The Polar Regions

Exercise Pg. 40

Q. 1. Which continent falls within this region?

Answer : The Polar Regions surround the North and the South poles, lying within the polar circles.

The Northern region of the Polar ice caps rest on the Arctic Ocean whereas the Southern region lies in the continent of Antarctica.

Q. 2. Try to recall what happens as we move away from the equator.

Answer : The equator is an imaginary line forming a circle around the earth's surface (equidistant from the poles and perpendicular to the earth's axis of rotation).

It divides the Earth into – Northern Hemisphere and Southern Hemisphere.

The seasons and climatic change result from the movement of the earth's axis and therefore the northern and the southern hemisphere experience alternate seasonal conditions.

The hemisphere receiving more sunlight is said to experience the summer season while the other hemisphere, experiencing less sunlight is said to experience the winter season.

Exercise Pg. 42

Q. 1. Mention five points about the summer in Tundra.

Answer: <u>1.</u> The sun begins to shine in the Tundra around February-March. In the beginning, it shines for a maximum of an hour and a half and then set. It gradually lengthens to 2 hours, 6 hours, 8 hours, 16 hours and finally 24 hours.

- <u>2.</u> Subsequently, the sun shines for almost three months from May to July for 24 hours i.e. all day long.
- <u>3.</u> The sun, however, does not rise overhead and since it does rise high up in the sky, it is never very warm i.e. it is comparatively less cold than the winter months.
- <u>4.</u> The warm weather allows the ice and frozen rivers to melt. The lakes fill up and huge chunks of ice break off and float into the ocean as icebergs.

<u>5.</u> The land (which was frozen during the winters) comes alive during summer. Many multi-coloured plants, lichens, grass, shrubs and berries sprout all around the region. Also, many birds and animals come to feed on them.

Q. 2. Fill in the blanks

-The Sun does not appe	ar during the month of _	and
-At this time, the water	and the plants	.

Answer: The Sun does not appear during the month of November and December.

<u>Explanation</u> – The Tundra region is extremely cold during the winter months of November, December and January, since the sun does not rise at all.

-At this time, the water <u>freezes</u> and the plants <u>die</u>.

<u>Explanation</u> - It is extremely dark and water in the lakes, seas and rivers freeze to become ice. Strong cold winds blow along with heavy snowfall. Due to the severe dark conditions, plants die and even animals leave the region and migrate elsewhere.

Q. 3. How do the people of the Tundra get light in winter?

Answer: The people living in the Tundra mostly move from place to place throughout the year, following a fairly fixed order of seasonal activities especially the eastern groups. They spend the winter near the coast, hunting for seals and fishing because of the extreme cold weather conditions during the winter when the entire region is dark, deserted and desolate.

Seal-oil lamps are majorly used for providing light and heat.

Exercise Pg. 43

Q. 1. Why do you think people probably always did not live in the Tundra region?

Answer: A major reason behind people not always living in the Tundra is the occurrence of extreme weather conditions which does not support the carrying out of activities necessary to sustain life. For example – hunting and fishing which is not possible during winter season when it is extremely dark. Also, freezing of water, a vital resource further restricts the day-to-day activities of man.

Exercise Pg. 45

Q. 1. In what ways are the resources available in their surroundings used for making houses?

Answer : During the summer, most Eskimos live in tents made of animal skins. For example – In Western Alaska very large tents are made using heavy Walrus skin which is put on wooden frames. On the Northern coast of Alaska, dome-shaped houses are built of logs and whale ribs.

Q. 2. How is the house impacted by the climate?

Answer : The houses of the Eskimos are made up of animal skins in order to get protection from the icy cold winds and snow. They are built in a manner that supports the climatic conditions. For example – Small snow houses with short tunnel entrances are used while travelling in the Eastern and Central regions. Large snow houses are often used as winter residences. In case of long tunnel entrances, they provide storage space in large homes and generally open into the house below the floor level.

Exercise Pg. 48

Q. 1. Do you think lives of people in Tundra have changed for better or worse because of their interaction with outside world? Give reasons for your answer.

Answer : The pattern of the relationship between the Eskimos and outsiders has been described as "boom and bust" as waves of outsiders have brought a series of changes characterised by brief periods of wealth, education and employment as well as poverty and disorganisation.

Peak periods have been those of whaling, modern fur trade, the building of military and defence bases, building of urban centres, and oil exploration and development.

Each Wave of activity has brought the Eskimos into contact with different social and economic forces, thereby producing great strains on the Eskimo way of life.

Improve your learning

Q. 1. Re-write the false statements with correct facts:

- a) Animal body parts were used only in clothing.
- b) Major part of the food includes vegetables.
- c) Popular games amongst the people in Tundra are closely related to their daily lives.
- d) Contact with people from outside impacted their health.

Answer: a) Animal body parts were used in clothing, housing, eating and decoration.

Animal body parts and their skins were particularly used in making clothes for both men and women, for building tents made of animal skin and stitch sealskin and for decorating people's possessions.

b) Major part of the food includes meat, fat and fish.

Because of the extreme weather conditions, the Tundra region has a unique kind of vegetation. Added to this, vegetables are scarcely available in this region.

c) Popular games of skill are essential parts of religious rituals in the lives of the people of the Tundra region.

Amongst these games include storytelling, singing, drumming and dancing. Athletic activities include wrestling, racing, and harpoon throwing contests among others.

d) Contact with people from outside brought new disease to this region, to which the Eskimos had no immunity or natural resistance.

The coming of outsiders from the nearby regions of Europe brought many new diseases to the Tundra region. Smallpox, tuberculosis, influenza, whooping cough, pneumonia, mumps, scarlet fever, and diphtheria were the most dangerous of these diseases.

Q. 2. Based on what you studied about equator regions in Class VII how is polar region different?

Answer : Polar Regions are in contrast to the equator regions in relation to climatic conditions.

Regions lying along the equator experience a tropical rainforest climate which is largely hot and wet. While, the Polar Regions are characterised by severe cold weather conditions in the most extreme parts of the earth in the North Pole and the South Pole.

The movement of ocean currents is also in contrast i.e. the warm currents flow from the equatorial region towards the poles and the cold currents flow from the poles to the equatorial regions.

Q. 3. What are the ways in which life of people in Tundra are dependent on climate of the region? Describe in the context of following aspects:

Food	Dress	Travel	Shelter

Answer:

The climate of the Tundra region is the most important factor in deciding a no. of aspects of the lives of the Tundra people (Eskimos).

Following are some aspects which are greatly influenced by the climatic conditions of the region-

Food	Dress	Travel	Shelter
Hunting and Fishing are the major sources.	Boots (mukluks), trousers, hooded jackets (parkas) are made of animal skin.	Two seasons in the Tundra Region – Summer and Winter are characterised by extreme weather conditions. It is absolutely dark during the winter and the sun does not rise. However, during the summer, the sun shines for the entire day for 3 months.	In summers, most Eskimos live in tents made of animal skin. Example- In Western Alaska, large winter tents are made by using heavy Walrus skins over wooden frames.
Starvation and hunger are common when fish and meat are not plentiful.	Caribou fawn skin is preferred in winters because it is soft and warm. Coastal groups prefer seal skin in late spring and summer.	During the winters, in the dark and icy conditions, all plants die and even birds and animals leave this region and migrate. During the summer, multicoloured plants, lichens, grass, shrubs and berries sprout and many animals and birds come to feed on them.	Snow houses are used in Eastern and Central regions which are made from blocks of packed snow, built into a dome. Sealskins are also used to line up snow houses.

Q. 4. In this chapter there are many aspects that are very different from the place where you live. Look at the subheadings in this chapter and make a list of them. Now create a wall paper with illustrations and descriptions comparing life in your location with that in the Tundra.

Answer : The life in the Polar Regions is very much different from the life in plains and coastal areas and perhaps greatly varies from region to region.

Following are the aspects which differ with respect to the various subheadings mentioned in the chapter.

- 1. Seasons The climate is not extreme at all as compared to the Tundra Region. Added to this, there are days and nights for the entire 365 days.
- 2. Vegetation Different types of vegetation available
- 3. Group life and social being Different types of festivals celebrated within the groups and communities every year.
- 4. Hunting and Fishing Agricultural and other activities are much more common due to the availability of large fields and soil.

- 5. Food Every region has speciality in foods which vary across the country and within regions itself.
- 6. Shelter –The material used to make houses (in case of polar regions- animal skin) is very much different as the climatic conditions are vastly different.
- 7. Clothing and crafts Every region has its own traditional ways of dressing and crafts.
- 8. Decorative objects Decoration and decorative materials are extremely unique to each region.
- 9. Religious beliefs Religion is very wide aspect has its own practices and beliefs among various communities.
- 10. Recreation Games and sports as well as festivities are very much centred on different aspects of life and community feeling.

Students can illustrate over the above points through comparative analysis of their respective regions with the Polar Region.

Q. 5. Imagine one entire day (24 hours) when the sun does not set and another day when there is no sun, what changes will you make in your daily lives? Write a short note on them.

Answer: Changes in the rising and setting of the sun similar to the conditions that prevail in Polar Regions would result in different scenario in our daily lives. The day-to-day responsibilities and activities would alter as a result.

Added to this, the default cycle of working hours and sleep at nights would change since the time to sleep would need to be identified in case when the sun does not set.

Students can further add to the answer by giving their views and creative ideas as it is an open ended question.