

Q1. Why has the earth's average temperature increased?

Ans. Emission of various greenhouse gases like CO₂ and CH₄ (Carbon dioxide and methane) by several human activities has led to the increase in the Earth's average temperature as these gases trap the heat released by the earth and do not let it escape into the space.

Q2. Why is the Himalayan region called the 'Water tower of Asia'?

Ans. The Himalayan region has a glacial coverage of 33,000 sq km and it provides around 8.6 million cubic metres of water annually. Therefore, it is aptly called the water tower of Asia.

Q3. What are the main sources of water in the Kashmir Valley?

Ans. Flood plain lakes, high altitude Himalayan lakes, perennial rivers of Indus system, wet-lands of different dimensions, ponds, snow fed streams, springs and reservoirs are the main sources of water in the Kashmir valley.

Q4. Why is water the most precious natural resource?

Ans. Water is the most precious natural resource because it saves our lives in many ways. It is used for drinking, maintaining health and hygiene, it helps in the economy, development, livelihood, generation of electricity and in agriculture.

Q5. How has Kashmir been influenced by global warming?

Ans. Kashmir has been adversely affected by global warming. In spite of being located at a pretty high altitude, the effects of global warming are quite vivid in the state. There has been a loss of 16% of glaciers in the Suru Basin, 18% of the Kollai Glacier has melted, demarcation between seasons is lost, early spring is not experienced in the state, precipitational patterns have changed, heavy rains and high velocity storms visit the place, flowers have changed their blooming period, water is becoming scarce, there is reduction in snowfall, icicles are nowhere to be seen in the winter months. Migratory birds have changed their cycle. This and many more are the repercussions of global warming in the Kashmir valley.

Q6. How is global warming the largest threat to humanity?

Ans. Global warming is the largest threat to humanity because it brings about changes in the climate and any change in climate shall influence every single organism living on the earth. Due to global warming, the largest glaciers are melting away which will cause the rise in the sea level and the consequent submerging of the coastal areas. The weather will change from moderate to hot. This will lead to droughts and lesser production in agriculture. The entire seasonal patterns will change which will result in the extinction of valuable plant and animal species that are essential for the survival of mankind.

Q7. What do you think is the cause of decrease in snowfall in Kashmir?

Ans. Global warming is the certain cause of reduction in snowfall in Kashmir because global warming changes the precipitational patterns and thus leads to weather and eventually climate change.

Q8. What role do the scientists play in J&K to deal with the problem of global warming?

Ans. Scientists do extensive field study and keep a steady vigil on the environment to deal with the grave issue of global warming. Scientists have considered the Kollai glaciers as one of the index glacier in the Lidder valley. Scientific studies conducted on the glacier will last for five years after which TERI (The Energy and Resources Institute J&K) will recommend measures to bring down the recession, rate of the glacier. Also the studies conducted by the Kashmir University have unveiled the fact that if the pollution release in the valley continues to be at the same pace, by the end of the 21st century, the temperature of the valley will rise by 2 to 3 degree Celsius.

Q9. What do we as individuals need to do to deal with the problem of global warming.

Ans. Each individual needs to realize the graveness of the issue and do his part however little it may be. We got to be aware about our environment and its problems and then spread the awareness among others as well. We should try to minimize the emission of greenhouse gases as much as we can. We got to realize the fact that our indifferent attitude shall cause us pay the piper.

Gerund:

The –ing form of verb that functions like a noun is called gerund. Gerund is, therefore, also called verbal Noun.

Uses of gerund:

a. The subject of a verb (or subject of the sentence)

- i. Swimming helps to build strong muscles.
- ii. Reading develops wisdom.
- iii. Playing is good for health.
- iv. Flying make me nervous.
- v. Smoking causes lung cancer.

b. As the object of a verb.

- i. I like reading
- ii. He knows climbing
- iii. She does painting

c. As the complement of a verb

- i. My favourite hobby is cooking
- ii. Our aim was only passing.
- iii. His nightmare was flying

(Notice: the gerund answers ‘what’ and not ‘doing what’)

d. As the object of a preposition.

- i. He is fond of cooking
- ii. Let.
- iii. ’s discuss about making excuses
- iv. She is unbatable in arguing.