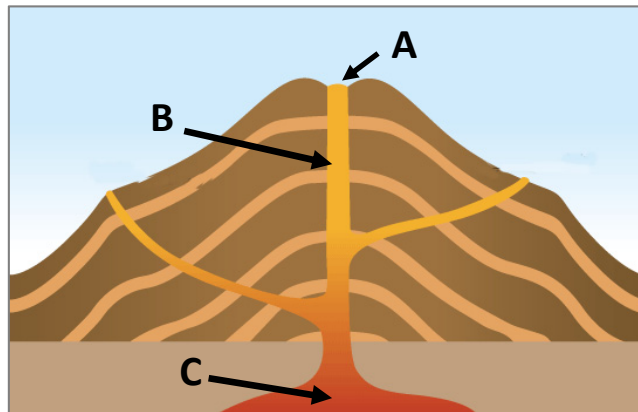SECTION 1 (60 marks)

Answer **ALL** questions.
You have a choice within three questions.
Be sure to return this folder with your answer book.
Otherwise, you will lose marks.

1.   **VOLCANOES**

Amended from www.bbc.co.uk

Examine the diagram of a volcano above.
Name each of the features of the volcano labelled **A**, **B** and **C**.

A.   _____

B.   _____

C.   _____

2.   **EARTHQUAKES**

Circle the correct answer in each of the following statements.

(i)   An earthquake starts at the **epicentre / focus**.

(ii)   The San Andreas Fault is located in **North America / South America**.

(iii)   The magnitude of an earthquake is measured using **convection currents / the Richter scale**.

3.   MASS MOVEMENT

A

Amended from www.geograp.org.uk

B

Amended from www.monasset.com

C

Amended from www.ticotimes.net

D

Amended from www.ukgeoghazards.info

Match each of the photographs **A**, **B**, **C** and **D** above with the type of mass movement that best matches it in the table below. One match has been completed for you.

Type of Mass Movement	Letter
Mudflow	**D**
Landslide	
Bog burst	
Soil creep	

4.   WEATHERING

Amended from www.summitpost.org

Examine the photograph above and circle the correct answer in each of the following statements.

(i)   The landscape shown in the photograph is a **scree slope / limestone pavement**.

(ii)   The landscape shown in the photograph occurs as a result of **freeze-thaw action / carbonation**.

(iii)   **Chemical weathering / mechanical weathering** is most associated with this landscape.
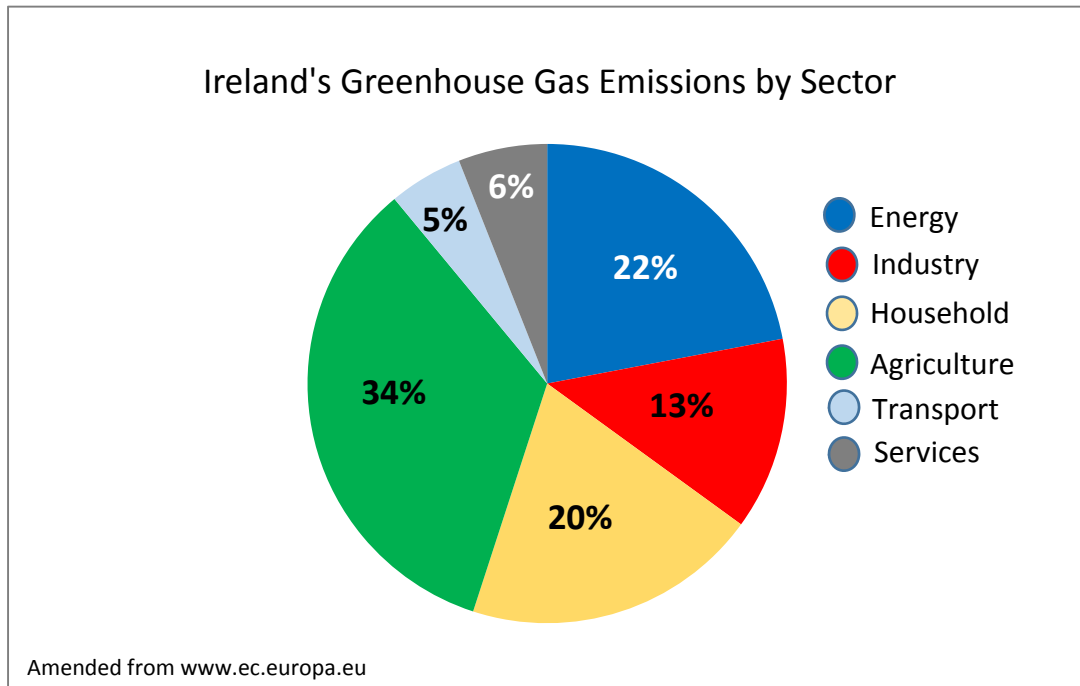

5.   ROCKS

In the boxes provided, match each of the letters in **Column X** with the number of its pair in **Column Y**. One match has been completed for you.

Column X			Column Y			X	Y
A	Sandstone		1	Wicklow Mountains, Co Wicklow		A	
B	Marble		2	Connemara, Co Galway		B	
C	Granite		3	MacGillycuddy's Reeks, Co Kerry		C	
D	Quartzite		4	Croagh Patrick, Co Mayo		D	**4**

6.   GREENHOUSE GAS EMISSIONS

Ireland's Greenhouse Gas Emissions by Sector

Amended from www.ec.europa.eu

Examine the pie chart above showing Ireland's greenhouse gas emissions by sector.

Indicate which **three** of the following statements are correct by ticking (✓) the correct box.

1.   Industry accounts for the greatest amount of greenhouse gas emissions.

2.   Energy and agriculture combined account for more than half of greenhouse gas emissions.

3.   Transport accounts for 5% of greenhouse gas emissions.

4.   Greenhouse gas emissions from industry and household combined is greater than from agriculture.

5.   Greenhouse gas emissions from services is greater than from transport.

1, 2, 3 ☐

1, 4, 5 ☐

2, 3, 5 ☐

2, 4, 5 ☐

ANSWER EITHER 7A OR 7B

7A.   GLACIATION

Circle the correct answer in each of the following statements.

(i)   The feature in the photograph is a **corrie** (**cirque**) / **drumlin**.

(ii)   The feature in the photograph is a feature of **glacial deposition / glacial erosion**.

(iii)   It was formed by the process(es) of **solution / plucking and abrasion**.

OR

7B.   COASTS

Circle the correct answer in each of the following statements.

(i)   The feature labelled **X** in the photograph is a **sand spit / tombolo**.

(ii)   The feature labelled **X** is a feature of **coastal erosion / coastal deposition**.

(iii)   It was formed by the process of **longshore drift / hydraulic action**.

ANSWER EITHER 8A OR 8B

8A.   WEATHER INSTRUMENTS

In the boxes provided, match each of the letters in **Column X** with the number of its pair in **Column Y**. One match has been completed for you.

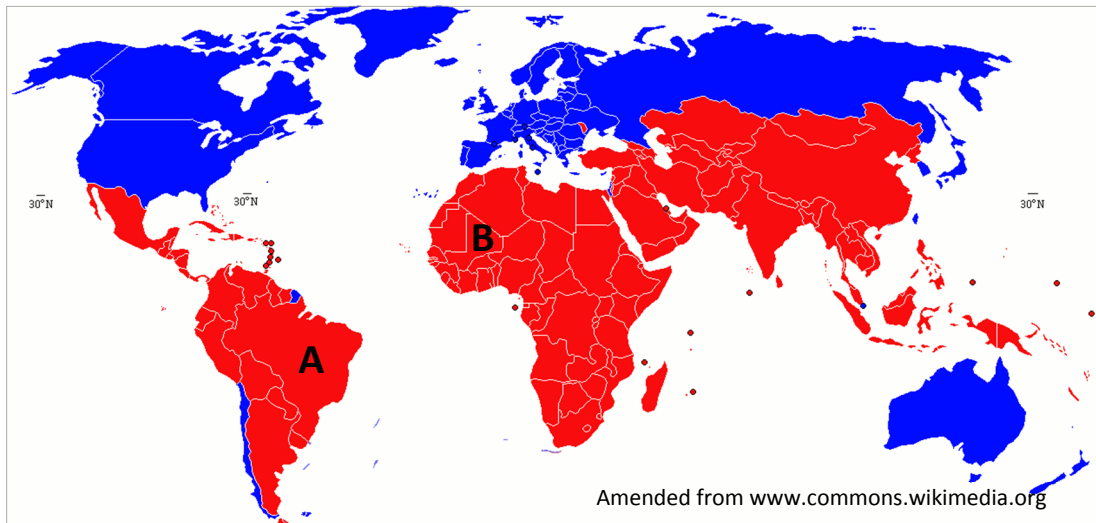| Column X			Column Y		X	Y
A	Anemometer	1	Instrument used to measure atmospheric pressure.		A	
B	Campbell-Stokes recorder	2	Instrument used to shelter weather equipment.		B	
C	Barometer	3	Instrument used to measure wind speed.		C	**1**
D	Stevenson screen	4	Instrument used to record sunshine.		D	

OR

8B.   MIGRATION

In the boxes provided, match each of the letters in **Column X** with the number of its pair in **Column Y**. One match has been completed for you.

Column X			Column Y		X	Y
A	Immigrant	1	Good employment opportunities.		A	
B	Emigrant	2	A person who migrates out of an area.		B	
C	Push factor	3	War and unrest.		C	**3**
D	Pull factor	4	A person who migrates into an area.		D	

ANSWER EITHER 9A OR 9B

9A.   POPULATION

Amended from www.commons.wikimedia.org

Examine the map of the world above and answer each of the following questions.

(i)   What is the name of the country labelled **A**?   _____

(ii)   What is the name of the country labelled **B**?   _____

(iii)   Is the child mortality rate high or low in Country **B**? _____

OR

9B.   FARMING

Farming is a system with Inputs, Processes and Outputs.

In the box below, circle **three** Inputs on a farm.

Harvesting	Capital	Cheese
Labour	Ploughing	Tractor
Sowing	Wool	Milking

10.   SETTLEMENT PATTERNS

Indicate which **three** of the following statements are correct by ticking (✓) the correct box.

1.   Isolated farmhouses are part of a dispersed pattern of settlement.

2.   A housing estate is an example of a linear pattern of settlement.

3.   A dispersed pattern of settlement is common in towns and cities.

4.   A nucleated settlement is also called a clustered settlement.

5.   A linear pattern occurs when houses form a line along a road.

1, 2, 3	☐
1, 4, 5	☐
2, 3, 4	☐
2, 4, 5	☐

11.   ECONOMIC ACTIVITIES

Amended from www.en.wikipedia.org, www.kyyba.com, www.esa.int

Examine the photographs above.
State whether each of the photographs **A**, **B** and **C** represent primary, secondary or tertiary economic activity.

A.   _____

B.   _____

C.   _____

12. **SHANTY TOWNS**

Indicate which **three** of the following statements are correct by ticking (✓) the correct box.

1.   A shanty town is an example of urban planning.

2.   Birth rates are high in shanty towns.

3.   Shanty towns in Calcutta are called bustees.

4.   Poor sanitation and a lack of clean water are major problems in shanty towns.

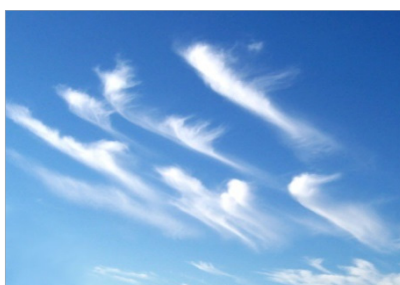5.   Shanty towns are areas of low population densities.

1, 2, 3   ☐

1, 3, 5   ☐

2, 3, 4   ☐

2, 4, 5   ☐

13. **CLOUDS**

Amended from www.en.wikipedia.org

Circle the correct answer in each of the following statements.

(i)   The cloud type shown in the photograph is **cirrus / cumulus**.

(ii)   The cloud type shown in the photograph occurs at a **low / high** altitude.

(iii) These clouds are associated with **fine weather / heavy showers**.

14. WEATHER MAPS

Lines on a weather map joining places of equal rainfall are called:

Isohels ☐

Isotherms ☐

Isotachs ☐

Isohyets ☐

Tick (✓) the correct box.

15. URBANISATION – BUILDING TYPES

In Dublin and other areas, large brick houses with wrought iron railings and rounded-arched doorways were built during which era?

Celtic ☐

Georgian ☐

Viking ☐

Norman ☐

Amended from mapio.net

Tick (✓) the correct box.

16. SETTLEMENT

The main function of an ecclesiastical settlement is:

Industrial ☐

Recreational ☐

Residential ☐

Religious ☐

Tick (✓) the correct box.

17.   **ORDNANCE SURVEY MAP**

Examine the Ordnance Survey map supplied with this paper.

In the boxes provided, match each of the letters in **Column X** with the number of its pair in **Column Y**. One match has been completed for you.

Column X			Column Y			X	Y
A	W 305 704		1	Garda Station		A	
B	W 295 668		2	Spot Height		B	
C	W 337 663		3	Nature Reserve		C	2
D	W 320 655		4	Megalithic tomb		D	

18.   **ORDNANCE SURVEY MAP**

Examine the Ordnance Survey map supplied with this paper.

Indicate whether each of the following statements is true or false by circling the correct option in each case.

(i)   The N22 is a National Secondary Road.   **True / False**

(ii)   The total area of the Ordnance Survey map is 120 km².   **True / False**

(iii)   Dromkeen (W 31 69) is located to the north of Ballina (W 31 67). **True / False**

19. **AERIAL PHOTOGRAPH**

Examine the aerial photograph supplied with this paper.

The bridge can be found in the:

Right background ☐

Centre foreground ☐

Right middleground ☐

Centre middleground ☐

Tick (✓) the correct box.

20. **AERIAL PHOTOGRAPH**

Examine the aerial photograph supplied with this paper.

Circle the correct answer in each of the following statements.

(i)   The trees in the right foreground are mainly **deciduous / coniferous**.

(ii)   This photograph was most likely taken in **winter / summer**.

(iii)   The land-use in the left background is mainly **agricultural / industrial**.