Reading Practise

Read the passage below and answer 10 questions.

Most people think of global climate change a human problem that can be controlled or prevented with adequate attention to contributing factors such as industry and an increasing use of automobiles. However, the Earth's climate may change as a result of natural forces as well, sometimes extremely slowly, as in the case of plate tectonics, and sometimes rapidly, as can happen as a result of volcanic eruptions.

Volcanoes happen when pressure beneath the Earth's surface forces magma, or liquid rock, to break through the relatively think crust, or solid rock, which covers the earth. The magma erupts as lava, and then cools to form new rock. However, lava is not the only thing forced up through the Earth's crust in a volcanic eruption, and while it can alter a landscape and cause devastation to the surrounding area, it does not have a significant effect on global climate. It is the contents of the plume, or the black cloud, emitted during an eruption which most concerns though studying climate trends.

The plume contains massive quantities of gases which are, like magma, released during an eruption. These gasses include water vapor as well as those which are commonly referred to as greenhouse gasses, including carbon dioxide (CO2) and sulfur dioxide (SO2), both of which are generally considered key elements in global warming. That is not to say that volcanic eruptions and the gasses they release have a warming effect on global climate. In fact, volcanic eruptions might actually have the opposite effect.

The kind of effect the release of gasses has on climate depends on the features of aerosol particles, which are formed when water vapor reacts with SO2 in the atmosphere. The chemistry itself is complex, but it basically boils down to a matter of size. Smaller particles cause a warming effect by reducing the ability of heat to leave the atmosphere, and larger particles have a cooling effect by reducing the amount of radiation, and therefore heat, entering the atmosphere from space.

As it turns out, most of the temperature change that happens as a result of large eruptions produces the latter effect, and history documents this. The eruption of Mount Pinatubo in the Phillipines in 1991, for example, directly lead to 1992 being the coolest year on Earth in the previous 30 years. This effect is often compounded by an increase in the amount of dust in the higher atmosphere following a large-scale eruption; this haze blocks some sunlight, further contributing to a fall in temperatures.

As for CO2, often the biggest culprit in global warming due to human activities, it turns out that while the amount of the gas released by volcanic activity is large, it by no means compares to the amount released by human activities like the burning of fossil fuels. These activities produce on average about one hundred times the amount of CO2 produced by volcanoes.

Do the following statements agree with the information given in Reading Passage 1?

On your answer sheet write

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

1) Human activities are not the only cause of climate change.
2) Volcanoes often cause global temperatures to rise.
3) Most pollution caused by human activity increases global temperatures.
4) Volcanoes change the climate more than other natural forces.
5) The lava released during an eruption is not dangerous.
6) Some volcanic eruptions can cause a warming effect.

Complete each sentence with the correct ending A-G from the box below.
Write the correct letter A-G in boxes 7-10 on your answer sheet.

7) Dust produced by eruptions

8) Fossil fuels

9) Carbon dioxide

10) Volcanoes

A produce greenhouse gasses when burned.
B often has a cooling effect.
C has only a minimal effect on temperature.
D is solely to blame for global warming.
E has a cooling effect.
F can affect both the local and global environment.
G is a major contributor to global warming.