Very Short Answer Type Questions

1. What is the main water divide in Peninsular India and which rivers flow eastwards into the Bay of Bengal?

Ans. The Western Ghats form the main water divide in Peninsular India. Rivers such as the Mahanadi, Godavari, Krishna, and Kaveri flow eastwards and drain into the Bay of Bengal.

CODE-qTBa

2. What are the only two long rivers that flow west in Peninsular India and make estuaries?

Ans. The Narmada and the Tapi are the only two long rivers that flow west in Peninsular India and make estuaries.

CODE-Xwto

3. Which is the largest Peninsular river and which are its major tributaries?

Ans. The Godavari is the largest Peninsular river. Its major tributaries include the Purna, Wardha, Pranhita, Manjra, Wainganga, and Penganga.

CODE-b5mF

4. What are the notable locations created by the Narmada river on its way to the sea?

Ans. The 'Marble rocks', near Jabalpur, where the Narmada flows through a deep gorge, and the 'Dhuadhar falls, where the river plunges over steep rocks, are some of the notable locations created by the Narmada river on its way to the sea.

CODE-axwN

5. Which are the main tributaries of the Krishna river and which states does its drainage basin cover?

Ans. The Tungabhadra, Koyana, Ghatprabha, Musi, and Bhima are some of the main tributaries of the Krishna river. Its drainage basin covers parts of Maharashtra, Karnataka, and Andhra Pradesh.

CODE-mVrA

6. Where does the Indus river rise?

Ans. The Indus river rises in Tibet, near Lake Mansarowar.

CODE-adaP

CODE-xkfD

7. How many rivers join the Indus near Mithankot in Pakistan?

Ans. Five rivers - the Satluj, the Beas, the Ravi, the Chenab, and the Jhelum - join together to enter the Indus near Mithankot in Pakistan.

8. What percentage of the total water carried by the Indus river system can India use according to the Indus Water Treaty (1960)?

Ans. India can use only 20% of the total water carried by the Indus river system.

CODE-zkrv

CODE-YY6o

9. What are the major rivers that join the Ganga from the Himalayas?

Ans. The major rivers that join the Ganga from the Himalayas are Yamuna, Ghaghara, Gandak, and Kosi.

10. Which are the main tributaries of the Ganga that come from the peninsular uplands?

Ans. The main tributaries of the Ganga that come from the peninsular uplands are Chambal, Betwa, and Son.

CODE-hduj

CODE-8Gj1

11. What is the name of the distributary of the Ganga that flows southwards through the deltaic plains to the Bay of Bengal?

Ans. The name of the distributary of the Ganga that flows southwards through the deltaic plains to the Bay of Bengal is Bhagirathi-Hooghly.

Short Answer Type Questions

CODE-CEQk

1. Write a note on the Indus River System.

Ans.

- The Indus River System is one of the largest river systems in the world.
- It rises in Tibet, near Lake Mansarowar, and flows west, entering India in Ladakh. The river then passes through a picturesque gorge and several tributaries, including the Zaskar, Nubra, Shyok, and Hunza, join it in the Kashmir region.
- The Indus flows through Baltistan and Gilgit and emerges from the mountains at Attock. It then joins with the Satluj, Beas, Ravi, Chenab, and Jhelum rivers near Mithankot in Pakistan, before eventually flowing into the Arabian Sea, east of Karachi.
- The Indus plain has a gentle slope, and with a length of 2900 km, the Indus is one of the longest rivers in the world.
- The Indus basin is spread across India and Pakistan, with a little over a third of it located in India, including Ladakh, Jammu and Kashmir, Himachal Pradesh, and Punjab.

2. What are some major tributaries of the Ganga river system, and where do they originate from?

Ans.

- Some major tributaries of the Ganga river system include the Yamuna, Ghaghara, Gandak, and Kosi.
- These rivers originate from the Himalayas, with the Yamuna rising from the Yamunotri Glacier, and the Ghaghara, Gandak, and Kosi rising in the Nepal Himalaya.

CODE-HJJ3

CODE-H7Ea

3. Where does the Ganga river bifurcate, and what are its distributaries?

Ans.

- The Ganga river bifurcates at Farakka in West Bengal.
- The Bhagirathi-Hooghly (a distributary) flows southwards through the deltaic plains to the Bay of Bengal.

- The mainstream flows southwards into Bangladesh and is joined by the Brahmaputra.
- Further downstream, it is known as the Meghna.
- The delta formed by these rivers is known as the Sundarban Delta.

4. What are some examples of lakes that are formed due to human activities?

Ans. Lakes that are formed due to human activities include those that are created by damming rivers for hydel power generation, such as the Guru Gobind Sagar (Bhakra Nangal Project) in India.

CODE-4Rqf

5. What is the importance of lakes to human beings?

Ans.
- Lakes are important to human beings for several reasons.
- They help regulate the flow of rivers, prevent flooding, and maintain an even flow of water.
- They can also be used for hydel power generation, moderate the climate, enhance natural beauty, and provide recreation and tourism opportunities.

DE-gc6L

6. Describe the role of rivers in the economy.

Ans.
- Rivers play a crucial role in the economy of a country. They are a source of water for agriculture, industry, and domestic use.
- Rivers provide irrigation facilities to farmers, enabling them to grow crops and contribute to the country's food security.
- They are also used for transportation of goods, providing cheap and efficient means of transport for industries located near the banks.
- The power generated by hydroelectric power plants on rivers is a source of cheap and renewable energy.
- Rivers also support the fishing industry, which provides livelihood to many people.
- Overall, the utilisation of rivers for various economic activities is crucial for the development of a country.

CODE-BrNk

7. What are some of the sources of pollution in rivers?

Ans.
- The sources of pollution in rivers include untreated sewage, industrial effluents, agricultural runoff, and domestic waste.
- As the demand for water from rivers increases, the quality of water deteriorates, reducing the self-cleansing capacity of the river.
- The pollution level of many rivers has been rising due to increasing urbanisation and industrialisation.
- Various action plans have been launched to clean the rivers.

DE-LMYm

8. Give characteristic features of the Ganga-Brahmaputra delta.

Ans. The characteristic features of the Ganga-Brahmaputra delta are:
- The Ganga-Brahmaputra delta is also known as Ganga delta or Sundarban delta.
- It is situated in Bangladesh (southern parts) and in the state of West Bengal (India).
- It is the world's largest and fastest growing delta.
- The mainstream of Ganga river flows southwards into Bangladesh and is joined by the Brahmaputra river resulting in the formation of a delta.
- Sundarban delta derived its name from Sundari trees which do not rot in stagnant water.
- It is also the home of Royal Bengal tigers.

CODE-HZsG

9. What is meant by drainage? Explain any four benefits of rivers.

Ans. Drainage means river system of an area. The four benefits of rivers are:
- The rivers provide water, the basic natural resource essential for various human activities.
- The banks of the rivers have always attracted settlers from ancient times. These settlements are now big cities.

-kyq3

- River waters used for irrigation, navigation, hydro-electric power generation is of special significance.
- Rivers are very significant for countries like India where agriculture is the livelihood of the majority of the population.

10. Enlist the characteristic features of the Godavari basin.

Ans. The characteristic features of the Godavari basin are as follows:

CODE-6H9E

- It is the largest river basin of the Peninsular rivers.
- It rises in the Nasik district of Maharashtra and joins the Bay of Bengal in Andhra Pradesh.
- The Godavari river basin covers the states of Maharashtra, Madhya Pradesh, Odisha and Andhra Pradesh (50% of this basin covers the state of Maharashtra).
- The Godavari is often referred to Dakshin Ganga because of its largest size and extent.
- The important tributaries of River Godavari are: the Purna, the Wardha, the Pranhita, the Manjra, the Wainganga and the Penganga.

CODE-BfδuI

11. Why are Peninsular rivers seasonal in nature? State any three reasons.

Ans. The three reasons are as follows:

- The Peninsular rivers are dependent on rainfall unlike the Himalayan rivers which are snowfed.
- The hills of the peninsular plateau are not snow-bound unlike the Himalayas.
- These rivers follow a smaller course and have small basins which influence water volume.

12. Why are most of the Peninsular river draining into the Bay of Bengal? Give two reasons. Name two rivers draining into the Arabian Sea.

CODE-LWju

Ans. I. Most of the Peninsular rivers drain into the Bay of Bengal because of the following reasons:

- The Eastern Ghats are lower than the Western Ghats and are also discontinuous thus making it easier for the rivers to reach the Bay of Bengal.
- The Deccan Plateau has a gentle slope towards the east, thus the rivers drain towards the east.

II. Two rivers draining into the Arabian Sea are the Narmada and the Tapi

CODE-7Tgw

13. Describe three important features of the Tapi basin.

Ans. The important features of Tapi basin are:

- The Tapi river rises in the Satpura ranges in the Betul district of Madhya Pradesh.
- It also flows through a rift valley parallel to the Narmada but much shorter in length.
- Its basin covers parts of Madhya Pradesh, Gujarat and Maharashtra.

14. Describe any three important features of the Mahanadi basin.

CODE-ocZG

Ans. The three important features of Mahanadi basin are:

- Mahanadi basin covers parts of the states of Chhattisgarh, Jharkhand, Odisha and Maharashtra.
- It rises in the highlands of Chhattisgarh and flows through Odisha to form a delta in the Bay of Bengal.
  It's length is 860 km.
- Due to the devastating floods that the river causes every year, the Hirakud dam has been built on it.

CODE-QiZz

15. From where does the River Krishna originate? Name its tributaries. Mention the names of the states covered by it.

Ans. The River Krishna rises from a spring near Mahabaleshwar. Its tributaries are the Tungabhadra, the Koyana, the Ghatprabha, the Musi and the Bhima. The states covered by Krishna river are Maharashtra, Karnataka and Andhra Pradesh.

Long Answer Type Questions

CODE-rPB4

1. What are the major Peninsular rivers of India and their characteristics?

Ans.
- The major Peninsular rivers of India are the Narmada, Tapi, Godavari, Mahanadi, Krishna, and Kaveri.
- The Western Ghats form the main water divide in Peninsular India, and most of these rivers flow eastwards and drain into the Bay of Bengal, except for the Narmada and Tapi which flow westward and make estuaries.
- The drainage basins of these rivers are comparatively smaller in size.
- The Narmada rises in Madhya Pradesh and flows towards the west in a rift valley formed due to faulting.
- The Tapi rises in the Satpura ranges, in Madhya Pradesh, and also flows in a rift valley parallel to the Narmada, but is much shorter in length.
- The Godavari is the largest Peninsular river and drains into the Bay of Bengal.
- The Mahanadi rises in Chhattisgarh and flows through Odisha to reach the Bay of Bengal.
- The Krishna rises near Mahabaleshwar and drains parts of Maharashtra, Karnataka, and Andhra Pradesh.
- The Kaveri rises in the Western Ghats and drains parts of Karnataka, Kerala, and Tamil Nadu.

CODE-L3Fe

2. What are the major tributaries of the Ganga river system and what role do they play in the northern plains?

Ans.
- The Ganga river system is fed by the Bhagirathi, which originates from the Gangotri Glacier and is joined by the Alaknanda at Devaprayag in Uttarakhand.
- The Ganga is also joined by several tributaries from the Himalayas, including major rivers such as the Yamuna, the Ghaghara, the Gandak, and the Kosi.
- The Yamuna rises from the Yamunotri Glacier and flows parallel to the Ganga as a right bank tributary, meeting the Ganga at Allahabad.
- The Ghaghara, the Gandak, and the Kosi rise in the Nepal Himalaya and are known for flooding parts of the northern plains every year, but they also enrich the soil for agricultural use.
- The main tributaries from the peninsular uplands are the Chambal, the Betwa, and the Son.
- These rivers rise from semi-arid areas and do not carry much water in them.
- Together, these tributaries feed the Ganga with water and sediment, making the river system one of the most fertile regions in the world.
- The tributaries also provide a lifeline to millions of people who depend on the river for agriculture, transportation, and fishing.
- Overall, the tributaries of the Ganga river system play a vital role in sustaining life and the economy of the northern plains.

CODE-ZpvF

3. Write main features of River Indus under the following headings:
(a) Source
(b) Tributaries
(c) Areas drained
(d) Extent of Indus Plain
(e) Indus Water Treaty.

Ans. The main features of River Indus as an important river of the Himalayas are:
- **Source:** Indus river rises in Tibet, near lake Mansarowar. While flowing towards west, it enters India in the Ladakh district of Jammu and Kashmir by forming a picturesque gorge.
- **Tributaries:** Several tributaries like the Zaskar, the Nubra, the Shyok and the Hunza join it in the Kashmir region. Other major tributaries are the Satluj, the Beas, the Ravi, the Chenab and the Jhelum join together and form Indus at Mithankot in Pakistan.

- **Areas drained by river Indus:** The Indus flows southwards eventually reaching the Arabian Sea east of Karachi areas. This is where Indus river end but not totally drained.
- **Extent of the Indus Plain:** The Indus plain has a gentle slope. It covers the states of Jammu and Kashmir, Himachal Pradesh and Punjab.
- **Indus Water Treaty (1960):** According to the regulations of this treaty, India can use only 20% of the total water carried by the Indus river system. The water is used for irrigation in Punjab, Haryana and southern and western parts of Rajasthan.

Case Study Based Questions

CODE-m5JH

I. Read the given extract and answer the following questions.

A meandering river across a floodplain forms cut-offs that later develop into ox-bow lakes. Spits and bars form lagoons in the coastal areas, e.g. the Chilika lake, the Pulicat lake and the Kolleru lake. Lakes in the region of inland drainage are sometimes seasonal; for example, the Sambhar lake in Rajasthan, which is a salt water lake. Its water is used for producing salt. Most of the freshwater lakes are in the Himalayan region. They are of glacial origin. In other words, they formed when glaciers dug out a basin, which was later filled with **snowmelt**. The Wular lake in Jammu and Kashmir, in contrast, is the result of tectonic activity. It is the largest freshwater lake in India. The Dal lake, Bhimtal, Nainital, Loktak and Barapani are some other important freshwater lakes.

(i) What are some human activities that can lead to the formation of lakes?

Ans. Lakes can be formed by human activities such as damming of rivers for hydropower generation, excavation of gravel and sand, and creation of artificial ponds or reservoirs for irrigation, drinking water, or recreational purposes.

(ii) What is the main use of the water from the Sambhar lake in Rajasthan?

Ans. The water from the Sambhar lake is used for producing salt.

(iii) Which lake in Jammu and Kashmir is the result of tectonic activity?

Ans. The Wular lake in Jammu and Kashmir is the result of tectonic activity.

II. Read the given extract and answer the following questions.

CODE-ppmu

Apart from originating from the two major physiographic regions of India, the Himalayan and the Peninsular rivers are different from each other in many ways. Most of the Himalayan rivers are perennial. It means that they have water throughout the year. These rivers receive water from rain as well as from melted snow from the lofty mountains. The two major Himalayan rivers, the Indus and the Brahmaputra originate from the north of the mountain ranges. They have cut through the mountains making gorges. The Himalayan rivers have long courses from their source to the sea.

(i) What is the major source of water for most of the Himalayan rivers?

Ans. Most of the Himalayan rivers receive water from rain as well as from melted snow from the lofty mountains.

(ii) What is the meaning of perennial rivers?

Ans. Perennial rivers are the ones that have water throughout the year.

(iii) Which are the two major Himalayan rivers that originate from the north of the mountain ranges?

Ans. The two major Himalayan rivers that originate from the north of the mountain ranges are the Indus and the Brahmaputra.