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Assignment: 2

Smart cities are now being established with smart, resilient infrastructure.

Smart cities are now facing extreme climate change and weather events which

Need to be monitored. Public transport is ideal for reducing overallgas emissions.

Smart cities: Smart city refers to modern urban growth which makes the cities

Competitive and productive. Top leaders and decision makers play a vital role

In the development of smart cities with balanced weather conditions.

Smart cities strive to achieve stable economy, good environment and smart governance.

The population growth in the smart cities will be growing exponentiallyin both developed and developing countries. World wide climate changes are increasing drought, flooding and large storms

which should be tackled effectively by the smart cities

Smart cities are generating 70% of global co2 emissions. Cities are rising to regulate

the environmental conditions. Smart cities have to face economic, environmental and social

challenges. The population growth is increasing tremendously in the smart cities.

Smart cities are using digital technologies to enhance conservation of natural resources

and energy use. By the use of new sensors the study of the environment pollution levels have

been closely monitored.

The city must have required funds to become a smart city.

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closely monitored.

The cities must have required funds to become a Smart city. Smart cities are using the latest technologies to combat the real urban changes. Smart cities have always been tied to goals like economic development.

Singapore is considered as one of the smartest cities in the world. Smart cities are coming up with new plans to promote public transport. The officials in the smart cities are monitoring traffic patterns

to avoid congestion. Smart cities are developing Smart systems to adjust thermostats,

monitor movement and even employ reminders for the daily medications.

Smart cities must develop good infrastructure with high levels of funds to combat extreme weather conditions. Smart cities are characterized with excellent IT connectivity, digitalization and good governance.

Smart cities with good economic opportunities can adapt to climate changes very easily.

Smart cities are working on better air quality by reducing the urban emissions, which are

causing the pollution.

Smart cities are more exposed to storms and flooding, other than the urban communities.

These conditions cause risk to our health, which is jeopardized with extreme changes in

weather. Smart cities provide excellent health benefits. The new climate economy

project[NCE] in the smart cities has lowered the green house gas emissions to a large extent.

Global warming is the increase in the average temperature due to the increase in the green house gases

in the atmosphere. Climate change is the major changes in the temperature, precipitation or wind which last for longer duration of time. Green house gases trap the energy in the atmosphere causing it to warm. This is called Greenhouse effect.

The different components in the weather data are Dewpoint, Pressure, Temperature,

Wind direction, Wind speed.

Dew point indicates the moisture in the air. Air is said to be saturated, when Dewpoint

Temperature and air temperature become equal.

Humidity also gives the moisture in the air. Humidity is calculated using variables

such as vapor pressure, temperature and dew point.

When the weather is muggy or sticky, the word Dew Point is used. Dew point is the true measurement of the moisture. Air pressure influences the movement of air around the planet.

Rising warm air causes areas of low pressure. When the weather reaches

The saturation point, cooled air forms clouds, which are followed by precipitation.

High pressure in the atmosphere causes clear skies and calmer conditions.

When the change lasts for an extended period of time, climatic changes are caused.

Climatic change is the change in the statistical properties which are mean and spread.

As the weather varies from day to day, so the climate changes also vary.

Scientists are still seeking to understand the various components of the earth system.

Earths temperature depends on balance between the outgoing and incoming energy.

Climatic changes before 1700’s is characterized by changes in Solar energy and

Volcanic eruptions. The high levels of carbondioxide in the atmosphere is causing the

Temperature changes leading to long term climatic changes. Feedbacks that

increase climate change are called positive feedbacks and the feedbacks which reduce

the climatic changes are called negative feedbacks. The green house effect has increased the

Earth’s surface temperature. The green house gas emissions are primarily due to the burning of

Fossil fuels. The different green house gases are carbondioxide, Methane and Nitrous oxide.

Water vapor is the abundant greenhouse gas which makes significant contribution to

the greenhouse effect.

The chlorofluoro carbons, hydrochloro carbons, sulfur hexafluoride are the other gases

which cause greenhouse effect.

The United States Environmental Protection Agency provides information

on weather changes. Global climate change has significant effects like the glaciers

have shrunk and ice formation on rivers.

Due to the human activities Scientists have predicted that the global temperatures

will rise in the coming decades.

The climate is not going to be uniform or smooth due to the temperature rise,

Due to the human induced warming.

The US precipitation has greatly increased since 2000 and some areas are

greatly affected by this. Droughts in the south west is causing the hot weather to

last more than the normal time period.

The intensity and frequency of the hurricanes has increased due to the uncertain causes.

The global sea level has risen by 8 inches and is expected to rise further.

The ocean waters will be warm and the sea level will rise in the coming centuries.