

Page no. 19

Read and find out

Que. How do geological phenomena help us to know about the history of humankind?

Ans. Geological phenomena such as the drifting of land masses and their separating into countries help us to know about the history of humankind. A visit to Antarctica around which Gondwana once existed, is like going back to past as it gives us an understanding of evolution and extinction, ozone and carbon, where humankind came from, and where it is headed.

Page no. 20

Read and find out

Que. What are the indications for the future of humankind?

Ans. All thoughtless activities of humankind such as increasing cities and megacities, cutting forests and turning those to concrete jungles, careless burning of fossil fuel, depleting ozone and increasing carbon dioxide, and global warming, melting ice caps and shields, our battle with other species for limited resources and other similar reckless activities point to a grim future for humankind. If concrete steps are not taken immediately, these drastic changes may lead to the end of the world.

Page no. 19

Reading with insight

Que. ‘The world’s geological history is trapped in Antarctica’. How is the study of this region useful to us?

Ans. Antarctica holds half a million-year-old carbon track records in its layers of ice. It gives us an understanding of evolution and extinction, ozone and carbon. A visit to Antarctica, around which Gondwana once existed, is like going back to the past. Witnessing the geological phenomena, such as the drifting of land masses and their spreading into countries, help us to know about the history of humankind. These are visible signs of where humankind came from and it gives us a clear understanding of where human life is headed if we do not take care of the environment. Actually seeing with our own eyes all these changes, make us understand that global warming is a real threat.

Que. What are Geoff Green's reasons for including high school students in the Students on Ice Expedition?

Ans. Geoff Green feels that students are the future generation of policy-makers. They should be provided an opportunity to have this life-changing experience at a young age in order to foster a new understanding and respect for our planet. It would help them to absorb, learn and act for the benefit of the planet. The youngsters still have the idealism to save the world and they need to understand that it belongs to them. So, to sensitize them, it is important to provide them the visible life changing experience.

Que. Why is Antarctica the place to go to understand the Earth's present, past and future?

The author states that to understand the earth's present, past and future, Antarctica is the right place to go. Antarctica is relatively untouched in this respect as it has never had human population. It is relatively pristine. It holds in its ice cores half a million-year-old carbon records, trapped in the layers of ice. It embodies all that is pre-historic: cordilleran folds, pre-Cambrian granite shields ozone and carbon: evolution and extinction. The simple eco system and lack of biodiversity indicate how little changes in the environment can have big repercussions.

A visit to Antarctica and witnessing the geological phenomena, such as the drifting of land masses, glaciers receding and ice shelves collapsing makes us understand that global warming is a real threat. Hence, to study the earth's past, present and future, these factors make Antarctica the best place to go.