Section 2

Allow Three Questions @ 30 marks each

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*.

One explanation @ 2m (2 or 0)

(ii)   Explain why the effects of the earthquake were greater in Christchurch than in Wellington.

Explanation @ 2m (St1 + D1)

(iii)   Describe **two** ways to reduce the impact of earthquakes.

Two descriptions @ 3m each (St1 + D1 + D1)

(10)

B.   Volcanoes

(i)   Examine the diagram of a volcano above and name each of the parts labelled **A**, **B**, **C** and **D**.

Four parts named at 1m each

A = Ash cloud, or two other valid elements	B = Vent
C = Magma chamber	D = Lava, Lava flow

(ii)   Explain **one** positive impact and **one** negative impact of volcanoes.

Positive impact explained at 3m (St 1+D1 +D1)
Negative impact explained at 3m (St 1+D1 +D1)

(10)

C.   Rivers

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

(10)

Feature named @ 1m
Labelled diagram @ 1m
Two explanations of formation @ 4m each (St2 + D1 + D1)
One development mark may be for additional information, not in the written, on a diagram.
One development mark must be a process.

Question 2.   THE RESTLESS ATMOSPHERE AND HUMAN ACTIVITY

A.   Rainfall

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

Labelled diagram 2m
Two description / explanations @ 4m each (St2 + D1 + D1)
One must be Explanation
One development mark may be for additional information, not in the written, on a diagram.

(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 were average global temperatures at their lowest?

Answer: 1901 – 1910 @ 1m

(ii)   What was the average global temperature in the period 1991-2000?

Answer: 14.26°C @ 1m   *(°C must be given)*

(iii)   Explain **two** ways that human activity contributes to global warming.

Two explanations @ 3 marks each (St1 + D1 + D1)

(iv)   Describe **one** effect of global warming on Ireland.

Description of one effect @ 2m (St1 + D1)

(10)

C.   Acid Rain

(i)   Explain **two** effects of acid rain.

Two explanations @ 3 marks each (St1 + D1 + D1)

(ii)   Describe **two** ways of reducing acid rain.

Two descriptions @ 2 marks each (St1 + D1)

(10)

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.

              Labelled diagram 1m

              Two explanations @ 4m each (St2 + D1 + D1)
              One development mark may be for additional information, not in the written, on a diagram.

    (ii)   Name **one** range of fold mountains in Ireland.

              One range named at 1m

                                                                          (10)

3B.   Population

    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.

              Answer: 20.8 @ 1m   *(% not required)*

    (ii)   Describe **two** challenges facing Germany in the future, given the percentage of
           its population aged 65 years and over.

              Two descriptions @ 3 marks each (St1 + D1 + D1)

    (iii)   Explain why the percentage of population in the 0-14 year age group in Brazil
           is significantly higher than that in Germany.

              Explanation @ 3m (S1 + D1 + D1)

                                                                             (10)

3C.   Soils

    (i)   Explain the role in soil formation of any **two** of the following factors:
                 ▪ Climate
                 ▪ Vegetation
                 ▪ Parent rock
                 ▪ Micro-organisms.

              Two factors explained @ 4m each (St2 + D1 + D1)

    (ii)   Describe **one** way that soil is important to people.
              Description @ 2m (St1 + D1)

                                                                                (10)

3D. **Traffic Congestion**

(i)   Describe **one** reason why traffic congestion occurs in Irish cities.

One description @ 2m (St1 + D1)

(ii)   Explain **two** methods that could be used to reduce traffic congestion in Irish cities.

Two explanations at 4m each (St2 + D1 + D1)

(10)

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.

   Two farm inputs named @ 1m each

(ii)   Describe **two** processes that take place on the farm.

   Two processes described @ 2m each (St1 + D1)

(iii) Name **two** outputs from the farm and state how each may be used.

   Two outputs named and use stated @ 2m each (N1 + St1)

(10)

B.   Tourism

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.

Two reasons explained @ 5m each (St2 + D1 + D1 + D1)

(10)

C.   Fishing

(i)   Explain **two** reasons for the over exploitation of fish.

   Two reasons explained @ 3 marks each (St1 + D1+D1)

(ii)   Describe **two** measures that could be used to prevent the over exploitation of
       fish.

   Two measures described @ 2 marks each (St 1 + D1)

(10)

Question 5.   AERIAL PHOTOGRAPH AND ORDNANCE SURVEY MAP

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

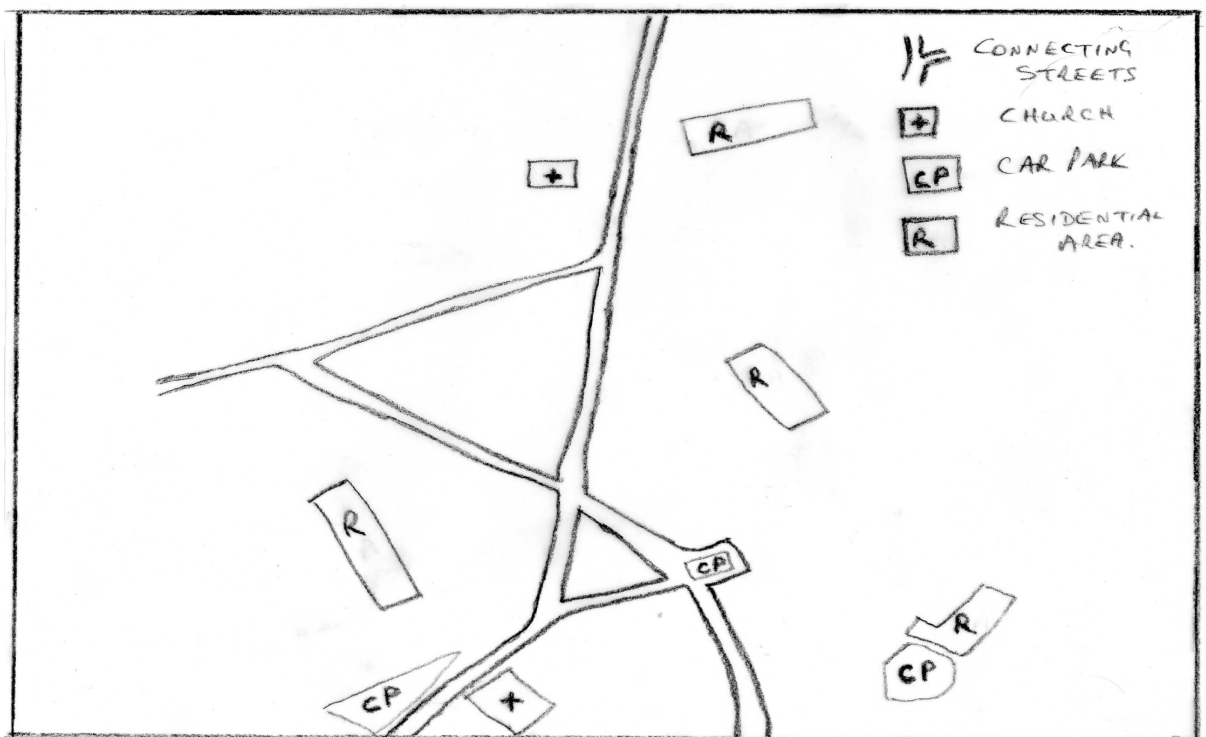Draw a sketch map of the aerial photograph.
On your sketch map **show** and **label** each of the following:

- Two connecting streets

- A church

- A car park

- A residential area.

(10)

Four Features Shown and Named @ 2m each

Shape and Orientation @ 2m (1 + 1)

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.

           Rural settlement pattern named @ 2m
           Grid reference @ 2m

     (ii)   Explain why this settlement pattern developed at this location.

           One explanation @ 4m (St2 + D1+D1)

     (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.

           Distance 5.7km – 6.0 km   **@ 4m** *(km not necessary)*

                                                                              (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.

Two reasons explained @ 4m each (St2 + D1 + Ev1)

                                                                                        (8)