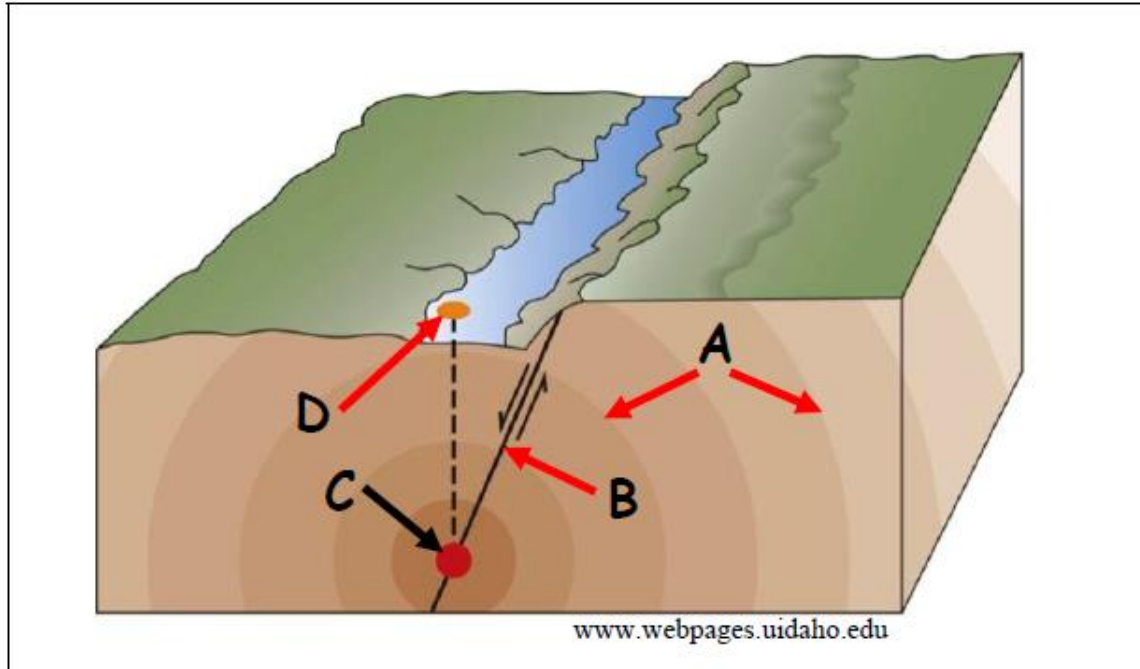




**Earthquakes & Volcanoes**  
**Geography past Exam Questions**  
**Higher Level**

Section 1 – Q3

Earthquakes



- (i) Match each of the letters **A**, **B**, **C** and **D** on the above diagram with the correct feature in the table below.

Feature	Letter
Focus	
Epicentre	
Seismic waves	
Fault line	

(ii) Explain briefly each of the following terms.

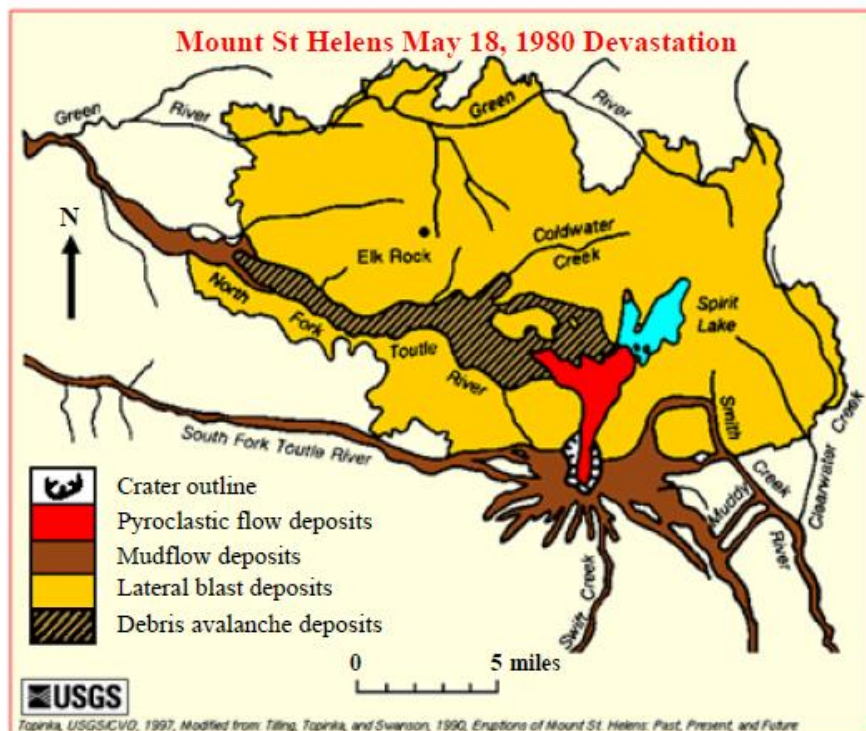
Seismologist \_\_\_\_\_

Seismometer \_\_\_\_\_

[8m]

Section 2 – Q3 A

A. Volcanoes



Examine the map and legend above showing the extent of the materials deposited as a result of the eruption of the Mount St Helens volcano and answer the following questions.

- (i) What were the most extensive deposits as a result of the eruption?
- (ii) What was the direction of the pyroclastic flow deposits?
- (iii) What distance did the pyroclastic flow deposits extend to?
- (iv) Name **two** examples of pyroclastic materials.
- (v) Explain briefly why some volcanoes erupt violently.

[20m]

**Q3 C**

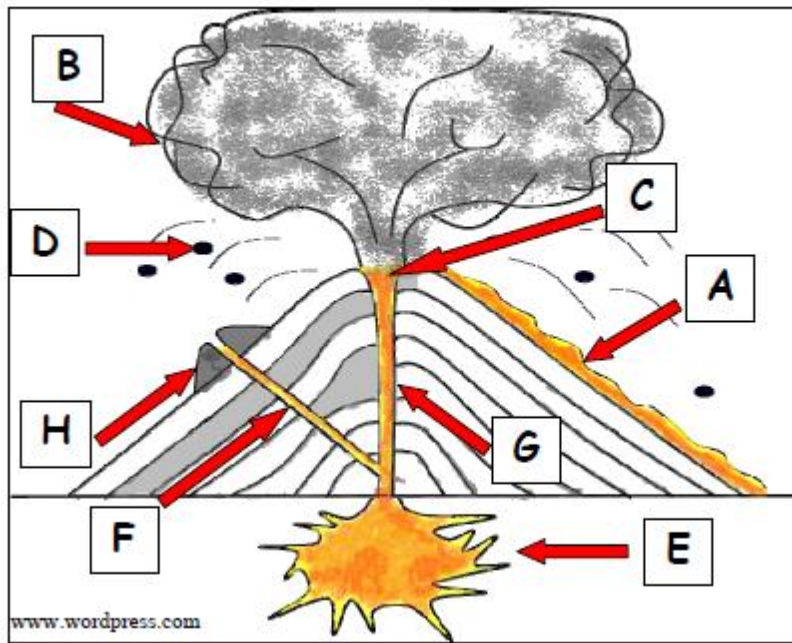
**Earthquakes and Volcanoes**

Explain how the occurrence of earthquakes and volcanic eruptions can be monitored and predicted.

**[30m]**

Section 1 – Q 4

Structure of a Volcano



Match each of the letters **A** to **H** in the above diagram with the correct volcanic feature in the table below.

Feature	Letter
Vent	
Crater	
Ash cloud	
Secondary cone / parasitic cone	
Lava flow	
Magma chamber	
Volcanic bombs / lava bombs	
Subsidiary vent	

[8m]

## Section 2 – Q1 C

### Earthquakes

Explain, with reference to examples that you have studied, how the theory of plate tectonics helps to explain the distribution of earthquakes around the world.

[30m]

Section 1 – Q1 C

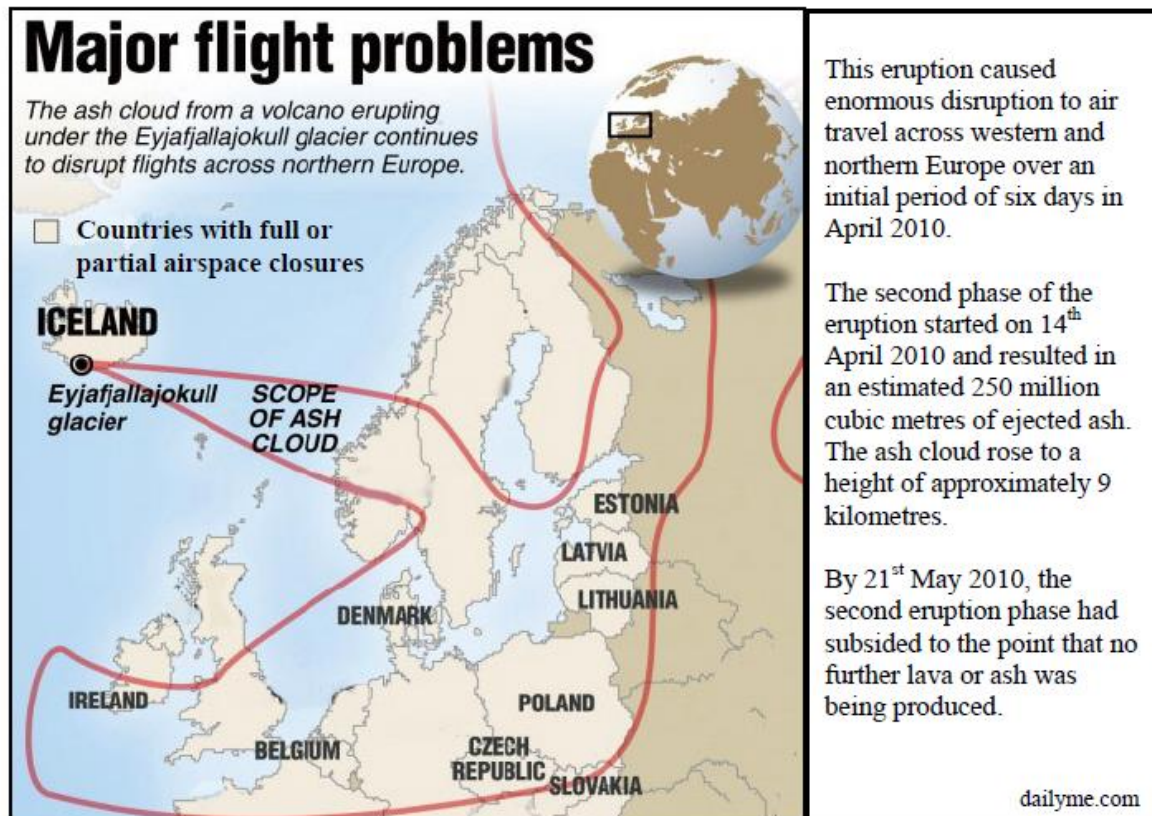
Volcanoes

Discuss the positive impacts of volcanic activity.

[30m]

Q3 A

A. Volcanoes



Examine the data above relating to the Eyjafjallajökull volcano which erupted in April 2010 and answer the following questions:

- (i) What approximate height did the volcanic ash cloud rise to?
- (ii) How many cubic metres of ash were ejected by the volcano?
- (iii) Name two countries not named on the map which had full or partial airspace closures.
- (iv) Briefly explain why volcanic activity occurs in Iceland.

[20m]

## Section 1 – Q3 A

## A. Earthquakes



Examine the map above relating to the earthquake in Haiti in January 2010 and answer the following questions in your answer book:

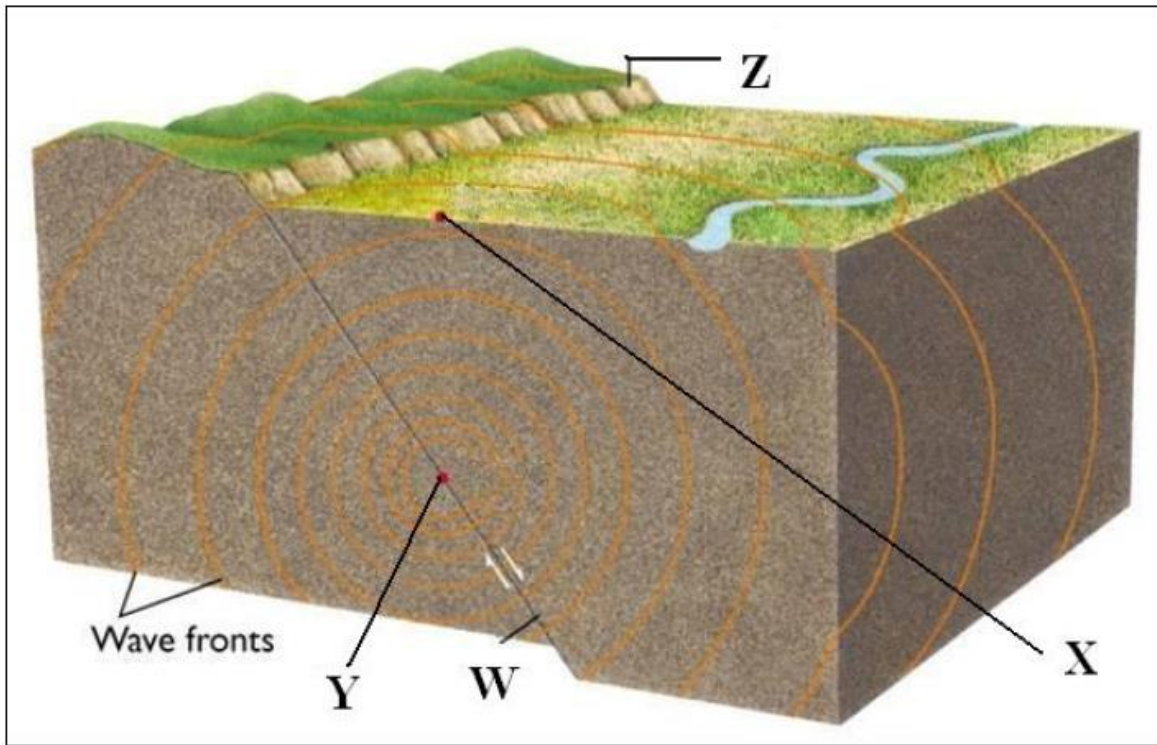
- (i) Activity along which two plates resulted in the earthquake in Haiti?
- (ii) What type of fault caused the earthquake?
- (iii) Describe the fault responsible for the earthquake.
- (iv) What tectonic activity along the subduction zone created the island arc on the map?

[20m]



Part 1 – Q1

1. Earthquake



Examine this diagram of an earthquake.

Insert the labels W to Z in their correct places in the table below:

Description	Label
Fault line	
Focus	
Escarpment	
Epicentre	

Section 1 – Q2 B

B. VULCANICITY

Explain how the study of plate tectonics has helped us to understand the global distribution of volcanoes.

[30m]

**Q3 C**

**C. EARTHQUAKES**

Examine, with reference to actual examples, the measurement and effects of earthquakes.

**[30m]**

2007

Section 1 Q3 A

A SATELLITE IMAGES

The satellite images below all show different views of a volcano.



Name an example of a volcano which you have studied.

State **two** advantages and **one** disadvantage for people living in a volcanic region.

[20m]

Q3 B

B STRUCTURES OF DEFORMATION

Examine the impact of **folding and faulting** on the landscape.

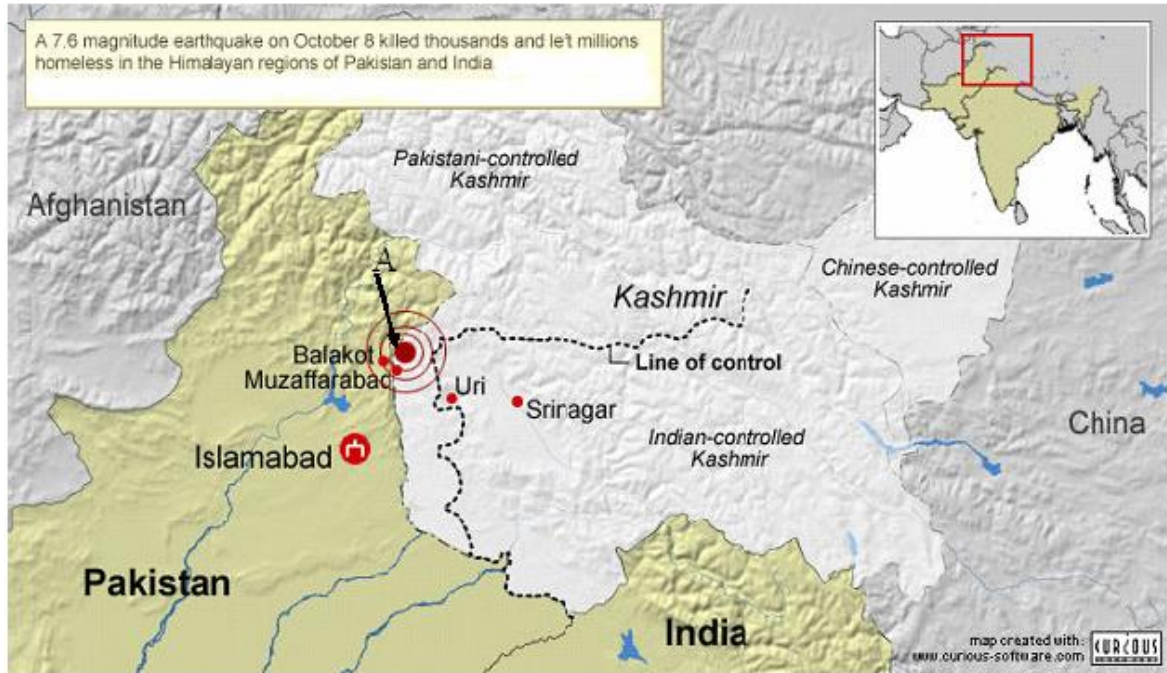
In your answer refer to **one** landform in **each** case.

[30m]

Part 1 – Q3

3 Earthquakes

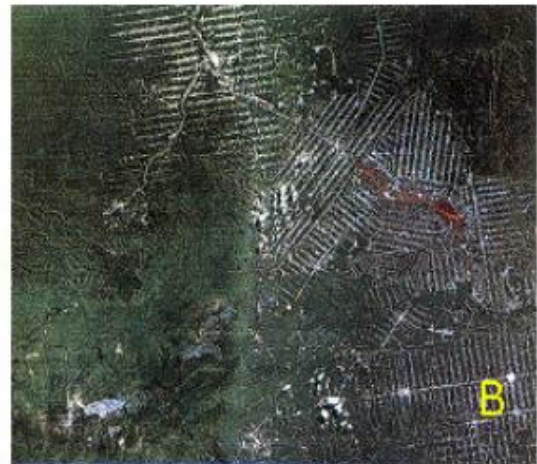
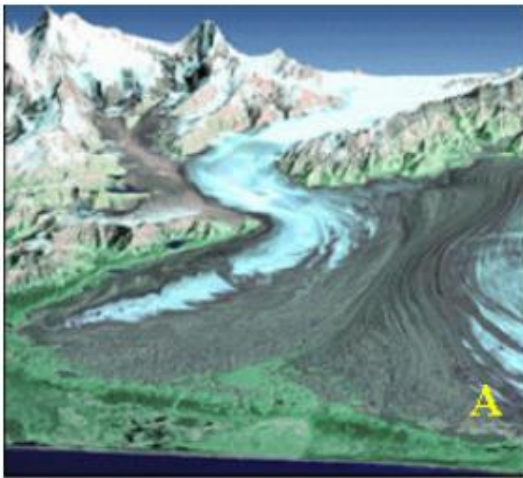
Examine the map of the Pakistan-India border region and answer the questions that follow.



- (i) The point on the earth's surface directly above the focus of the earthquake – shown at A – is called the:  
.....
- (ii) Smaller shocks followed the main earthquake. These later shocks are called:  
.....
- (iii) Which of these cities is likely to have suffered the greatest damage: Uri, Balakot or Islamabad?  
.....
- (iv) To what scale does the term “7.6 magnitude earthquake” refer?  
.....

Q10

10 Photograph Interpretation



Source: USGS

Insert the correct letter A to D in the boxes below, to identify the various images.

Volcano (Mt. Etna)	
Delta (Mississippi)	

Deforestation (Brazil)	
Glacier (Alaska)	

**Section 1 – Q3 C**

**C VOLCANOES**

Examine the processes that have led to the formation of any **two** volcanic landforms.

**[30m]**