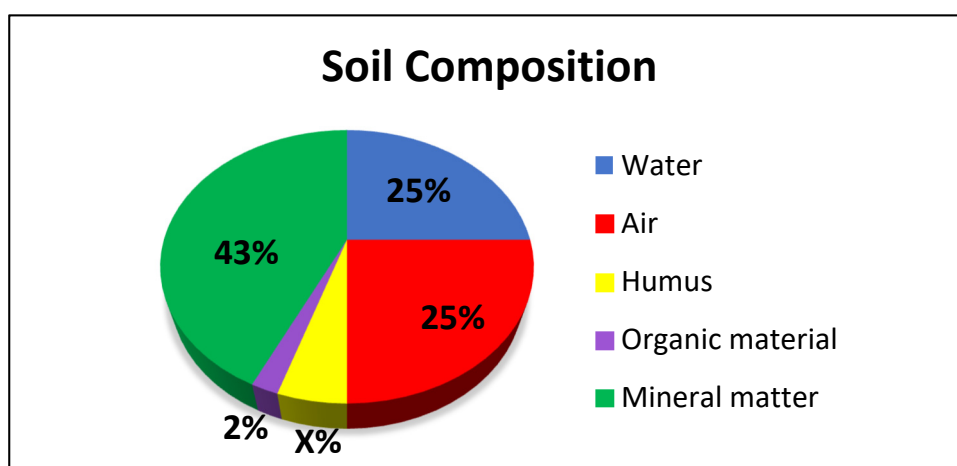
Vent	Magma chamber	Crater
Layers of ash and rock		Lava

[illegible]

(iii) Using an example that you have studied, discuss **one** impact of volcanic activity.

Question 8

(a) Study the pie chart below showing the composition of soil and answer each of the following questions.



(i) Which component of soil has the highest percentage?

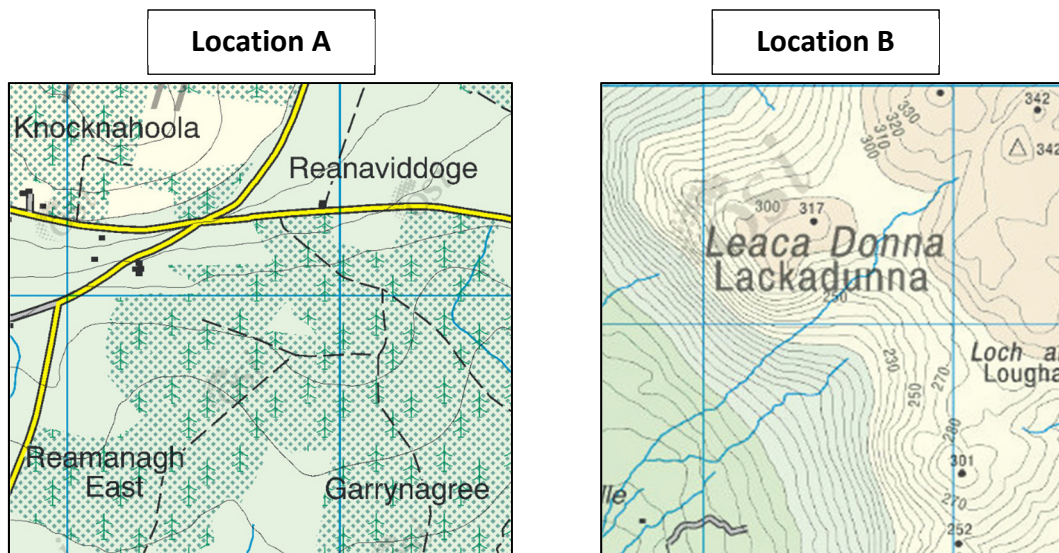
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(ii) Calculate X, the percentage of humus found in soil.

Optional rough work
Answer:

(iii) Explain how vegetation (plants) influences soil.

(b) Study the slopes shown on the two map extracts below and answer each of the following questions.



(i) At which location is an example of a fast type of mass movement most likely to occur?

Location A ☐

Location B ☐

(ii) State briefly **two** reasons for your answer.

1.
2.

- (c) The photographs below were taken after a bogburst in Co. Leitrim in 2020 where tonnes of waterlogged peat flowed downhill. Primary economic activities in the area were greatly affected.



- (i) Name **two** types of primary economic activity that can be seen in the photographs above.

1.
2.

- (ii) Describe **one** effect that the bogburst had on the landscape shown in the photographs.

Question 9

(a) (i) Insert the correct category of rock from the list below into the table for each rock type.

- Igneous
- Sedimentary
- Metamorphic.

Rock Type	Category
Limestone	
Marble	
Basalt	

(ii) Name a location in Ireland where each rock type named below can be found.

Rock Type	Location in Ireland
Limestone	
Marble	
Basalt	

(b) Rocks can be exploited in different ways and this exploitation can have many impacts.

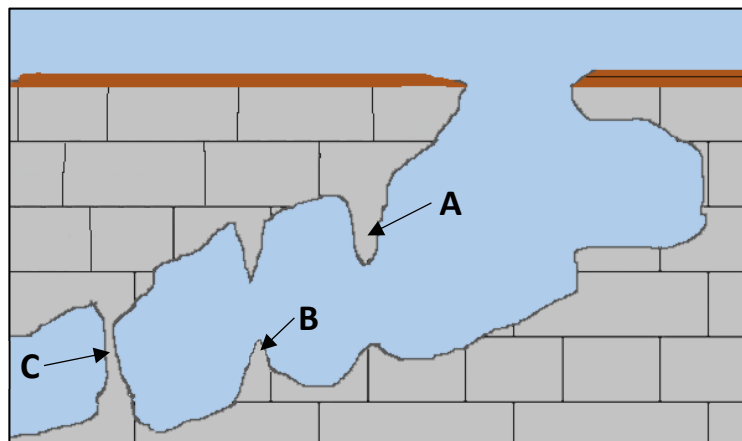


(i) Name **one** location that you have studied where rocks are exploited **and** state how rocks are being exploited at this location.

(ii) Explain **one** economic **and one** environmental impact of exploiting rocks.

Economic Impact:
Environmental Impact:

(c) Study the diagram below which shows some of the features that are found in a limestone landscape and answer each of the following questions.



(i) Name each of the features labelled **A**, **B** and **C**.

A.
B.
C.

(ii) Name **two** surface features that can be found in karst landscapes.

1.
2.

(iii) One process that leads to the development of a karst landscape is carbonation. What type of weathering is carbonation?

Tick (✓) the correct box.

Chemical ☐

Mechanical ☐

(iv) Explain how limestone rock is weathered by the process of carbonation.

Question 10

- (a) Each of the questions below relate to tourism in the Dungarvan area shown on the Ordnance Survey map accompanying this paper. Use the map and legend supplied to answer each of the following questions.

- (i) Name **two** cycle routes shown on the map.

1.
2.

- (ii) Name **and** give a six figure grid reference for **one** other tourist attraction from the area shown on the map, not mentioned in part (i).

Tourist attraction:
Six figure grid reference:

- (iii) Explain why the attraction you named in part (ii) would attract tourists to the area.

- (b) Read the article below about forestry in the Dublin Mountains and answer each of the following questions.

Dublin Mountains Makeover to Positively Transform Forests for Generations to Come

A long term project has been announced that will see nine forests in the Dublin Mountains converted from commercial forestry to recreational use.

It is estimated that 600,000 people visit the Dublin Mountains forest parks each year. These forests are among the most important recreational sites for a growing urban population.



- (i) How many forests will be part of the project?

--

- (ii) How many people are estimated to visit the Dublin Mountains forest parks each year?

--

- (iii) Explain **one** way that tourists can have a negative impact on the areas they visit.

Additional answer space.
Label all work clearly with the question number and part.

Additional answer space.
Label all work clearly with the question number and part.

Acknowledgements

Images

Images on page 3: <https://oilprice.com/Latest-Energy-News/World-News/UK-Centrica-To-Exit-Oil-And-Gas-Production.html> (Accessed: June 2020); <https://www.ifac.ie/news/solar-energy-farmers-to-benefit-from-finance-act-changes/> (Accessed: June 2020); <https://www.powergenadvancement.com/news/tidal-energy-project-approved-for-english-channel-regions/> (Accessed: June 2020); <https://www.ft.com/content/1ce6db64-ce52-40b7-825b-7e42a82f2d8c> (Accessed: February 2021)

Images on page 4: <https://gardenerspath.com/> (Accessed: August 2021); <https://www.arklayrichardswind.com> (Accessed: August 2021); <https://www.forging-ahead.co.uk> (Accessed: August 2021)

Image on page 5: www.googleearth.com (Accessed: October 2020)

Images on page 9: www.populationpyramid.net (Accessed: August 2020)

Image on page 10: www.irishaid.ie (Accessed: November 2020)

Image on page 12: Data from Central Statistics Office (Accessed: November 2020)

Images on page 13: <https://news.sky.com/story/congestion-costs-uk-economy-8bn-in-2018-an-average-of-1-300-per-driver-11635271> (Accessed: November 2020); <https://www.healthaffairs.org/doi/10.1377/hblog20200130.710866/full/> (Accessed: November 2020)

Image on page 14: <https://www.irishtimes.com/business/energy-and-resources/bye-bye-troika-hello-financial-engineering-1.1884039> (Accessed: October 2020)

Image on page 15: <https://climate.nasa.gov/effects/> (Accessed: October 2020)

Image on page 17: www.wikipedia.org (Accessed: October 2020)

Image on page 19: <https://www.nationalgeographic.org/media/earths-interior> (Accessed: February 2021)

Image on page 21: Data from <https://www.sciencedirect.com/science/article/pii/B9780128092705000145> (Accessed: October 2020)

Image on page 22: <https://maps.scoilnet.ie/OSiMaps/EsriVer17/index.html> (Accessed: January 2020)

Image on page 23: www.twitter.com (Accessed: October 2020)

Images on Page 24: www.asthecrowflies.com (Accessed: October 2020); <https://brasilminingsite.com.br/dalian-iron-ore-surged-7-after-vale-shut-some-mines-in-brazil/> (Accessed: October 2020)

Image on Page 25: State Examinations Commission (Accessed: October 2020)

Image on Page 28: <http://trailrunningireland.com/wp-content/uploads/2017/04/wicklowway5.jpg> (Accessed: November 2020)

Texts

Article on page 10: www.irishaid.ie (Accessed: November 2020)

Headline on page 14: <https://www.theguardian.com/world/2018/nov/27/ireland-closes-peat-bogs-climate-change> (Accessed: October 2020)

Article on page 28: <https://www.coillte.ie/coillte-dublin-mountains-makeover-to-transform-forests/> (Accessed: November 2020)

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Junior Cycle Final Examination – Common Level

Geography

Thursday 8 June

Afternoon 1:30 - 3:30