

Riviera International Academy

Assignment-2077

(Ashad 31, 2077, Wednesday)

Class: Eight Date:- _____ **Name:-** _____

Subject- English

Climate change

Wikipedia defines climate as follows:

Climate encompasses the statistics of temperature, humidity, atmospheric pressure, wind, rainfall, atmospheric particle count and other meteorological elements in a given region over a long period of time. Climate can be contrasted to weather, which is the present condition of these same elements and their variations over shorter time periods.

Climate may be inherently variable as evidenced by the irregularity of the seasons from one year to another. This variability is normal and may remain partially understood. It is related to changes in ocean currents, volcanic eruptions, solar radiation and other components of the climate system. In addition, our climate also has its extremes (such as floods, droughts, hail, tornadoes and hurricanes), which can be devastating. However, in recent decades, a number of indicators and studies show more and more evidence of climate warming across the globe. A disturbing phenomenon that challenges human habits and activities which are responsible for greenhouse gas emissions.

The green house effect

The greenhouse effect is the process by which absorption and emission of infrared radiation by gases in the atmosphere warm a planet's lower atmosphere and surface. It was proposed by Joseph Fourier in 1824 and was first investigated quantitatively by Svante Arrhenius in 1896.

Naturally occurring greenhouse gases have a mean warming effect of about 33°C (59°F). But Human activity since the Industrial Revolution has increased the amount of greenhouse gases in the atmosphere, leading to increased radiative forcing from CO₂, methane, tropospheric ozone, CFCs (chlorofluorocarbon) and nitrous oxide. The concentrations of CO₂ and methane have increased by 36% and 148% respectively since 1750. These levels are much higher than at any time during the last 650,000 years, the period for which reliable data has been extracted from ice cores. Over the last three decades of the 20th century, GDP (Gross Domestic Product) per capita and population growth were the main drivers of increases in greenhouse gas emissions. CO₂ emissions are continuing to rise due to the burning of fossil fuels and land-use change.

Consequences of global warming

There are two major effects of global warming: the increase of temperature on the earth by about 3° to 5°C (5.4° to 9° Fahrenheit) by the year 2100 and Rise of sea levels by at least 25 meters (82 feet) by the year 2100. Other consequences are listed below:

- Sea levels are rising due to thermal expansion of the ocean, in addition to melting of land ice.

- Amounts and patterns of precipitation are changing.
- The total annual power of hurricanes has already increased markedly since 1975 because their average intensity and average duration have increased.
 - Changes in temperature and precipitation patterns increase the frequency, duration, and intensity of other extreme weather events, such as floods, droughts, heat waves, and tornadoes.
 - Higher or lower agricultural yields, further glacial retreat, reduced summer stream flows, species extinctions.
 - Diseases like malaria are returning into areas where they have been extinguished earlier.

A. Answer the following questions:

- a) What is climate change?
- b) What are consequences of climate change?
- c) What did you understand by global warming?

B. Tick the correct answer.

1. Climate is by definition variable.
 - a. true
 - b. false
2. Climate change observed in the last decades is natural.
 - a. true
 - b. false
3. Global warming is caused by industrialization.
 - a. true
 - b. false
4. Greenhouse effects have no impacts on our health.
 - a. true
 - b. false

Subject-Science

Write the short answer of the following:

1. Which is the smallest particle of an element?
2. Which is the smallest particle containing the same characteristic of a compound?
3. What is the sub-atomic particle with a positive charge?
4. What is the sub atomic particle with a negative charge?
5. Write the unit of electric charge.
6. How many electrons can the L- shell of an atom hold?
7. What do you mean by the capacity of an element to combine with other element to form a compound?
8. What do you mean by the total weight of an atom?

Subject- Mathematics

Source: Photo of exercise are already given.

Work: read & write all the examples & formulae from 19 to 22.

Do your work neatly

Subject- Computer

1. Answer the following questions:

- a. What is Information and Communication Technology?
- b. List the areas where the ICTs are used?
- c. Define cybercrime and cyber law
- d. What is computer ethics? List any four commandments of computer ethics.

2. Write the full form of the following:

- a. ICT b. WWW c. BLOG d. Email e. IRC f. ETA

The End.