Class 12th English Supplementary Chapter 3 Journey to the end of the Earth Question Answers Gujarat Board

Read and Find Out (Textbook Page No. 19)

Question 1. How do geological phenomena help us to know about the history of humankind?
Answer:
The geological phenomena of separating various continents and water bodies from one compact landmass tells us about the age of the existence of human race on the earth. Six hundred and fifty million years ago, no human race existed on the earth because the environment was not favourable. After the time when the dinosaurs were wiped out, the mammals started existing and after the separation of landmass, the human race started flourishing on the earth.

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Question 2. What are the indications for the future of humankind?
Answer:
The future of the humankind can get in danger if the emission of carbon dioxide and other poisonous gases go on in the same manner. These gases deplete the ozone layer and allow the ultraviolet rays of the sun to enter the earth's environment. This causes the rise in temperature of the earth and giving rise to the phenomenon called global warming. Increased temperature can melt the ice of the Antarctica, and cause other environmental problems, thus jeopardizing the future of humankind.

Reading with Insight

Answer the following questions in about six to seven sentences each:

Question 1. 'The world's geological history is trapped in Antarctica.' How is the study of this region useful to us?
Answer:
The study of this region of Antarctica gives us insight into the world's geological history. It gives an idea, how the earth was like before it drifted into continents and countries. It shows how slight changes in the climate can change the shape of the region. It gives the explanation how the climatic conditions of the earth were not favourable for life before and how slowly rising temperature made earth a place to sustain life. All secrets are embedded in the layers of ice in the form of half-million-year-old carbon records.

Question 2. What are Geoff Green's reasons for including high school students in the Students on Ice expedition?
Answer:
Geoff Green took the high school students to one end of the world, to provide them the opportunity to develop the respect and understanding for the earth. He wanted to make

the future policy-makers to experience how difficult it would have been for the earth to sustain life by raising its temperature. He wanted them to understand that any interference in nature can cause drastic mishappenings in the future when the students see the ice shelves melting and collapsing, they can estimate the kind of environmental trophies ahead in their future.

Question 3. 'Take care of the small things and the big things will take care of themselves.' What is the relevance of this statement in the context of the Antarctic environment?
Answer:
This statement has great relevance in the context of the Antarctic environment. A small change in the environment can give rise to drastic developments. Antarctica has a small biodiversity. The example of small grass called phytoplankton can be studied in this context. These microscopic grasses undergo the process of photosynthesis and serve as food for number of marine birds and animals.

The author says if there is further depletion of the ozone layer, it will affect the phytoplanktons and the carbon cycle on the globe. This whole process can jeopardize the existence of all the marine birds and animals. So if we take care that processes carried over by these small grasses are carried out properly, the bigger animals and birds will fall into the place on their own.

Question 4. Why is Antarctica the place to go to, to understand the earth's present, past and future?
Answer:
Antarctica gives us an idea, how the earth would have been like millions of years ago and how it got divided into various earth masses. The melting and colliding ice masses also give us an insight into how our future is going to be, if we continue with interference in the working of the nature. Moreover, Antarctica holds into the depths of its ice half-million-year-old carbon records, which are helpful in understanding the past, present and future of the earth. Therefore, Antarctica is the place which reveals our past, shows our present and visualizes our future.