SECTION 2 (90 marks)

Answer any **THREE** questions. All questions carry equal marks.

Question 1. THE EARTH'S SURFACE

A. Earthquakes

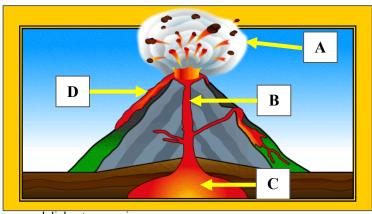
Examine the map opposite and answer each of the following questions.

- (i) Explain what is meant by the term *epicentre*.
- (ii) Explain why the effects of the earthquake were greater in Christchurch than in Wellington.
- (iii) Describe **two** ways to reduce the impact of earthquakes.



(10)

B. Volcanoes



www.edulinks.stcronans.ie

- (i) Examine the diagram of a volcano above and name each of the parts labelled **A**, **B**, **C** and **D**.
- (ii) Explain **one** positive impact and **one** negative impact of volcanoes.

(10)

C. Rivers

Name **one** feature formed by rivers, and with the aid of a labelled diagram, explain how it was formed.

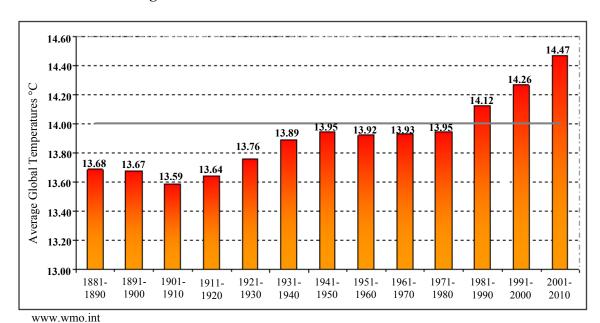
Question 2. THE RESTLESS ATMOSPHERE AND HUMAN ACTIVITY

A. Rainfall

Describe and explain, with the aid of a labelled diagram, how relief rainfall occurs.

(10)

B. Global Warming



Examine the graph above which shows information regarding average global temperatures from 1881 to 2010 and answer each of the following questions.

- (i) During which ten year period was average global temperature at its lowest?
- (ii) What was the average global temperature in the period 1991-2000?
- (iii) Explain **two** ways that human activity contributes to global warming.
- (iv) Describe **one** effect of global warming on Ireland.

(10)

C. Acid Rain

- (i) Explain **two** effects of acid rain.
- (ii) Describe **two** ways of reducing acid rain.

Question 3. GEOGRAPHICAL MIX

Answer ANY THREE of the questions 3A, 3B, 3C, 3D.

3A. Fold Mountains



- (i) With the aid of a labelled diagram, explain how fold mountains are formed.
- (ii) Name **one** range of fold mountains in Ireland.

(10)

3B. Population

% of Population by Age Group in Germany and Brazil in 2013

| Age Group | 0-14 years (%) | 15-64 years (%) | 65+ years (%) |
|-----------|----------------|-----------------|---------------|
| Germany | 13.1 | 66.1 | X |
| Brazil | 24.2 | 68.5 | 7.3 |

US Census Bureau

Examine the table above and answer each of the following questions.

- (i) Calculate **X**, the percentage of the population in Germany aged 65 years and over.
- (ii) Describe **two** challenges facing Germany in the future, given the percentage of its population aged 65 years and over.
- (iii) Explain why the percentage of population in the 0-14 year age group in Brazil is significantly higher than that in Germany.

3C. Soils

- (i) Explain the role in soil formation of any **two** of the following factors:
 - Climate
 - Vegetation
 - Parent rock
 - Micro-organisms.
- (ii) Describe **one** way that soil is important to people.

(10)

3D. Traffic Congestion



- (i) Describe **one** reason why traffic congestion occurs in Irish cities.
- (ii) Explain **two** methods that could be used to reduce traffic congestion in Irish cities.

Question 4. ECONOMIC ACTIVITIES

A. Farming



A farm can be viewed as a system, involving inputs, processes and outputs. Answer each of the following questions with reference to any mixed farm that you have studied.

- (i) Name **two** farm inputs.
- (ii) Describe **two** processes that take place on the farm.
- (iii) Name **two** outputs from the farm and state how each may be used.

(10)

B. Tourism

Climate data for Dublin and the Costa del Sol (Spain)

| Month | June | | July | | August | |
|---------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
| | Hours of sunshine | Mean temp °C | Hours of sunshine | Mean temp °C | Hours of sunshine | Mean temp °C |
| Dublin | 6.5 | 17.0 | 5.0 | 18.0 | 5.0 | 18.0 |
| Costa del Sol | 9.0 | 27.0 | 10.0 | 30.0 | 9.0 | 31.0 |

With reference to the information given in the table above, explain **two** reasons why the Costa del Sol would be a better location than Dublin for a sun holiday.

(10)

C. Fishing

- (i) Explain **two** reasons for the over exploitation of fish.
- (ii) Describe **two** measures that could be used to prevent the over exploitation of fish.

Ouestion 5. AERIAL PHOTOGRAPH AND ORDNANCE SURVEY MAP

A. Examine the **AERIAL PHOTOGRAPH** supplied with this paper.

Draw a sketch map of the aerial photograph. On your sketch map **show** and **label** each of the following:

- Two connecting streets
- A church
- A car park
- A residential area.

(10)

- **B.** Examine the **ORDNANCE SURVEY MAP** supplied with this paper and answer each of the following questions.
 - (i) Name and locate, using a six-figure grid reference, **one** rural settlement pattern evident on the Ordnance Survey map.
 - (ii) Explain why this settlement pattern developed at this location.
 - (iii) Measure the distance in kilometres along the N70 from where it enters the map at V 850 698 to where it meets the N71 at V 905 713.

(12)

C. Examine the **ORDNANCE SURVEY MAP** supplied with this paper.

Explain **two** reasons why there is an absence of settlement north of northing 74, using evidence from the Ordnance Survey map to support each reason.

(8)