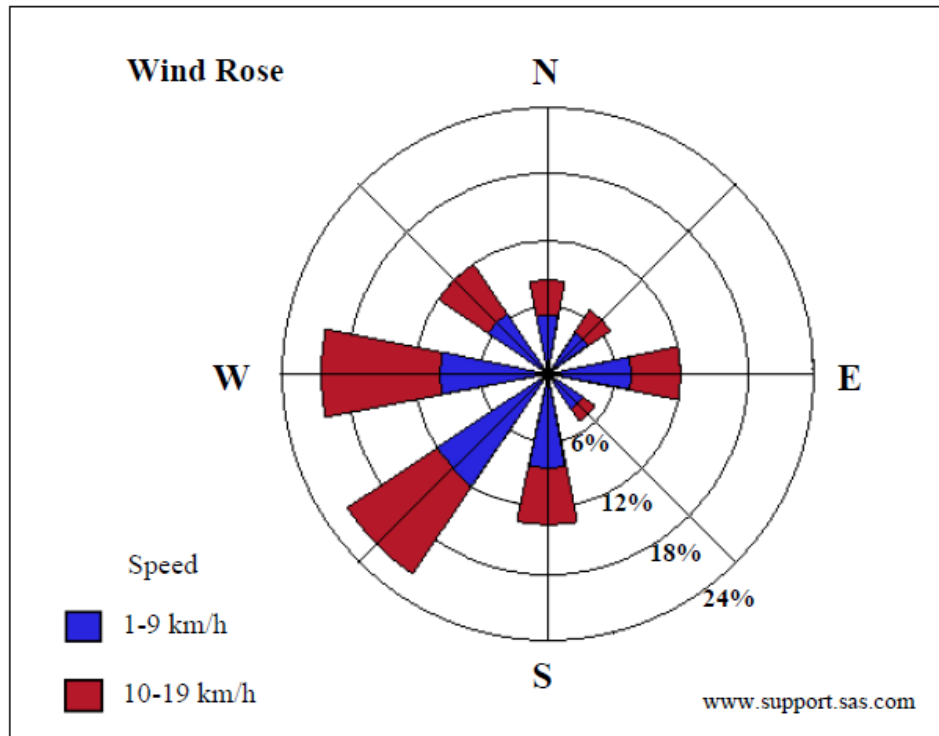




**Weather & Climate**  
**Geography past Exam Questions**  
**Higher Level**

Part 1 – Q8

8. Graphical Interpretation - Weather



Examine the wind rose above and answer each of the following questions.

- (i) What percentage of wind blowing from the South West was at a speed of between 1-9 km/h?

\_\_\_\_\_

- (ii) What percentage of wind blew from the North West?

\_\_\_\_\_

- (iii) From what direction did the wind blow most frequently?

\_\_\_\_\_

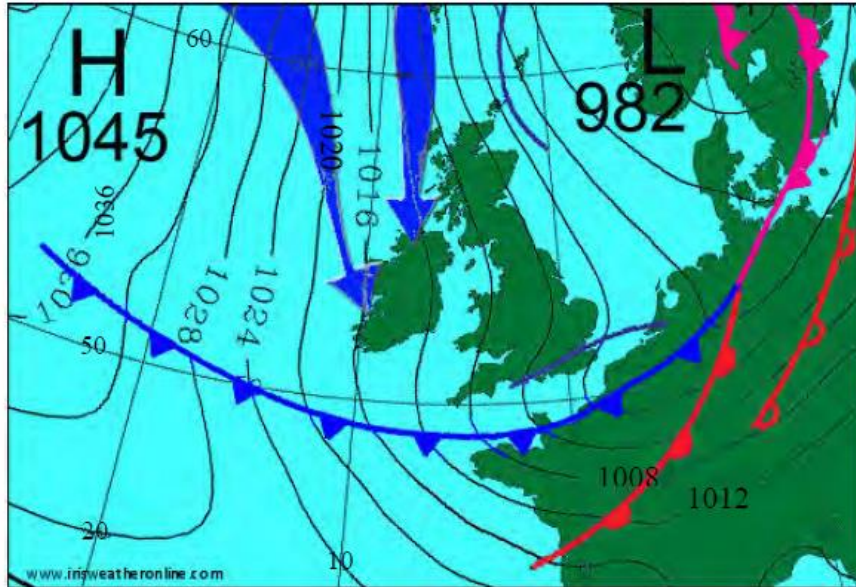
- (iv) From what direction did the wind blow least frequently?

\_\_\_\_\_

[8m]

Part 1 – Q3

3. Weather Chart



Examine the weather chart above.

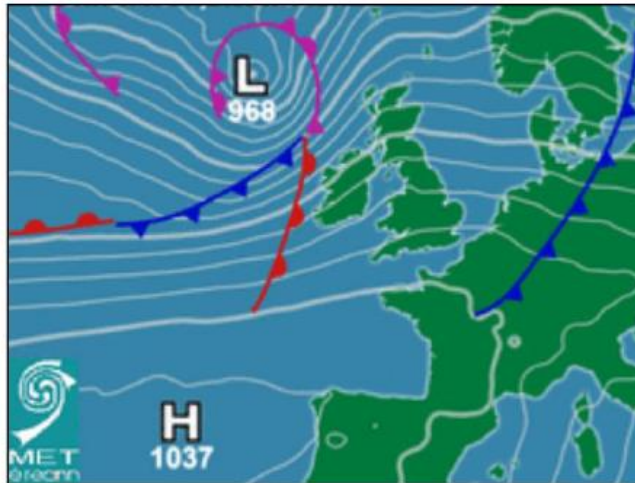
State whether each of the following statements is true or false by ticking the correct box.

- (i) There is a cold northerly airflow over Ireland. True  False
- (ii) There is a cold front over the northern coast of France. True  False
- (iii) There is an anticyclone over Scandinavia. True  False
- (iv) The air pressure nearest to Latitude  $60^\circ$  North and Longitude  $20^\circ$  West, is 1032 hectopascals/millibars. True  False

[8m]

Part 1 – Q6

6. Weather Chart



Examine the Irish weather chart above.

State whether **each** of the following statements is true or false by ticking the correct box.

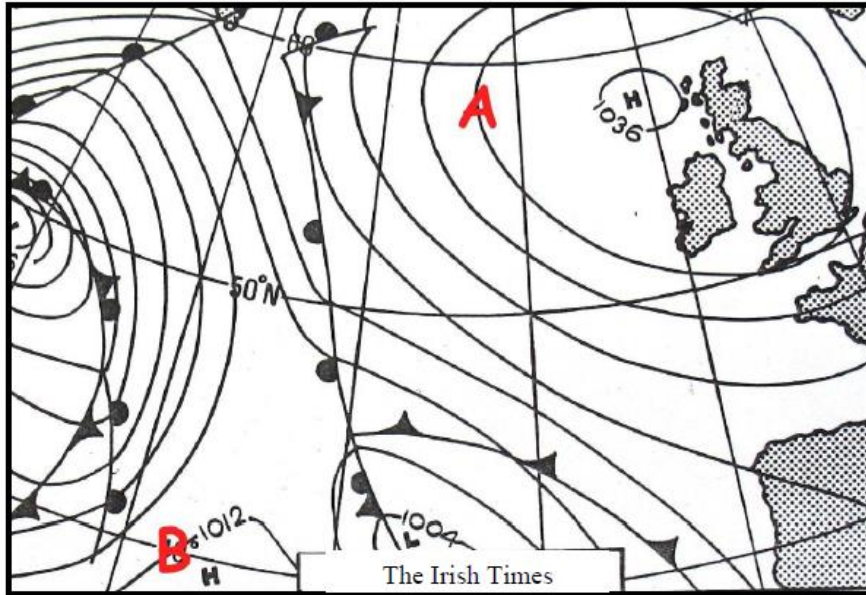
- (i) The weather over the Iberian Peninsula is very calm. True  False
- (ii) There is a cold front over central and northern Europe. True  False
- (iii) There is an anticyclone affecting Ireland and Great Britain. True  False
- (iv) Winds are light over Ireland. True  False

[8m]

Part A – Q6

6. Weather Chart

The Atlantic Weather Chart below shows a weather situation in June. Examine the chart and answer the questions which follow:



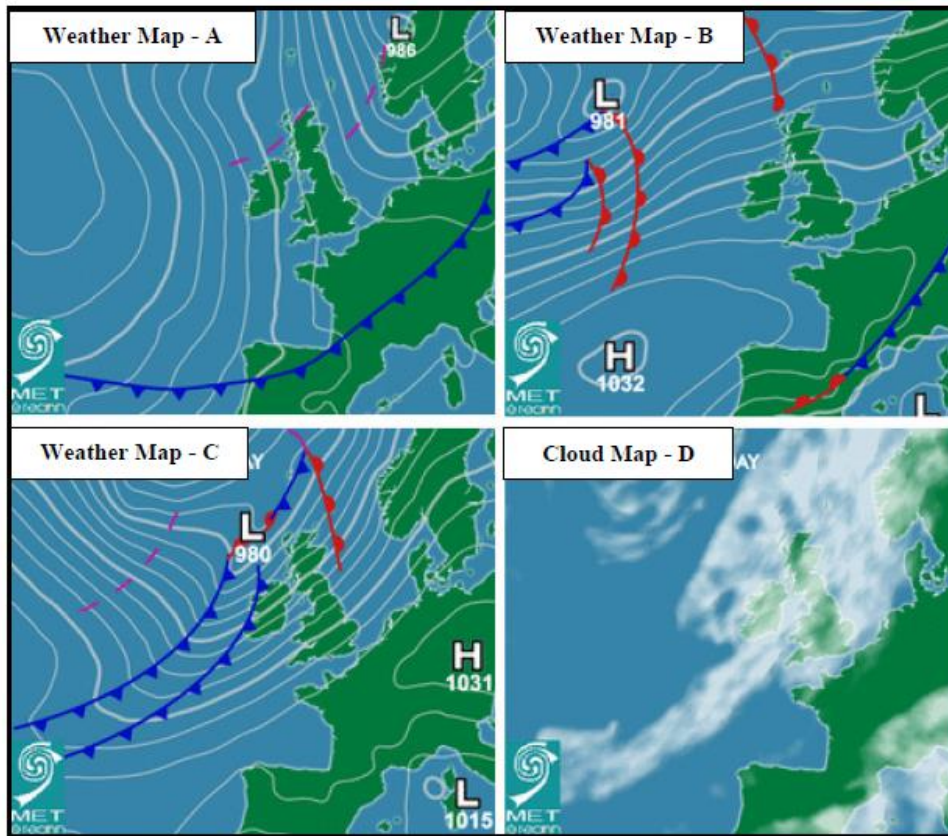
- (i) Is Ireland under the influence of a Depression or an Anticyclone?  
\_\_\_\_\_
  - (ii) Name the type of line at **A** on the map. \_\_\_\_\_
  - (iii) What is the barometric pressure at **B** on the map? \_\_\_\_\_
  - (iv) Which of the descriptions below best describe weather conditions over Ireland?  
Tick the correct box.
- |   |                          |
|---|--------------------------|
| Continuous light or heavy rain          | <input type="checkbox"/> |
| Showers with strong winds               | <input type="checkbox"/> |
| Calm dry weather with warm temperature. | <input type="checkbox"/> |

[8m]

Part A – Q 12

12. Atlantic Weather Charts

Examine the Weather and Cloud Maps below and answer the questions that follow:



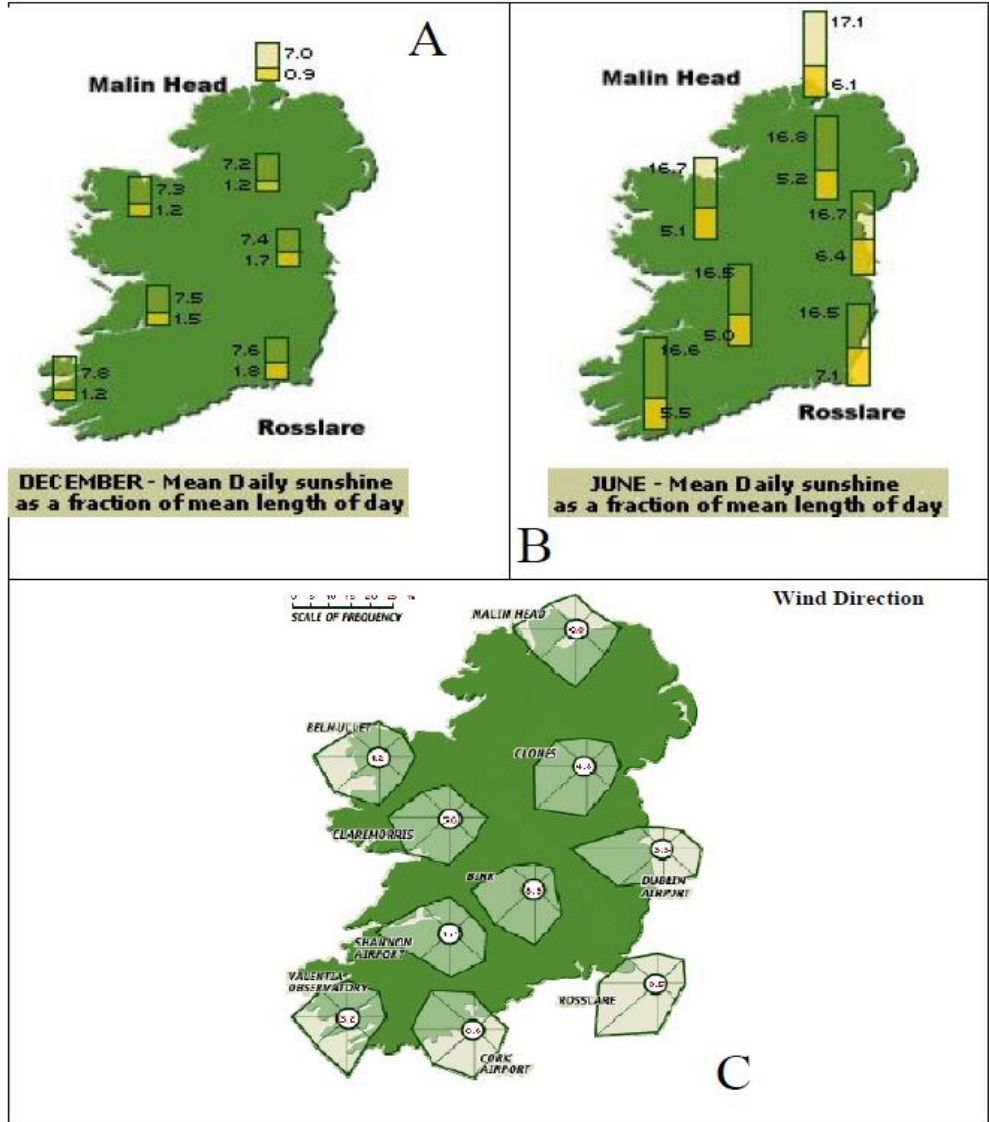
www.met.ie

|  |  |
|--|--|
| Categorise the type of weather front over Central Europe in Weather Map A? |  |
| State the barometric pressure of the anti-cyclone in Weather Map B?        |  |
| Is Ireland experiencing strong or light wind conditions in Weather Map C?  |  |
| Which of the Weather Maps A, B or C is represented by Cloud Map D?         |  |

[8m]

Part A – Q7

7. IRELAND'S CLIMATE



[Figs in A and B are in hours]

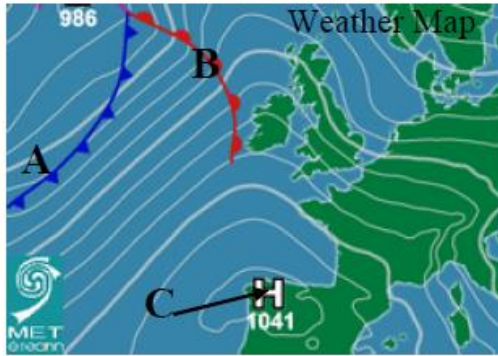
Examine these statistical maps, about Ireland's climate and answer the following:

- (i) Which station has the **least** sunshine in December? \_\_\_\_\_
- (ii) What is the difference in sunshine in June between Rosslare and Malin Head?  
\_\_\_\_\_
- (iii) What is the most frequent wind direction at:  
Dublin \_\_\_\_\_ and Rosslare \_\_\_\_\_

Part A – Q8

8 Atlantic Weather Chart

Examine the weather map and cloud maps below and answer the questions that follow.



Match each of the following terms with its correct letter – A, B or C - in the weather map.

|             |  |
|-------------|--|
| Warm Front  |  |
| Anticyclone |  |
| Cold Front  |  |

|  |  |
|--|--|
| Which cloud map - D, E or F – matches the weather map? |  |
|--|--|



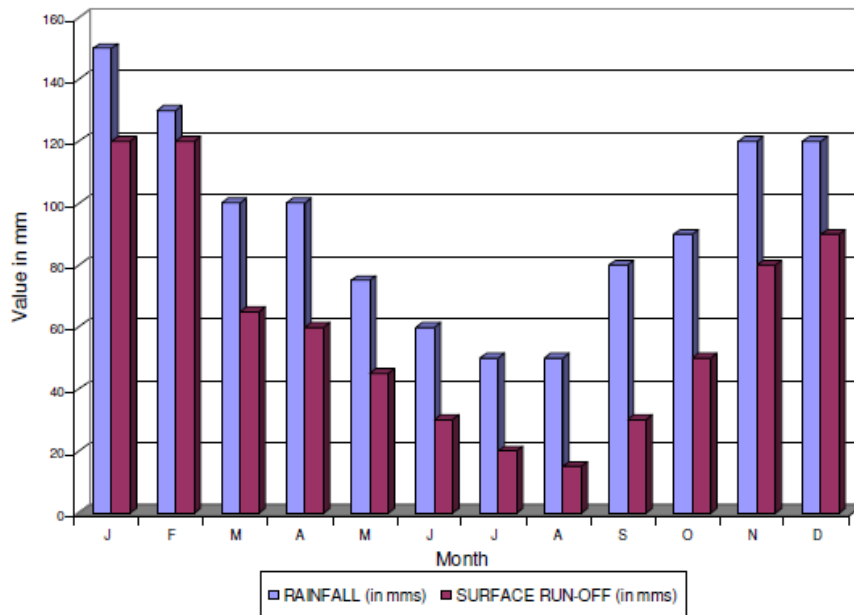
## 2006

### Part 1 – Q1

#### 1 Rainfall and Run-off

The table and graph below give information on rainfall and runoff, gathered over a twelve-month period.

| MONTH                    | J   | F   | M   | A   | M  | J  | J  | A  | S  | O  | N   | D   |
|--------------------------|-----|-----|-----|-----|----|----|----|----|----|----|-----|-----|
| RAINFALL (in mms)        | 150 | 130 | 100 | 100 | 75 | 60 | 50 | 50 | 80 | 90 | 120 | 120 |
| SURFACE RUN-OFF (in mms) | 120 | 120 | 65  | 60  | 45 | 30 | 20 | 15 | 30 | 50 | 80  | 90  |



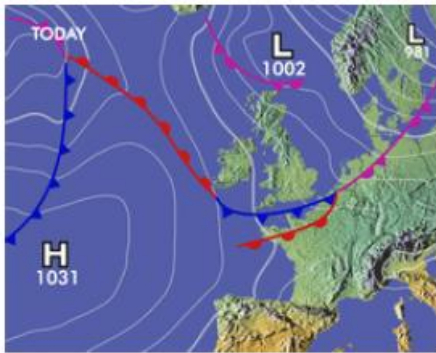
Answer the questions below in the spaces provided:

|  |  |
|--|--|
| In how many months did rainfall exceed 80mm?   |  |
| Calculate the average monthly rainfall for the last three months of the year                 |  |
| Name the month when rainfall and surface run-off were closest.                               |  |
| Select the most likely explanation for run-off being almost equal to rainfall in that month. |  |
| (a) the ground was very dry<br>(b) evaporation was low<br>(c) the soil was very wet          |  |





[8]

Q4

4 Weather Maps



Match each weather map symbol in Column A with its description in Column B.

| Column A  |   |
|---|---|
|    | A |
|    | B |
|  | C |
|  | D |

| Column B    |   |
|-------------|---|
| Warm Front  | 1 |
| Isobars     | 2 |
| Anticyclone | 3 |
| Cold Front  | 4 |

|   |  |
|---|--|
| A |  |
| B |  |
| C |  |
| D |  |

[8]