Chapter 3: Drainage

Question 1: Choose the right answer from the four alternatives given below.

(i) In which of the following states is the Wular lake located?

(a) Rajasthan

(b) Uttar Pradesh

(c) Punjab

(d) Jammu and Kashmir

(ii) The river Narmada has its source at

(a) Satpura

(b) Brahmagiri

(c) Amarkantak

(d) Slopes of the Western Ghats

(iii) Which one of the following lakes is a salt water lake?

(a) Sambhar

(b) Dal

(c) Wular

(d) Gobind Sagar

(iv) Which one of the following is the longest river of the Peninsular India?

(a) Narmada

(b) Krishna

(c) Godavari

(d) Mahanadi

(v) Which one amongst the following rivers flows through a rift valley?

(a) Mahanadi

(b) Tungabhadra

(c) Krishna

(d) Tapi

Answers :

(i) (d) Jammu and Kashmir

(ii) (c) Amarkantak

(iii) (a) Sambhar

(iv) (c) Godavari

(v) (d) Tapi

Question 2: Answer the following questions briefly.

(i) What is meant by a water divide? Give an example.

Answer : Any elevated area such as a mountain or an upland separates two drainage basins. Such an upland is known as a water divide.

(ii) Which is the largest river basin in India?

Answer : Largest River basin in India is the Ganga River basin.

(iii) Where do the rivers Indus and Ganga have their origin?

Answer :

Indus River: it originates in Tibet near Lake Manasarovar.

Ganga River: it originates from the Gangotri glacier.

(iv) Name the two headstreams of the Ganga. Where do they meet to form the Ganga?

Answer : The two headstreams of the Ganga are Bhagirathi and Alaknanda.

The Bhagirathi originate from Gangotri glacier and joined by the Alaknanda at Devprayag in Uttarakhand.

(v) Why does the Brahmaputra in its Tibetan part have less silt, despite a longer course?

Answer : The Brahmaputra have less silt in its Tibetan part because it is a cold and a dry area.

(vi) Which two Peninsular rivers flow through trough?

Answer : Narmada and Tapi are the two Peninsular rivers that flows through trough.

(vii) State some economic benefits of rivers and lakes.

Answer : Some economic benefits of rivers and lakes are:

1. A lake helps to regulate the flow of a river.
2. During heavy rainfall, it prevents flooding. And during the dry season, it helps to maintain an even flow of water.
3. Lakes can also be used for developing hydel power.
4. They moderate the climate of the surroundings.
5. They maintain the aquatic ecosystem.
6. It enhances natural beauty and help developing tourism and provides recreation.
7. Rivers are used for irrigation navigation hydropower generation.

Question 3 : Below are given names of a few lakes of India. Group them under two categories

– natural and created by human beings.

(a) Wular
(b) Dal
(c) Nainital
(d) Bhimtal
(e) Gobind Sagar
(d) Loktak
(g) Barapani
(h) Chilika
(i) Sambhar
(j) Rana Pratap Sagar
(k) Nizam Sagar
(l) Pulicat
(m) Nagarjuna Sagar
(n) Hirakund

Answer :

Natural lakes :

1. Wular
2. Dal
3. Nanital
4. Bhimtal
5. Loktal

6. Chilika
7. Pulicat
8. Sambhar
9. Barapani

Man-Made lakes :

1. Gobind sagar
2. Rana Pratap Sagar
3. Nizam Sagar
4. Nagarjuna Sagar
5. Hirakund

Question 4:Discuss the significant difference between the Himalayan and the Peninsular rivers.

Answer :

Himalayan River:

1. These are perennial rivers; they flow throughout the year.
2. They receive water from rains and snowfall.

Peninsular River:

1. These are seasonal rivers. They disappear after the season.
2. These are dependent on rainfall.

Question 5:Compare the east flowing and the west flowing rivers of the Peninsular plateau.

Answer :

East Flowing Rivers	West flowing rivers
They flow into the Bay of Bengal	They flow into the Arabian Sea
They form Deltas	They form Estuaries
Major rivers are Mahanadi, Godavari, Krishna.	Major rivers are Narmada and Tapi
They have many tributaries	They have less tributaries

Question 6:Why are rivers important for the country's economy?

Answer :Rivers are important for the country's economy because :

- Rivers carries freshwater which is the most essential resource for our life.
- They carry minerals which are useful for us.
- Rivers are used for generating hydroelectricity.
- Rivers are also used for irrigation.
- They provide fertility to the soil.
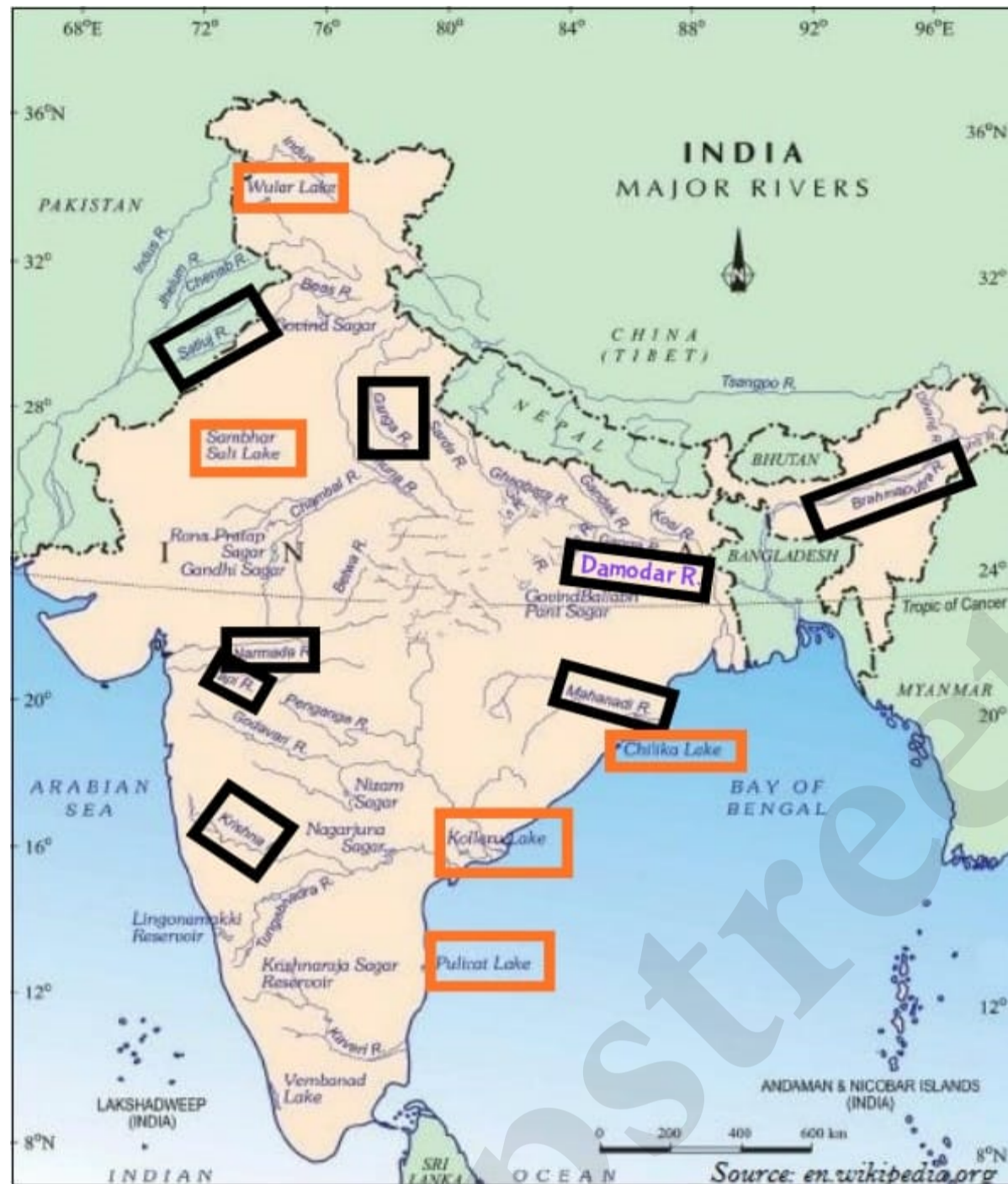
MAP SKILLS

Question :

(i) On an outline map of India mark and label the following rivers: Ganga, Satluj, Damodar, Krishna, Narmada, Tapi, Mahanadi, and Brahmaputra.

(ii) On an outline map of India mark and label the following lakes: Chilika, Sambhar, Wular, Pulicat, Kolleru.

Answer :

(i) Rivers are highlighted by black boxes.

(ii) Lakes are highlighted by Orange boxes.

Question : Solve this crossword puzzle with the help of given clues.

Across

1. Nagarjuna Sagar is a river valley project. Name the river?

2. The longest river of India.

3. The river which originates from a place known as Beas Kund.

4. The river which rises in the Betul district of MP and flows westwards.

5. The river which was known as the "Sorrow" of West Bengal.

6. The river on which the reservoir for Indira Gandhi Canal has been built.

7. The river whose source lies near Rohtang Pass.

8. The longest river of Peninsular India?

Down

9. A tributary of Indus originating from Himachal Pradesh.

10. The river flowing through fault, drains into the Arabian Sea.

11. A river of south India, which receives rainwater both in summer and winter

12. A river which flows through Ladakh, Gilgit and Pakistan.

13. An important river of the Indian desert.

14. The river which joins Chenab in Pakistan.

15. A river which rises at Yamunotri glacier

Answer :

1. Krishna
2. Ganga
3. Beas
4. Tapi
5. Damodar
6. Satluj
7. Ravi
8. Godavari
9. Chenab
10. Narmada
11. Kaveri
12. Indus
13. Luni
14. Jhelum
15. Yamuna

Intext Questions

Question : Which River has the largest basin in India?

Answer : Ganga River.

Question : The name of the biggest waterfall in India.

Answer : Kunchikal falls in Karnataka.

Question : Lakes of large extent are called seas like the Caspian, the Dead and the Aral seas.

Answer : Because when they were not landlocked, they were seas.

Question : Concern over rising pollution in our rivers led to the launching of various action plans to clean the rivers. Have you heard about such action plans? How does our health get affected by polluted river water? Think about "life of human beings without fresh water".

Answer : **Namami Gange Programme** the Government launched an integrated Ganga conservation mission called 'Namami Gange' to arrest the pollution of Ganga River and revive the river.

Health risk associated with polluted water includes different diseases such as respiratory disease, cancer, diarrheal disease, neurological disorder and cardiovascular disease. Poor quality water destroys the crop production and infects our food which is hazardous for aquatic life and human life. Pollutants disturb the food chain and heavy metals, especially iron affects the respiratory system of fishes. An iron clog in to fish gills and it is lethal to fishes, when these fishes are eaten by human leads to the major health issue. Metal contaminated water leads to hair loss, liver cirrhosis, renal failure and neural disorder.

"Life of human beings without fresh water":

Our existence will be in danger without fresh water. we will not get water for irrigation for our fields and as a result there could be lot of scarcity of food. So, we will face a situation of food crisis. Water running in rivers is tapped and big dams are constructed and hydropower is produced. Moreover, river transport system is not possible in case water stop flowing in rivers.

Activity

Question : Make a list of natural and artificial lakes with the help of the atlas.

Answer :

Natural Lake

(a) Wular lake

(b) Dal lake

(c) Nainital lake

(d) Bhimtal lake

(e) Loktok lake

(f) Barapani lake

(g) Chilka lake

(h) Sambhar lake

(i) Pulicat lake

(j) Kolleru lake

(k) Vembanad lake

Artificial Lake

(a) Gobind sagar

(b) Rana Pratap

(c) Rana Pratap sagar

(d) Nagarjuna sagar

(e) Hirakud