

HOTS (Higher Order Thinking Skills)

Q.1. Explain the term 'water divide' with example. What is its significance?

Ans. (i) Any elevated area such as a mountain or a plateau that separates two drainage basins is known as a 'water divide'.

(ii) For example, Ambala is located at the water divide between the Indus and Ganga rivers. It does not receive water from either of the two rivers.

Q.2. Why do Himalayan rivers get flooded every year? What are its advantage?

Ans. Himalayan rivers get flooded every year due to excessive melting of the snow due to global warming and excessive rains too.

Advantage:

(i) They enable the enriching of the soil in entire northern plains by providing alluvial silt to it.

(ii) Various food and cash crops are grown in it and due to irrigational facilities and green revolution, certain crops have bumper crops.

Q.3. Explain any three differences between east flowing peninsular rivers and west flowing peninsular rivers.

Ans. The East flowing rivers:

(i) These rivers originate from the Western Ghats and flow eastwards.

(ii) They all form deltas at their mouths.

(iii) They drain into the Bay of Bengal.

(iv) They have large volume of water.

Examples: Mahanadi, Godavari, Krishna and Kaveri

The West flowing rivers:

(i) These rivers originate in Central India and flow westwards.

(ii) They form estuaries since they flow from rift valleys.

(iii) They drain into the Arabian Sea.

(iv) They have lesser volume of water.

Examples: Narmada and Tapi

Q.4. 'Lakes are of great value to human beings'. Justify the statement with three suitable reasons.

Ans. The benefits of lakes to human beings are:

- (i)** A lake helps to regulate the flow of a river.
- (ii)** During heavy rainfall, it prevents flooding and during the dry season, it helps to maintain an even flow of water.
- (iii)** Lakes can be used for developing hydel power too.
- (iv)** They help in maintaining a moderate climate.
- (v)** They are able to maintain the aquatic ecosystem.
- (vi)** They enhance the natural beauty and help in developing tourism and provide recreation.

Q.5. How do urbanisation and industrialisation cause river pollution? Suggest three measures to control river pollution.

OR

What are the main causes of the pollution in the rivers of India? How can we prevent this kind of pollution?

Ans. The main causes of pollution of Indian rivers are:

- (i)** The growing domestic, municipal, industrial and agricultural demand for water from rivers naturally affects the quality of water.
- (ii)** As a result, more and more water is drained out of the rivers, thereby reducing their volume.
- (iii)** A heavy load of untreated sewage and industrial effluents are emptied into the rivers.
- (iv)** This affects not only the quality of water but also the self-cleansing capacity of the river.
- (v)** The increasing urbanisation and industrialisation has increased the pollution levels of the rivers.

How to prevent pollution:

- (i)** The effluents of the industries should be treated before they enter the river waters.

(ii) People of the urban areas living on the banks of the rivers should be sensitised about the pollution levels of the rivers and the difficulty in cleaning it.

(iii) Since Indians are religious-minded and most of their festivals are associated with pure water of rivers, the immersing of deities, and of religious goods and even the dead are associated with these holy rivers, resulting into pollution, which needs to be checked and controlled.