

Date: 18th to 22nd January, 2021

Number of Blocks: 2

Topics: Human Environment Interaction: The Tropical and Subtropical Regions
Life in Deserts

Subtopics:

- LIFE IN THE AMAZON BASIN
- LIFE IN THE GANGA-BRAHMAPUTRA BASIN
- THE HOT DESERT – SAHARA
- THE COLD DESERT - LADAKH

Instructional Aid: MS Word, NCERT Pdf, YouTube video, Concept Map, Dictionary of Geography, Map work
<https://ncert.nic.in/pdf/publication/otherpublications/tidog101.pdf>
<https://www.youtube.com/watch?v=sVZZXLKOL9Y> https://www.youtube.com/watch?v=k_RxBOIHdqw

Learning Outcomes: Each student will be able to:

- List the characteristics of tropical and sub-tropical and desert regions of the world.
- Identify the region of Amazon basin, Ganga Brahmaputra Basin, Sahara and Ladakh in the world map.
- List the characteristics features of basins and deserts.
- Analyze the life of people in these regions.

Reference Book: Our Environment (NCERT Geography book class VII)

Chapter Link: <https://ncert.nic.in/textbook.php?gess2=8-9> <https://ncert.nic.in/textbook.php?gess2=9-9>

GUIDELINES: Read the notes and the Chapter 8,9 of Geography- 'Human Environment Interaction: The Tropical and Subtropical Regions and Life in Deserts' and follow the instructions given below. All the questions given below are to be done in the Social Science Notebook.

Block 1: Lesson Development

Life in Amazon Basin

Location



Fig. 8.2: The Amazon Basin in South America

The tropical region lies very close to the equator; between 10°N and 10°S. So, it is referred to as the equatorial region. The river Amazon flows through this region. The place where a river flows into another body of water is called the river's mouth. Numerous tributaries (small rivers that join the main river) join the Amazon River to form the Amazon basin. The Amazon river basin drains portions of Brazil, parts of Peru, Bolivia, Ecuador, Columbia and a small part of Venezuela.

Climate

- Hot and wet climate throughout the year. It rains almost every day, that too without much warning.
- The day temperatures are high with very high humidity. At night the temperature goes down, but the humidity remains high

Rainforests

FLORA

- Thick forests grow here. The forests are in fact so thick that the dense “roof” created by leaves and branches do not allow the sunlight to reach the ground. The ground remains dark and damp.
- Only shade tolerant vegetation may grow here.
- Orchids, bromeliads grow as plant parasites.

FAUNA

- Birds such as toucans, hummingbirds, bird of paradise etc.
- Animals like monkeys, sloth and ant-eating tapirs are found here.
- Various species of reptiles, snakes such as Crocodiles, snakes such as Pythons, Anaconda and boa constrictor are some of the species found here.
- The basin is home to thousands of species of insects.
- Several species of fishes including the flesh-eating Piranha fish is also found in the river.

People of the Rainforests

- People grow most of their food in small areas after clearing some trees in the forest.
 - They mainly grow tapioca, pineapple and sweet potato.
 - They practice “slash and burn agriculture”.
 - The staple food is manioc, also known as cassava, that grows under the ground like the potato.
 - Cash crops like coffee, maize and cocoa are also grown.
- The rainforests provide a lot of wood for the houses. Some families live in thatched houses shaped like beehives. There are other large apartment-like houses called “Maloca” with a steeply slanting roof.

Life of the people of the Amazon basin is slowly changing.

- In the older days the heart of the forest, could be reached only by navigating the river.
- In 1970 the **Trans Amazon highway** made all parts of the rainforest accessible.
- Aircrafts and helicopters are also used for reaching various places.
- The indigenous population was pushed out from the area and forced to settle in new areas where they continued to practise their distinctive way of farming.
- The developmental activities are leading to the gradual destruction of the biologically diverse rainforests.

Life in the Ganga – Brahmaputra Basin

Location



Fig. 8.8: Ganga-Brahmaputra Basin

The tributaries of rivers Ganga and Brahmaputra together form the Ganga-Brahmaputra basin in the Indian subcontinent. The basin lies in the sub-tropical region that is situated between 10°N to 30°N latitudes. The tributaries of the River Ganga like the Ghaghra, the Son, the Chambal, the Gandak, the Kosi and the tributaries of Brahmaputra drain it. Himalayas and the Sundarbans delta are the main features of this basin. Ox-bow lakes dot the plain area.

Climate

- The area is dominated by monsoon climate. The monsoon brings rains from mid-June to mid-September.
- The summers are hot and the winters are cool.

Topography

The basin area has varied topography.

- The mountain areas with steep slopes have inhospitable terrain. Therefore, less number of people live in the mountain area of the Ganga-Brahmaputra basin.
- The plain area provides the most suitable land for human habitation. The soil is fertile. Agriculture is the main occupation of the people where flat land is available to grow crops. The density of population of the plains is very high.

The main crop is paddy. Wheat, maize, sorghum, gram and millets sugarcane, jute, Banana plantations are seen in some areas of the plain. In West Bengal and Assam tea is grown in plantations. Silk is produced through the cultivation of silkworms in parts of Bihar and Assam.

FLORA

The vegetation cover of the area varies according to the type of landforms.

- In the Ganga and Brahmaputra plain tropical deciduous trees grow, along with teak, sal and peepal.
- Thick bamboo groves are common in the Brahmaputra plain.
- The delta area is covered with the mangrove forests.
- In parts of Uttarakhand, Sikkim and Arunachal Pradesh, coniferous trees like pine, deodar and fir can be seen because the climate is cool and the slopes are steep.

FAUNA

- Elephants, tigers, deer and monkeys are common. The one-horned rhinoceros is found in the Brahmaputra plain. In the delta area, Bengal tiger, crocodiles and alligator are found.
- Aquatic life are found in the fresh river waters, the lakes and the Bay of Bengal Sea. The most popular varieties of the fish are the rohu, catla and hilsa. Fish and rice are the staple diet of the people living in the area.

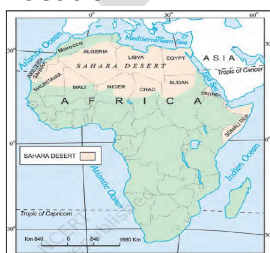
Life of the people

- The Ganga-Brahmaputra plain has several big towns and cities with the population of more than ten lakhs are located along the River Ganga. The wastewater from these towns and industries is discharged into the rivers. This leads to the pollution of the rivers.
- All the four ways of transport are well developed in the Ganga-Brahmaputra basin. In the plain areas the roadways and railways transport the people from one place to another. The waterways is an effective means of transport particularly along the rivers. Kolkata is an important port on the River Hooghly.
- The plain area also has many airports.

Tourism is another important activity of the basin. Taj Mahal on the banks of River Yamuna in Agra, Allahabad on the confluence(meeting) of the Rivers Ganga and Yamuna, Buddhists stupas in Uttar Pradesh and Bihar, Lucknow with its Imambara, Assam with Kaziranga and Manas with wildlife sanctuaries and Arunachal Pradesh with a distinct tribal culture are some of the places worth a visit.

THE HOT DESERT – SAHARA

Location



It is the world's largest desert. It has an area of around 8.54 million sq. km. The Sahara Desert touches eleven countries. These are Algeria, Chad, Egypt, Libya, Mali, Mauritania, Morocco, Niger, Sudan, Tunisia and Western Sahara.

Sahara Desert is covered with, gravel plains and elevated plateaus with bare rocky surface. These rocky surfaces may be more than 2500m high at some places.

Climate

- The climate of the Sahara Desert is scorching hot and parch dry.
- It has a short rainy season.
- Days are unbelievably hot. The temperatures during the day may soar as high as 50°C, heating up the sand and the bare rocks.
- The nights may be freezing cold with temperatures nearing zero degrees.

Flora and Fauna

- Vegetation in the Sahara desert includes cactus, date palms etc.
- In some places there are oasis – green islands with date palms surrounding them.
- Camels, hyenas, jackals, foxes, scorpions, many varieties of snakes and lizards are the prominent animals.

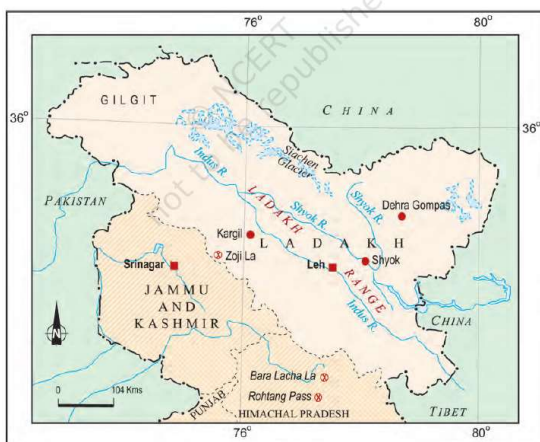
Life of the people

- The Sahara Desert despite its harsh climate has been inhabited by various groups of people, who pursue different activities.
- The nomadic tribes: Bedouins and Tuaregs rearing livestock such as goats, sheep, camels and horses.
- These animals provide them with milk, hides from which they make leather for belts, slippers, water bottles; hair is used for mats, carpets, clothes and blankets.
- They wear heavy robes as protection against dust storms and hot winds.
- The oasis in the Sahara and the Nile Valley in Egypt supports settled population. Since water is available, the people grow date palms.
- Crops such as rice, wheat, barley and beans, Cotton are also grown.
- The discovery of oil – a product in great demand throughout the world, in Algeria, Libya and Egypt is constantly transforming the Sahara Desert. Other minerals of importance that are found in the area include iron, phosphorus, manganese and uranium.

The cultural landscape of the Sahara is undergoing change. Gleaming glass cased office buildings tower over mosques and superhighways crisscross the ancient camel paths. Trucks are replacing camels in the salt trade. Tuaregs are seen acting as guides to foreign tourists. More and more nomadic herdsmen are taking to city life finding jobs in oil and gas operations.

THE COLD DESERT - LADAKH

Location



Ladakh is a cold desert lying in the Great Himalayas, on the eastern side of Jammu and Kashmir. The Karakoram Range in the north and the Zaskar mountains in the

south enclose it. Several rivers flow through Ladakh, Indus being the most important among them.

Several glaciers are found in Ladakh, for example the Gangri glacier.

The altitude in Ladakh varies from about 3000m in Kargil to more than 8,000m in the Karakoram.

Climate

- Due to its high altitude, the climate is extremely cold and dry.
- The day temperatures in summer are just above zero degree and the night temperatures well below -30°C .
- It is freezing cold in the winters when the temperatures may remain below -40°C for most of the time. There is little rainfall, as low as 10 cm every year. The area experiences freezing winds and burning hot sunlight.

Flora

- Due to high aridity, the vegetation is sparse. There are scanty patches of grasses and shrubs for animals to graze.
- During the summers, fruit trees such as apples, apricots and walnuts bloom.
- Several species of birds such as Robins, redstarts, Tibetan snowcock, raven and hoopoe are common. Some of these are migratory birds.

Fauna

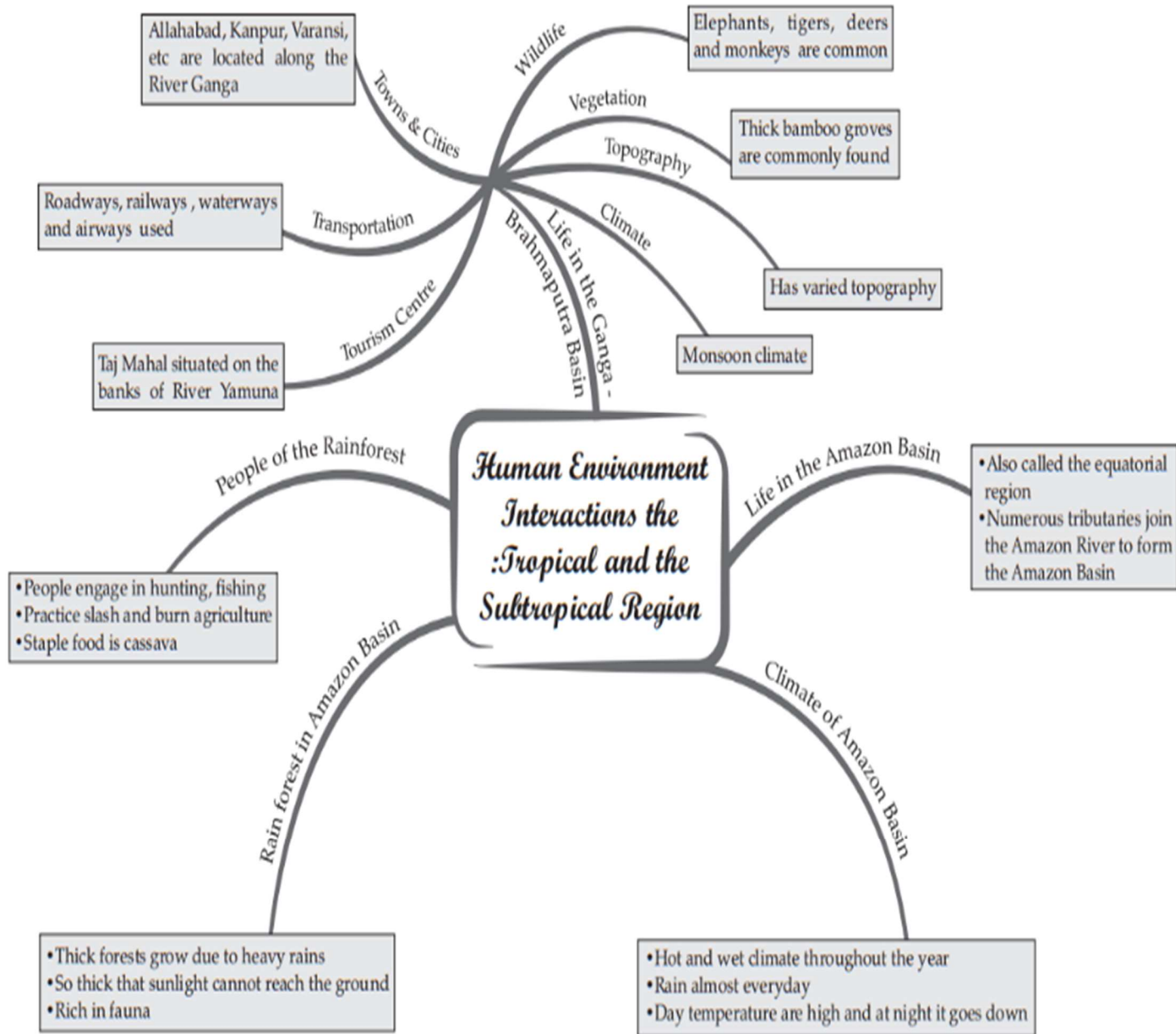
- The animals of Ladakh are wild goats, wild sheep, yak and special kinds of dogs. The animals are reared to provide for the milk, meat and hides. Yak's milk is used to make cheese and butter. The hair of the sheep and goat is used to make woollens.

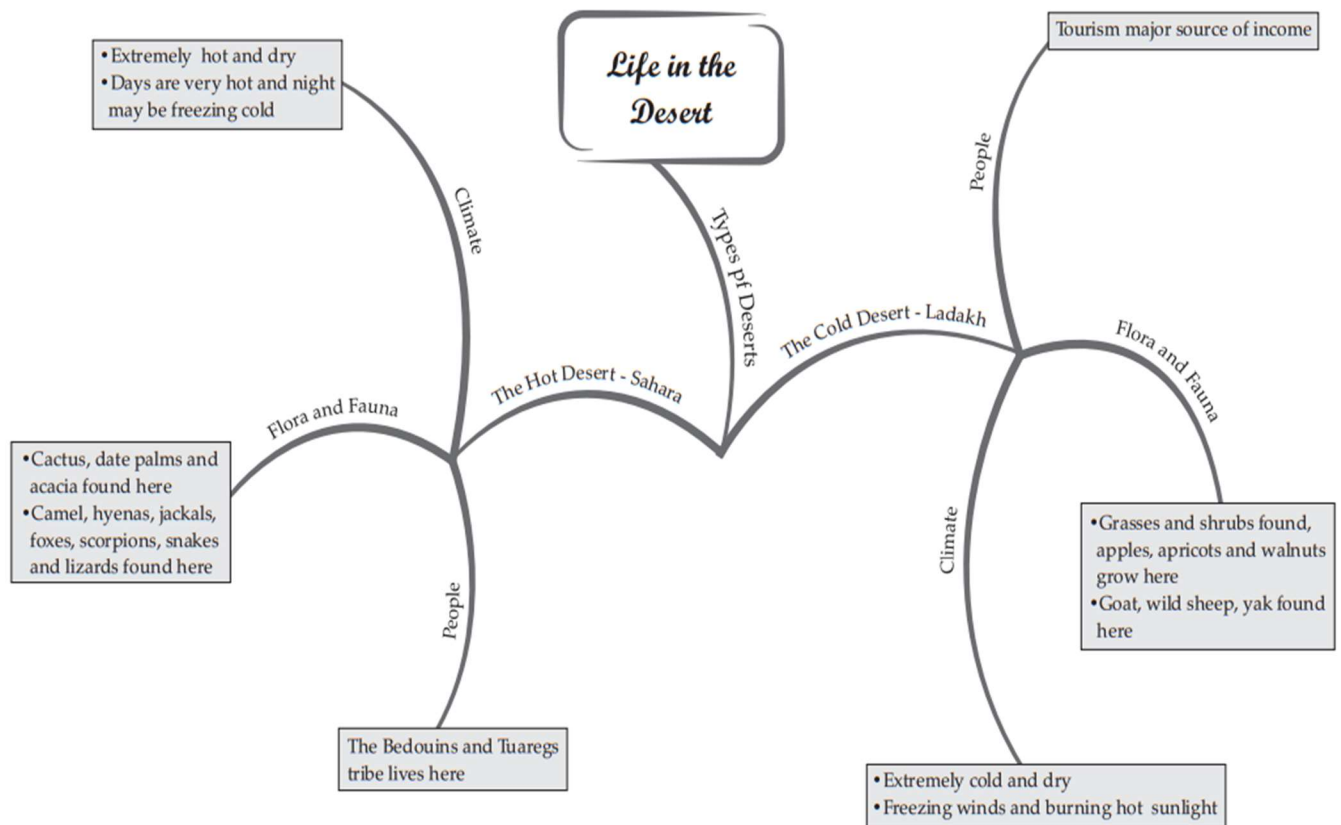
Life of the people

- The people here are either Muslims or Buddhists.
- In the summer season the people are busy cultivating barley, potatoes, peas, beans and turnip.
- The climate in winter months is so harsh that people keep themselves engaged in festivities and ceremonies.
- Leh, the capital of Ladakh is well connected both by road and air. The National Highway 1A connects Leh to Kashmir Valley through the Zoji la Pass.
- Tourism is a major activity with several tourists streaming in from within India and abroad. Visits to the gompas, treks to see the meadows and glaciers, witnessing ceremonies and festivities are important activities.

Life of people is undergoing change due to modernisation. But the people of Ladakh have over the centuries learned to live in balance and harmony with nature. Due to scarcity of resources like water and fuel, they are used with reverence and care. Nothing is discarded or wasted.

SUMMARY





Assignment:

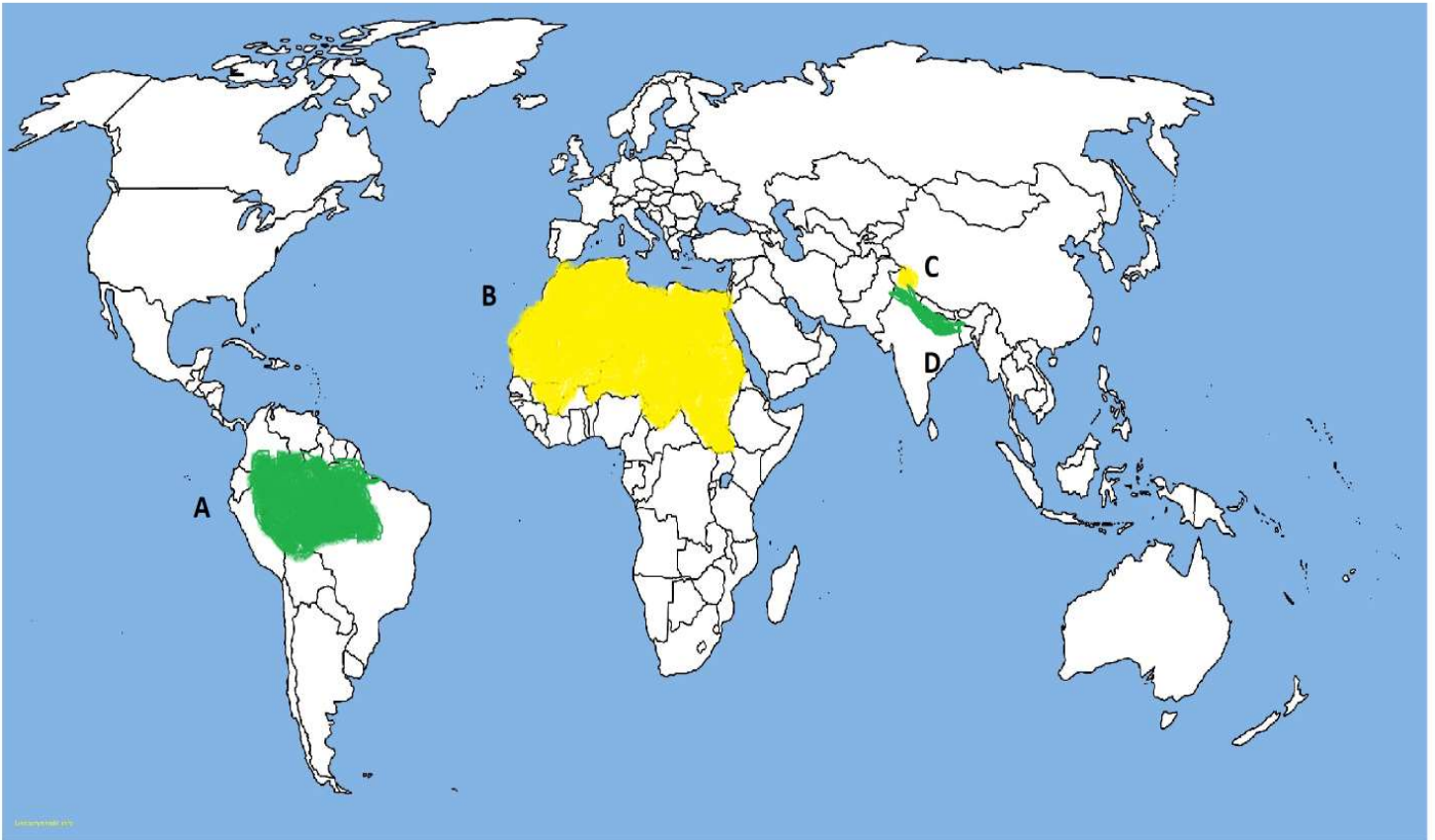
Q1. Multiple choice questions

1. How is the climate of Amazon basin characterized?
 (a) cold and wet (b) hot and wet (c) dry or wet (d) None of these
2. What is the main occupation of the people living in Ganga-Brahmaputra basin?
 (a) Fishing (b) Lumbering (c) Mining (d) Agriculture
3. Which region is characterized by extremely high or low temperature and scarce vegetation?
 (a) Desert (b) Fertile land (c) Grassland (d) None of these
4. The Amazon river basin drains portions of
 (a) Brazil (b) Peru (c) Bolivia (d) All of these
5. The “slash and burn” is a type of
 a) Agriculture (b) Weaving (c) Fishing (d) Hunting

Q2. Fill in the blanks:

1. Small rivers that join a main river are called
2. West Bengal and Assam are known for plantations.
3. The People of Sahara wear heavy robes as a protection against and
4. is the most important river of Ladakh.

- Q3. Give an account of the climate of Ladakh Desert.
- Q4. How is Sahara's landscape gradually changing?
- Q5. Enlist the characteristics of flora of Ganga- Brahmaputra basin.
- Q6. 'Life of the people of the Amazon basin is slowly changing'. Explain
- Q7. On the given political map of World, identify the following:



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