ANSWERS

CHAPTER 10-LIFE IN THE DESERTS

1. Choose the correct option:

- (a) (iv) Sahara desert
- (b) (ii) Australia
- (c) (i) 0° and 30°N
- (d) (iii) Nile

(e) (iv) Libya

(f) (iv) None of the above

2. Fill in the blanks.

- (a) Glacier
- (b) Pass
- (c) chiru

- (d) bird
- (e) Gompas

3. Match the columns.

- 1. (i) (v)
- 2. (f) (viii)
- 3. (h) (vi)
- 4. (d) (ii)
- 5. (a) (iii)
- 6. (c) (ix)
- 7. (e) (vii)
- 8. (b) (i)
- 9. (g) (iv)

4. Differentiate between the following:

(a) Climate in the Sahara desert is very hot and dry. There are no clouds present in the desert, and it has a very short rainy season. The climate is so hot that many times, rainwater gets evaporated even before even reaching the ground. The Sahara is also one of the hottest regions in the world. The average annual temperature in the desert is about 30°C but during the hottest months, temperature can exceed 55°C. The highest temperature ever recorded (58°C) was in Aziziyah, Libya. However, the nights are freezing cold, and the temperatures can dip to several degrees below 0.

Ladakh is a cold desert. It has high-speed winds, dry atmosphere, rocky and uneven terrain and very low temperature. Thus

summer temperatures rarely exceed about 27°C while in winter they may dip to -20°C. As Ladakh is located at a high altitude the atmospheric pressure decreases is very less. The air is also very thin. This makes the heat of the sun even more intense. It is rightly said that only in Ladakh can a man sitting in the sun with his feet in the shade, suffer from sunstroke and frostbite at the same time! Water in such places is always scarce because the place hardly receives any rain.

(b) Hot Deserts: These deserts are often located near the equator. The day temperature of these deserts can be very high, but the nights are usually cold. Rainfall is very low and sometimes comes as an outburst. Some examples of hot deserts are: Thar Desert in India, Sahara Desert in Africa.

Cold Deserts: These deserts are found away from the equator, usually in the centre of continents. They often have mountains. In winter, these deserts can be covered with snow and ice. Some examples of cold deserts are: The Patagonian Desert in South America, Ladakh Desert in India and Antarctica.

5. Put a $(\sqrt{})$ mark if the statement is correct and (x) if incorrect.

(a) (√)

(b) (√)

(c) (X)

(d) (√)

(e) (√)

6. Identify the picture given below and answer the questions.

Yak

Ladakh

Cactus

The leaves of some plants like cactus are modified into spines to minimize water loss.

9. Short answer questions.

(a) The Sahara Desert, located in the northern portion of Africa, is the largest hot desert of the world. Since the Sahara desert makes up nearly 10% of the African continent, it is also sometimes referred to as 'The Great Desert'.

- (b) An oasis is a fertile spot having vegetation typically surrounding a spring or similar water source. The sandstorms and heavy winds blow the sand and sometimes the desert sand dips to the level of underground water. This way, underground water comes to the surface, creating an oasis. The location of oases has been of critical importance for trade and transportation routes in desert areas. This is because all caravans plan their travel-routes via oases so that supplies of water and food can be replenished. Erg Awbari is a famous Oasis in the Sahara desert.
- (c) Musk deer is hunted to obtain musk is an aromatic substance which is commonly used to prepare perfumes. It is found in the gland of animals such as the musk deer. In olden days, good musk collected from musk deer was stored in special vessels made of gold and silver.
- (d) Climate in the Sahara desert is very hot and dry. There are no clouds present above the desert and it has a very short rainy season. The climate is so hot that many times, rainwater gets evaporated even before even reaching the ground. The Sahara is also one of the hottest regions in the world. The average annual temperature for the desert is about 30°C but during the hottest months, temperature can exceed 55°C. The highest temperature ever recorded (58°C) was in Aziziyah, Libya. However, the nights are freezing cold, and the temperatures can dip to several degrees below 0.
- (e) Glacier is a slow moving river of ice. There are many glaciers found in Ladakh. Siachen Glacier, Biafo Glacier are two glaciers found in Ladakh.
- (f) Many species are found in Ladakh, considering the height of the region and the uneven terrain. Animals have also adapted themselves to survive in the harsh conditions. In freezing winter season, some animals go into hibernation. Hibernation is a deep sleep that helps the animals staying at cold places to save energy and survive the winter without eating much. For example: brown bears and marmots go into hibernation.

On the other hand, some animals escape the freezing winters by migrating to lower altitudes. For example, Yaks which are found in Ladakh, spend their winters in the lower valleys and move upwards in summers. Many animals have a thick fur to keep them warm in winters. For example: yak and Wooly hare in Ladakh have fur coat.

- (g) Yaks which are found in Ladakh, spend their winters in the lower valleys and move upwards in summers. They have a thick fur to keep them warm in winters.
- (h) Ladakh has a great diversity of birds. A total of about 225 species have been found here. Some bird species found here are: Robins, Redstart and Tibetan snowcok. Most of the birds are migratory birds. Many birds migrate from the warmer parts to spend the summer in Ladakh.

Long answer questions.

(a) Flora of the Sahara Desert includes plants like cactus, artemisia, thyme and acacia. Due to high temperatures and arid conditions of the Sahara Desert, the plants found are drought and heat resistant. The leaves of some plants like cactus are modified into spines to minimize water loss. Plants like the African welwitchsia possess very long roots that penetrate very deep into the soil and help the plant to survive in the hot deserts. Date palms are found near oasis.

The fauna of Sahara Desert comprises of animals such ascamels, hyenas, jackals, foxes, snakes, lizards, etc. Even in the central and driest part of the desert, there are around 70 different animal species are present. The desert animals spend most of the day underground. Animals like rattlesnakes, kangaroo rats, and kit foxes come out in the open only during the night for hunting. These animals meet their water needs by eating foods, which have high-water content, like: succulent stems of cactus. Many animals have hairy soles to help them walk on hot land. Camels are known as the 'ship of the deserts.'

(b) The Sahara's population is around 4 million. There are various groups of people staying there, like: Tuareg, Bedouins, etc. The Tuaregs are the largest group of people who inhabit the Sahara Desert. They live mostly in the northern Africa while the Bedouins are the desert-dwelling Arab group. These groups and tribes are mostly nomads. Nomads are people who are always moving from one place to another and do not have any permanent settlements. Nomads generally use food items such as rice and dates that can be easily carried as they move around. They rear livestock such as camels, sheep, goats, etc. They also depend on the same animals for meat whenever required. The women folk are very tactful in utilizing every possible item for daily necessities. For example: they process milk and make butter. The animal skins are used to make bedding, clothes, belts and slippers. Animal hair is used to make mats, carpets, blankets and robes. These people have to wear heavy robes to protect themselves from dust storms and heavy winds.

The oasis in Sahara Desert and the Nile river valley supports significant population. Since water is available here, people have permanent settlements. They also resort to farming and grow crops such as: rice, wheat, barley and beans. People in the Nile valley in Egypt grow cotton. This Egyptian cotton is famous all over the world. At some places like Algeria, Libya and Egypt, oil has been discovered. Besides this, many other minerals have been found here, like: iron, phosphorus, manganese and uranium. Tuaregs have opted to become tourist guides to earn their living. Earlier, the only mode to travel in the Sahara was by foot or using camels. Several highways have also been introduced. These are the Trans African highway, Cairo Dakar highway, Trans Sahara highway, Tripoli-Cape Town Highway, Cairo-Cape Town Highway and many more. Hence, trucks are now frequently used for trading purposes than camels. Even the nomadic people of Sahara have started settling in cities as they have access with roads and vehicles. Infrastructure has

played an important role to convert a once dead land full of sand to a tourism hotspot.

The occupations of people of Sahara and Ladakh differ due to geographical diversity. People of Ladakh depend more on farming of food crops. In the Sahara region, cash crops are also grown. Mining activities within the Sahara region offer another option for jobs. The discovery of oil in Egypt also has been responsible for a major change. The introduction of highways has helped in the development of trade. All these factors are absent in Ladakh.