



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Cycle Final Examination 2022

Geography

Common Level

Friday 10 June Morning 9:30 - 11:30

360 marks

Examination Number

----------------------	----------------------	----------------------	----------------------	----------------------

Day and Month of Birth

----------------------	----------------------	----------------------	----------------------

For example, 3rd February
is entered as 0302

Centre Stamp

--

For Examiner Use Only		
Question	Exr.	Adv. Exr.
1		
2		
3		
4		
5		
6		
7		
8		
9		
Total		
Grade		

Instructions

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

Answer all questions.

The questions do not all carry equal marks.

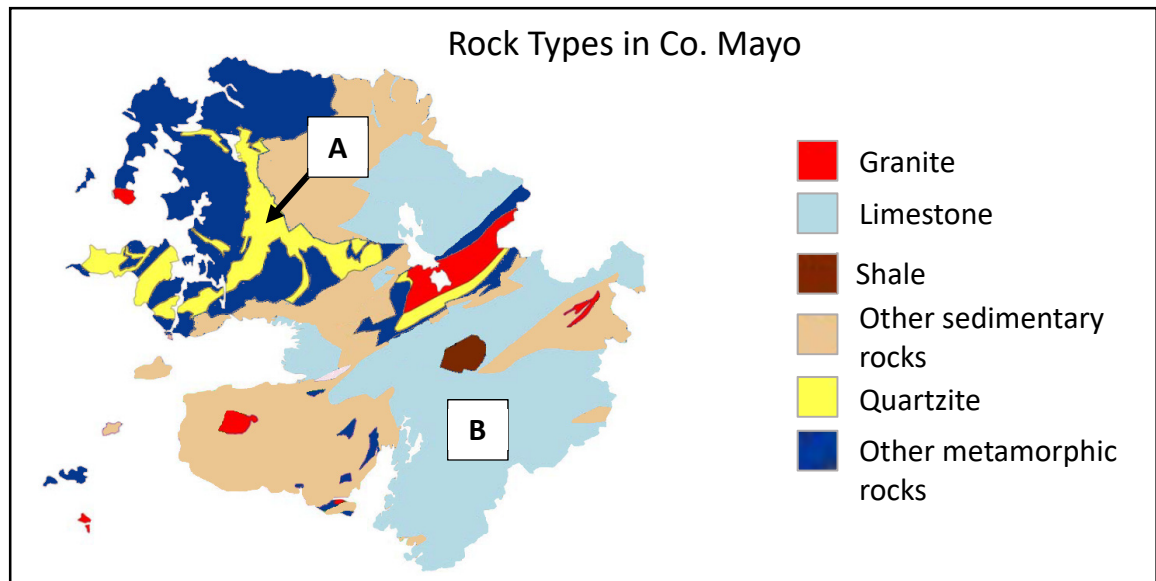
Write your answers in blue or black pen. You may use pencil and colouring pencils for sketches, graphs and diagrams only.

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 map of Co. Mayo below showing the rock types found in the county and answer each of the following questions.



- (i) Which of the following rock types can be found at the location labelled **A**?
Tick (✓) the correct box.

Granite ☐

Limestone ☐

Quartzite ☐

- (ii) Name the sedimentary rock found in the area marked **B**.

- (iii) Name **one** type of igneous rock shown on the map above.

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



Plan to protect busy Croagh Patrick

The administrator of St Mary's Parish, Westport, has said that some weathering and erosion on the mountain is due to climatic factors. However, most of it is human-related and linked to the mountain's increased popularity as a climbing destination, attracting an estimated 100,000 climbers each year.

- (i) How many people are estimated to visit Croagh Patrick each year?

Question 2

- (a) (i) Name a factory in your local area that you have studied.

--

- (ii) Using information from the factory named above, name **two** inputs, **two** processes and **two** outputs from that factory.

Inputs	1:
	2:

Processes	1:
	2:

Outputs	1:
	2:

- (iii) Which of the following sentences best describes a footloose industry?
Tick (✓) the correct box.

An industry that can be located at a wide variety of places without being tied to the factors of production. ☐

An industry that needs to locate near bulky raw materials. ☐

(b) The aerial photograph below shows the area around Rosslare Harbour.



A multinational company has factories in the area and has decided to build a new factory in the location marked **X**.

(i) In which of the following areas of the photograph above can industrial buildings be seen?

Tick (✓) the correct box.

North west ☐

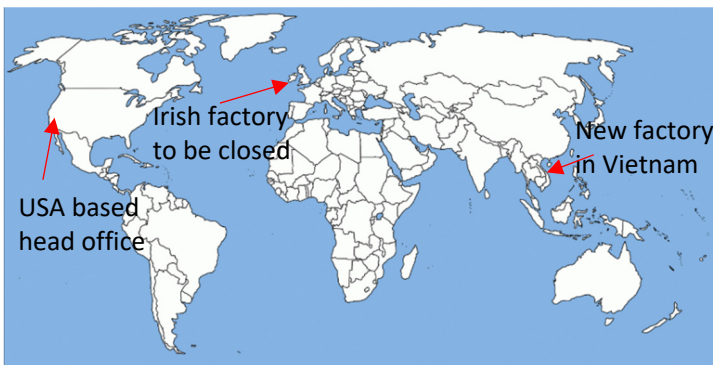
South east ☐

South west ☐

- (ii) Explain **two** reasons why the area marked **X** would be a good location for a factory.
Use evidence from the photograph to support each reason.

Reason 1:
Reason 2:

- (c) Examine the article below about a multinational company moving the location of one of its factories and answer each of the following questions.



USA based head office

Irish factory to be closed

New factory in Vietnam

A multinational company, whose head office is in the USA, has decided to relocate one of their factories from Ireland to Vietnam in Asia. This will result in the loss of 400 jobs in the large Irish town where the factory is currently located.

- (i) Name **one** impact of the relocation mentioned in the article above.

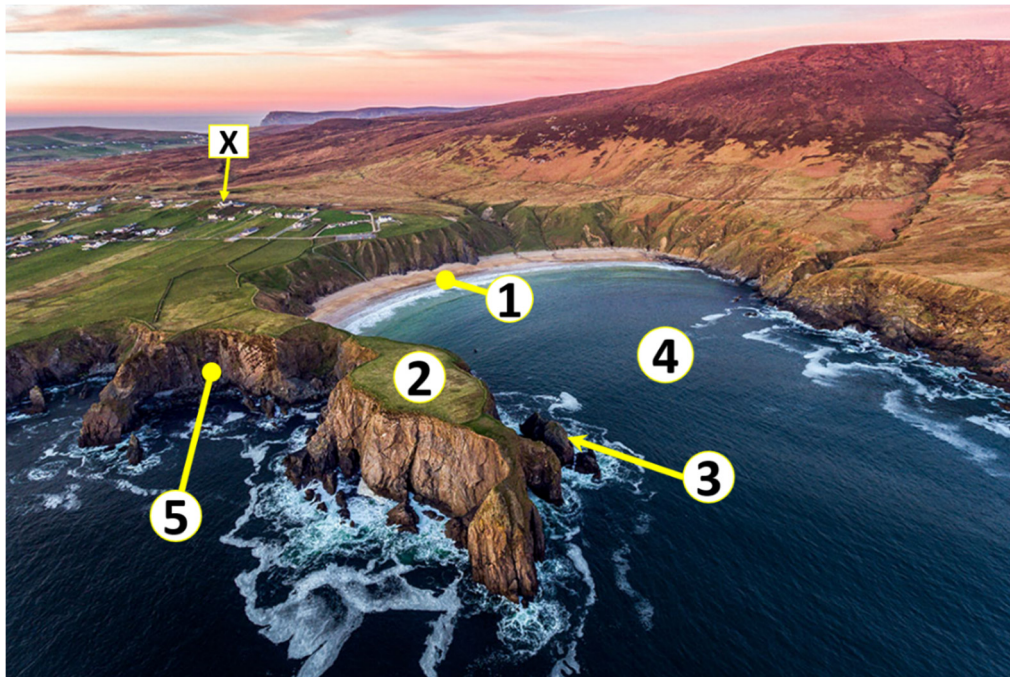
--

- (ii) State **one** reason why a multinational company would decide to move a factory from a developed country, like Ireland, to a developing country, like Vietnam.

- (iii) How does this decision by the multinational company to move one of its factories to another country show that we live in a globalised and interconnected world?

Question 3

- (a) Examine the photograph of a coastal area shown below and answer each of the following questions.



- (i) Match each of the labels on the photograph 1 to 5 with the feature that best matches it in the table below. One has been completed for you.

Feature	Number
Headland	2
Sea stack	
Beach	
Cliff	
Bay	

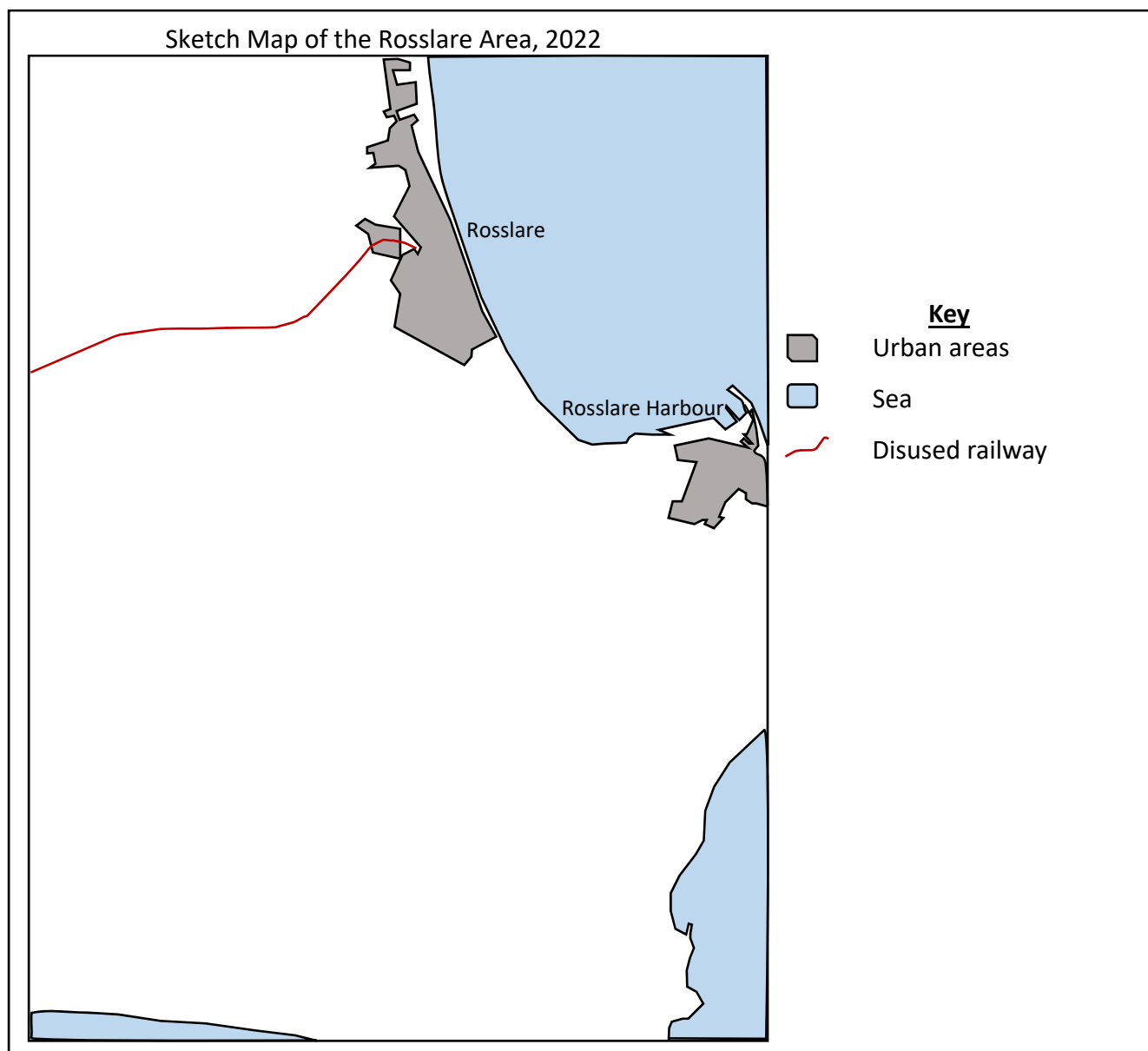
- (ii) The house labelled X on the photograph is a holiday home for tourists. Describe **one** reason why the area on the photograph would attract tourists.

- (iii) Explain how longshore drift transports material along the coast.
You may also draw a diagram if you wish.

Space for diagram (optional)

- (b) Examine the Ordnance Survey map and legend supplied with this paper. Answer each of the following questions.

- (i) Complete the sketch map of the Rosslare area on page 11 by showing and labelling each of the following:
- The N25 national primary road
 - The railway line
 - **One** example of tourist accommodation
 - **One** named tourist attraction.



- (ii) What is the straight line distance between the two railway stations on the Ordnance Survey map? Tick (✓) the correct box.

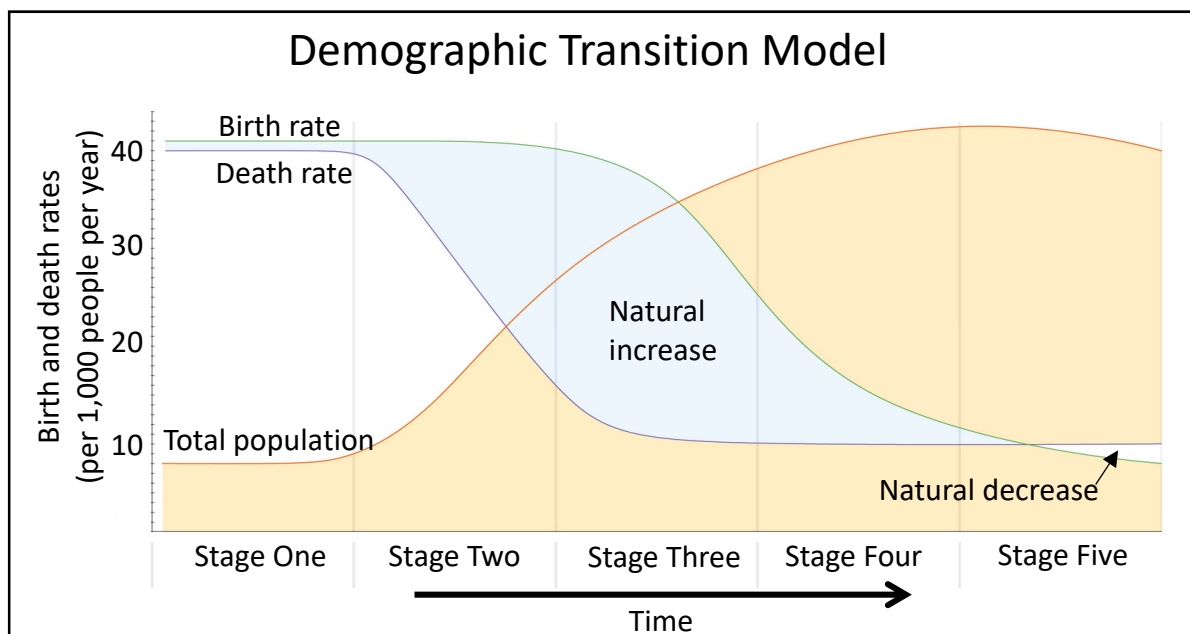
2.8 kilometres ☐ 4.5 kilometres ☐ 9 kilometres ☐

- (iii) Name **two** urban functions in the Rosslare area **and** give evidence of each function from the map in the table below. One function and evidence of that function from the map has been included for you.

Urban Function	Evidence of Function from Map
Tourist	Beach

Question 4

- (a) Examine the demographic transition model below and answer each of the following questions by ticking (✓) the correct box for each.



- | | | |
|--|--------------------------|--------------------------|
| | True | False |
| (i) The birth rate is increasing during stage 3. | ☐ | ☐ |
| (ii) The death rate is highest in stage 4. | ☐ | ☐ |
| (iii) Total population growth in stage 4 is slower than in stage 2. | ☐ | ☐ |
| (iv) The death rate being lower than the birth rate is the only reason a population increases. | ☐ | ☐ |

- (b) Study the table below which shows data relating to birth and death rates, education and income for Ireland, Sudan and Sierra Leone and answer each of the following questions.

	Birth and death rates 2016		Mean years of schooling		Gross National Income per capita (US\$)	
	Birth rate (per 1,000)	Death rate (per 1,000)	Female	Male	Female	Male
Ireland	13.4	6.4	13	12	44,921	66,583
Sudan	32.9	7.3	3	4	1,759	6,168
Sierra Leone	34.5	12.3	3	4	1,238	1,525

- (i) Which country from the table on page 12 has the highest mean years of schooling for males? Tick (✓) the correct box.

Ireland ☐

Sudan ☐

Sierra Leone ☐

- (ii) What was the Gross National Income per capita (in US\$) for females in Sierra Leone?

--

- (iii) Calculate the natural increase in population (per 1,000) in Sudan for 2016.

Optional rough work:

Answer:

- (c) Read the article about aid in South Sudan below and answer each of the following questions.

Aid Project in South Sudan

When the aid project started in 2016, there were no schools. Since then, the community has built new school buildings and parents are strongly involved in their children's education through Parent-Teacher Associations.

A total of 130 teachers received training with the project, and more than 7,000 pupils can access learning spaces and materials.

- (i) How many teachers were trained as part of this aid project?

--

- (ii) What is the type of aid described in the article most commonly known as?
Tick (✓) the correct box.

Emergency aid ☐

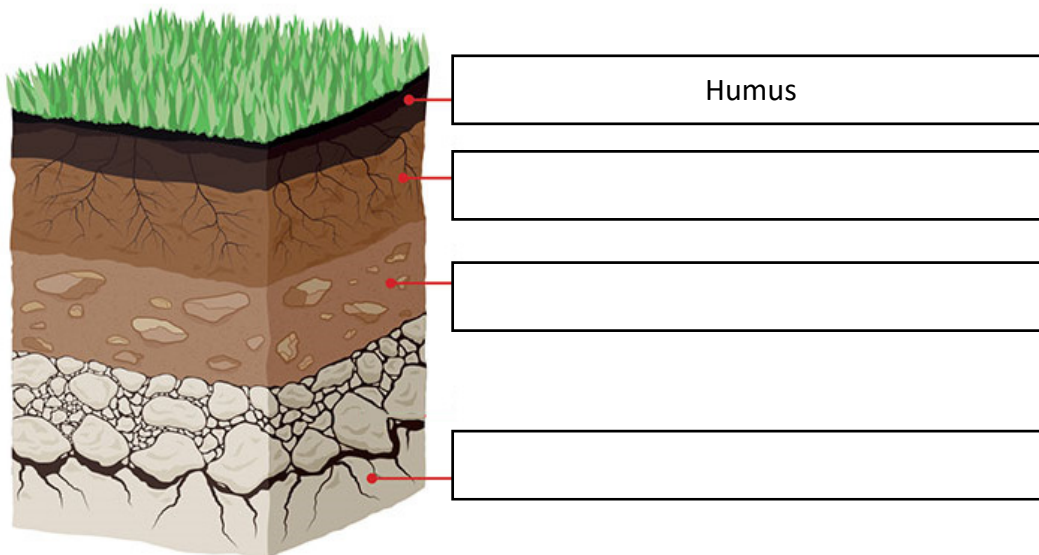
Development aid ☐

- (iii) Education for young people can impact on gender equality and life expectancy.
Explain how providing young people with education can have an impact on either gender equality **or** life expectancy.

Question 5

- (a) (i) Use the terms in the box to correctly label the soil profile diagram below. One has been completed for you.

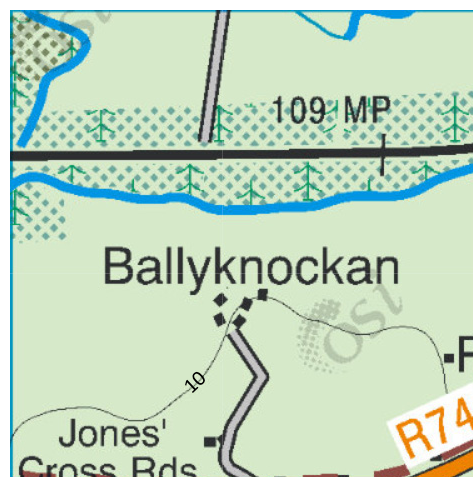
Humus	Bedrock	Topsoil	Subsoil
-------	---------	---------	---------



- (ii) Name **one** soil type you have studied.

--

- (b) Examine the aerial photograph and map extract below answer each of the following questions.



- (i) Which of the following types of forest is the most common in the grid square shown above?
Tick (✓) the correct box.

Coniferous plantation ☐

Deciduous woodland ☐

- (ii) Name **one** example of a primary economic activity, other than forestry.

--

- (iii) Explain **one** way the physical landscape has influenced the development of primary economic activities in the area shown in the aerial photograph and/or map extract on page 15.

- (iv) Explain **one** negative impact of deforestation.

Question 6

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

It is planned that the Renewable Electricity Support Scheme will increase Ireland's share of renewable energy. 70% of Ireland's energy should be renewable by 2030.

The Minister for Climate Action said "Ireland is currently 86% reliant on fossil fuel. We must reduce this dependence and move to cleaner, more renewable energy."



- (i) According to the article, what percentage of Ireland's energy should be renewable by 2030?

--

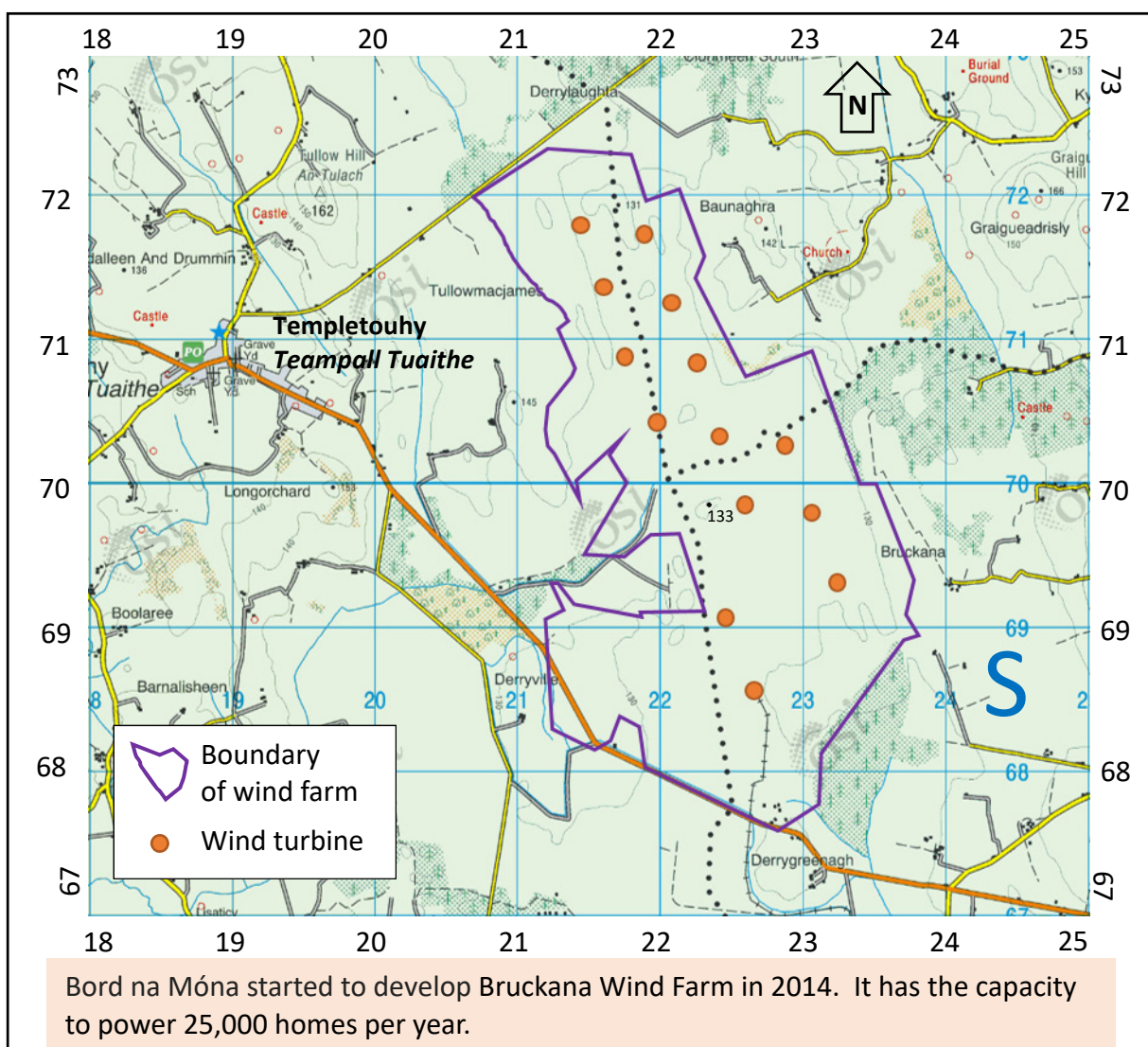
- (ii) Ireland is currently 86% reliant on fossil fuel. Which **two** of the following are examples of fossil fuels?

Tick (✓) the **two** correct boxes.

- | | |
|----------------------|--------------------------|
| Solar | ☐ |
| Coal | ☐ |
| Hydro-electric power | ☐ |
| Peat | ☐ |

- (iii) Briefly explain the difference between renewable energy and non-renewable energy.

- (b) Examine the Ordnance Survey map extract and information below showing the village of Templetohy and Bruckana Wind Farm.



- (i) How many homes can be powered by Bruckana Wind Farm per year?

- (ii) What is the approximate area of Bruckana Wind Farm? Tick (✓) the correct box.

4 km² ☐

7 km² ☐

15 km² ☐

- (iii) The highest area of land inside the wind farm is shown on the map extract above as a spot height showing 133 metres.
Give the location, as a six-figure grid reference, of this spot height.

- (iv) There were arguments for and against the development of Bruckana Wind Farm from the people living in the nearby village of Templetouhy.

Explain in detail **one** argument for **or one** argument against the development of the wind farm that the people of Templetuohy may have raised.

Question 7

(a) Examine the aerial photograph below which shows the area around a town in Co. Cork and answer each of the following questions.

(i) Is the river shown in the photograph in the upper or lower course?

Tick (✓) the correct box.

Upper course ☐

Lower course ☐

(ii) Name **one** river feature that can be seen in the photograph.



(iii) Explain **two** reasons why towns often develop near rivers.

1.
2.

(b) Towns and cities change over time. Urban change can have many different effects.



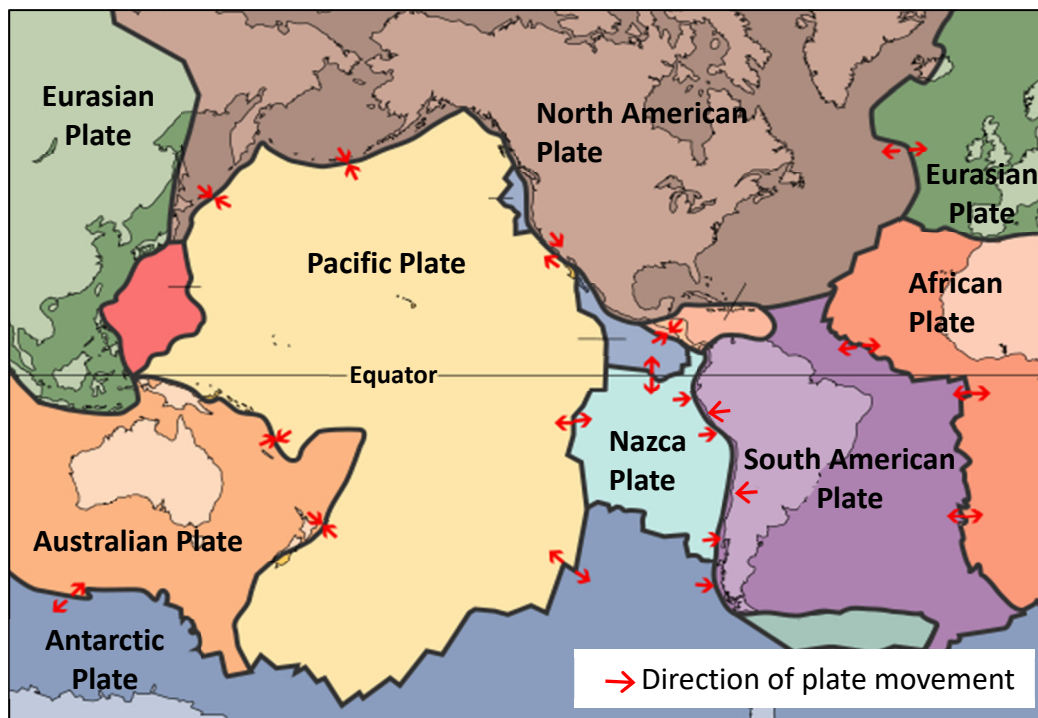
(i) Name **one** town or city that you have studied that has experienced urban change.

--

(ii) Explain **one** negative effect of urban change in the town or city you named in part **(i)**.

Question 8

- (a) Study the map of the world below showing major plates and plate boundaries and answer each of the following questions.



- (i) On which of the following plates is Ireland located? Tick (✓) the correct box.

- Nazca plate ☐
 Pacific plate ☐
 Eurasian plate ☐
 African plate ☐

- (ii) What is the name for the outer layer of the earth that is made up of plates?

- (iii) Name **two** plates that are separating from each other.

1.	
2.	

- (iv) Name **two** landforms that are created when plates separate.

1.	
2.	

- (b) (i)** Name an example of a range of fold mountains located outside of Ireland that you have studied.

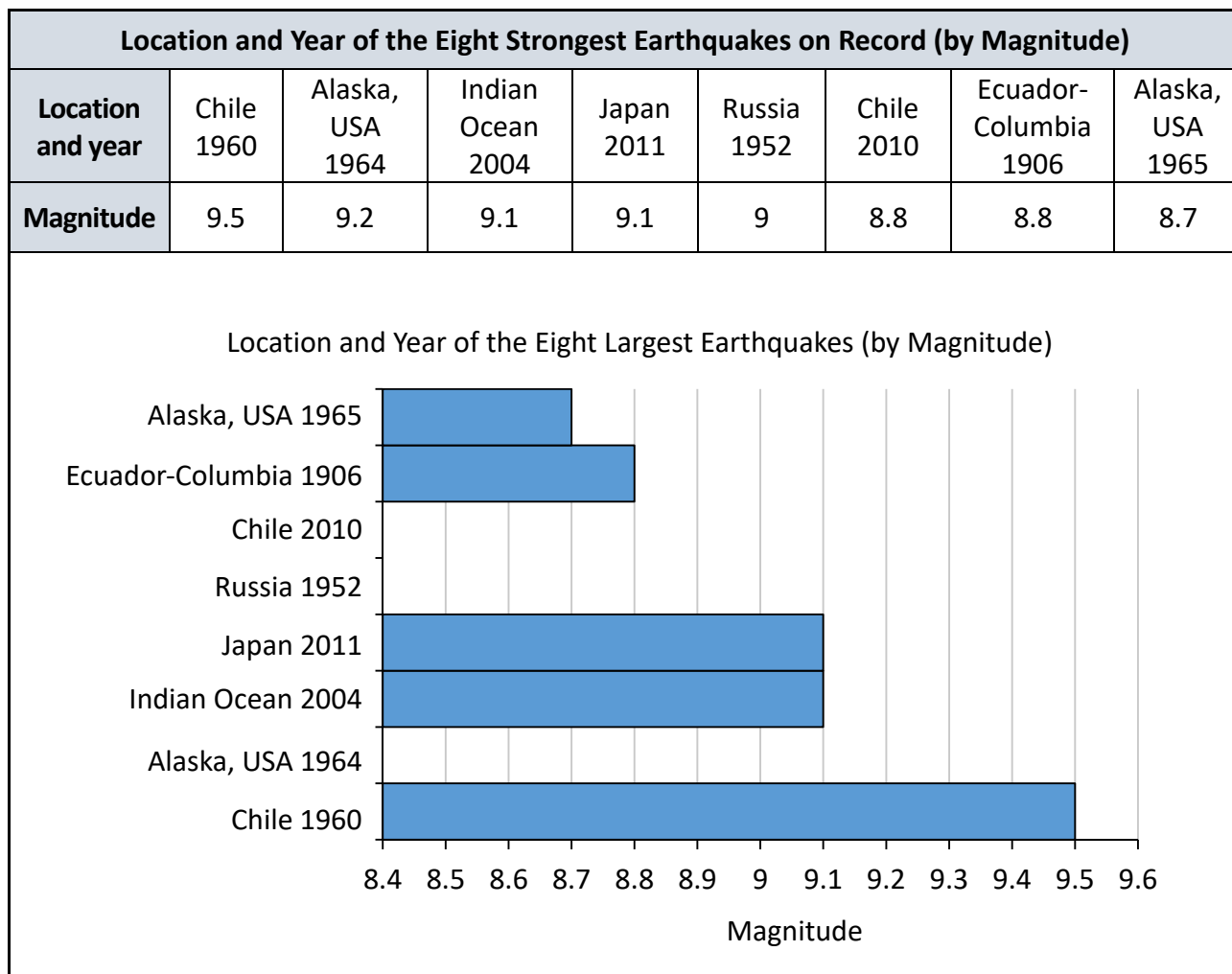
--

- (ii)** Draw a labelled diagram in the space below to show the formation of fold mountains at a colliding plate boundary. Label each of the following on your diagram:

- Two colliding plates
- Convection currents
- Mantle
- Fold mountains.

--

- (c) Study the table and partially completed chart below showing information on the eight strongest earthquakes ever recorded and answer each of the following questions.



- (i) Complete the chart above using the information from the table for the **three** missing bars.

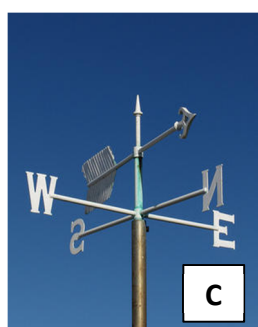
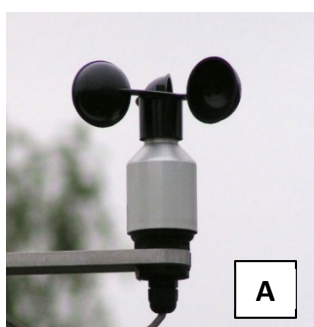
- (ii) What was the magnitude of the earthquake in Japan in 2011?

- (iii) Name **one** instrument used to measure the strength of earthquakes.

(iv) Explain **one** way to reduce the damage caused by earthquakes.

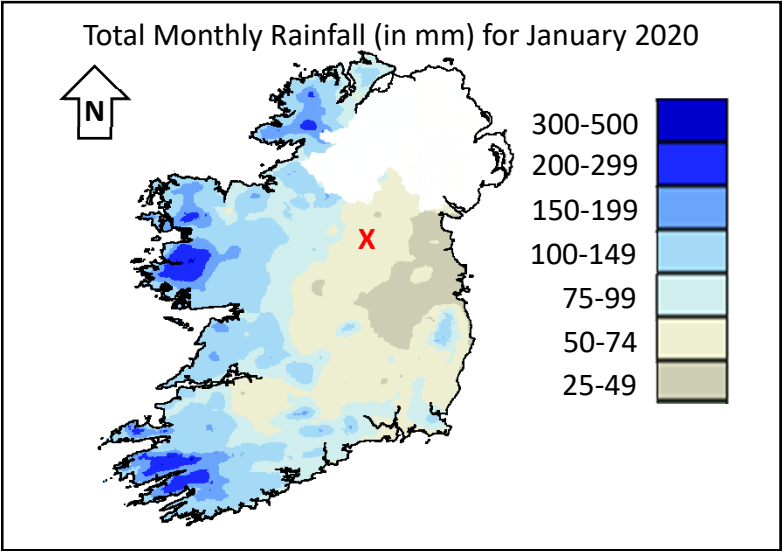
Question 9

(a) (i) Match each of the photographs below, labelled **A** to **D**, to the weather instrument that matches it by writing the correct letter for each instrument in the table below.



Weather Instrument	Letter
Wind/weather vane	
Campbell-Stokes recorder	
Rain gauge	
Anemometer	

Study the map of Ireland below showing the total monthly rainfall in Ireland for January 2020 and answer each of the following questions.



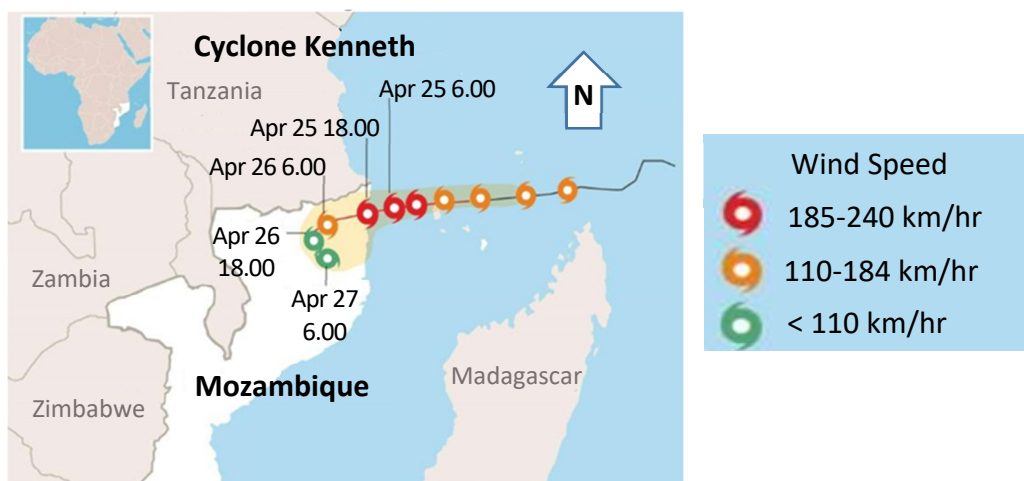
(ii) The area marked **X** on the map experienced 200-299 mm of rainfall in January 2020. Tick (✓) the correct box.

True ☐ False ☐

(iii) The weather map above shows that the highest levels of rainfall were along the west coast of Ireland.

Explain **one** reason why areas along the west coast of Ireland have more rainfall.

- (b) Study the map below showing the path of Cyclone Kenneth from 2019 and answer each of the following questions.



- (i) What was the wind speed of Cyclone Kenneth at 6.00 on April 25th?
Use the correct unit of measurement in your answer.

--

- (ii) What direction was Cyclone Kenneth travelling before it came ashore?
Tick (✓) the correct box.

Westerly ☐

Easterly ☐

Northerly ☐

- (iii) Name a significant weather event that you have studied, other than Cyclone Kenneth.

--

- (iv) List **three** effects of the significant weather event that you studied.

1.	
2.	
3.	

(c) Natural disasters can force people to move away from their homes.

(i) A natural disaster is one example of a push factor. The table below lists other factors that affect migration. Circle the **three** push factors listed in the table.

Job opportunities	Shops and services are nearby	Persecution
Unemployment	Famine	Good schools

(ii) A donor region is the place that a person moves away from when they migrate.
Discuss **one** impact of outward migration on donor regions.

[illegible]

[illegible]

Acknowledgements

Images

Image on page 3: *Geological Survey Ireland*, https://www.gsi.ie/documents/Geoschol_Mayo_Geology.pdf (Accessed: January 2021).

Image on page 3: *Irish Times*, <https://www.irishtimes.com> (Accessed: January 2021).

Image on page 6: www.geohive.ie (Accessed: November 2020).

Image on page 8: www.printable-maps.blogspot.com (Accessed: January 2021).

Image on page 9: www.garethwray.com (Accessed: June 2020).

Image on page 11: *State Examinations Commission*.

Image on page 12: *Our World in Data*, <https://ourworldindata.org/world-population-growth> (Accessed: January 2021).

Images on page 15: <https://www.dearborncounty.org> (Accessed: January 2021); *Scoilnet Maps* <https://maps.scoilnet.ie/OSiMaps/EsriVer17/index.html> (Accessed: December 2020).

Images on page 17 created using <https://icograms.com/icograms-designer.php> (June 2020).

Image on page 18: <https://www.bruckanawindfarm.ie/the-wind-farm/location/> and *Scoilnet Maps* <https://maps.scoilnet.ie/OSiMaps/EsriVer17/index.html> (Accessed: January 2021).

Image on page 20: <http://ballincolligtidytowns.ie/images-of-ballincollig-past/> (Accessed: January 2021).

Images on page 21: [https://images.thestar.com/UazABROX0Ihn-rYmutkuryp-9TU=/1200x795/smart/filters:cb\(2700061000\)/https://www.thestar.com/content/dam/thestar/opinion/editorials/2012/01/01/natural_cities_on_an_urban_planet/urbansprawl.jpeg](https://images.thestar.com/UazABROX0Ihn-rYmutkuryp-9TU=/1200x795/smart/filters:cb(2700061000)/https://www.thestar.com/content/dam/thestar/opinion/editorials/2012/01/01/natural_cities_on_an_urban_planet/urbansprawl.jpeg) (Accessed: January 2021); <https://www.coolgeography.co.uk> (Accessed: January 2021); https://c1.staticflickr.com/1/127/352155011_e28f65923e_b.jpg (Accessed: January 2021).

Image on page 22: *Geological Survey Ireland*, www.gsi.ie (Accessed: August 2020).

Images on page 25: <https://commons.wikimedia.org> (Accessed: January 2021); <https://4.imimg.com/data4/CS/NN/MY-4176277/wind-vane-wind-direction-500x500.jpg> (indiamart.com) (Accessed: January 2021); <https://commons.wikimedia.org> (Accessed: January 2021); <https://www.garlandproducts.com> (Accessed: January 2021).

Image on page 26: *Met Éireann*, www.met.ie (Accessed: August 2020).

Image on page 27: <https://www.apdnews.com/breaking-news/949889.html> (Accessed: January 2021).

Texts

Article on page 3: *Irish Independent*, <https://www.independent.ie> (Accessed: February 2021).

Data on page 12: <http://hdr.undp.org/en/content/table-4-gender-development-index> (Accessed: December 2020).

Article on page 13: <https://reliefweb.int/report/south-sudan/over-7000-pupils-accessed-quality-education-eu-humanitarian-funding-south-sudan> (Accessed: December 2020).

Article on page 17: <https://ieefa.org/ireland-moves-forward-with-70-by-2030-green-energy-goal/> (Accessed: June 2020).

Data on page 24: *United States Geological Service*, <https://www.usgs.gov> (Accessed: January 2021).

Material may have been adapted, for the purpose of assessment, without the authors' prior consent.

Do not write on this page

Copyright notice

This examination paper may contain text or images for which the State Examinations Commission is not the copyright owner, and which may have been adapted, for the purpose of assessment, without the authors' prior consent. This examination paper has been prepared in accordance with Section 53(5) of the *Copyright and Related Rights Act, 2000*. Any subsequent use for a purpose other than the intended purpose is not authorised. The Commission does not accept liability for any infringement of third-party rights arising from unauthorised distribution or use of this examination paper.

Junior Cycle Final Examination – Common Level

Geography

Friday 10 June

Morning 9:30 - 11:30