Key Terms to remember

- The flow of water through well-defined network of channels is known as 'drainage system'.
- A river drains the water collected from a specific area, which is called its 'catchment area'.
- An area drained by a river and its tributaries is called a drainage basin. Smaller drainage basin are also called watershed.
- The boundary line separating one drainage basin from the other is known as the water divide or watershed.
- The Panjnad is the name given to the five rivers of Punjab, namely the Satluj, the Beas, the Ravi, the Chenab and the Jhelum.
- 'Namami Gange Programme', launched in June 2014 with the twin objectives of effective abatement of pollution, conservation and rejuvenation of the National River Ganga.
- An antecedent river is a stream that originated well before the Himalayan region was uplifted, retains its original course and pattern.
- The **ephemeral** river is one which flows for short period of time and distance when it rains heavily. This river or stream is purely temporary.
- The pattern of flow of water in a river channel over a year is known as its regime.
- The Chenab is the largest tributary of the Indus.
- The Yamuna is the western most and the longest tributary of the Ganga
- The Chambal is famous for its badland topography called the Chambal ravines.
- Once known as the 'sorrow of Bengal', the Damodar has been now tamed.
- The Godavari is the largest Peninsular river system. It is also called the Dakshin Ganga.

Describe Important Drainage Patterns

- The drainage pattern resembling the branches of a tree is known as "dendritic" the examples of which are the rivers of northern plain.
- When the rivers originate from a hill and flow in all directions, the drainage pattern is known as 'radial'. The rivers originating from the Amarkantak range present a good example of it.
- When the primary tributaries of rivers flow parallel to each other and secondary tributaries join them at right angles, the pattern is known as 'trellis'.
- When the rivers discharge their waters from all directions in a lake or depression, the pattern is know as 'centripetal'.

Classify Indian Drainage system on the basis of discharge of water

- the Arabian Sea drainage; Nearly 23 per cent comprising the Indus, the Narmada, the Tapi, the Mahi and the Periyar systems discharge their waters in the Arabian Sea.
- the Bay of Bengal drainage. Nearly 77 per cent of the drainage area consisting of the Ganga, the Brahmaputra, the Mahanadi, the Krishna, etc. is oriented towards the Bay of Bengal

Classify Indian Drainage system on the basis of the size of the watershed

 Major river basins with more than 20,000 sq. km of catchment area. It includes 14 drainage basins such as the Ganga, the Brahmaputra, the Krishna, the Tapi, the Narmada, the Mahi, the Pennar, the Sabarmati, the Barak, etc.

CC BY 4.0 SURYAVEER SINGH

CH-3 – DRAINAGE SYSTEM

- Medium river basins with catchment area between 2,000-20,000 sq. km incorporating 44 river basins such as the Kalindi, the Periyar, the Meghna, etc.
- Minor river basins with catchment area of less than 2,000 sq. km include fairly good number of rivers flowing in the area of low rainfall.

Classify Indian Drainage system on the basis of mode of origin

SL No.	Aspects	Himalayan River	Peninsular River
1.	Place of origin	Himalayan mountain covered with glaciers	Peninsular plateau and central highland
2.	Nature of flow	Perennial; receive water from glacier and rainfall	Seasonal; dependent on monsoon rainfall
3.	Type of drainage	Antecedent and consequent leading to dendritic pattern in plains	Super imposed, rejuvenated resulting in trellis, radial and rectangular patterns
4.	Nature of river	Long course, flowing through the rugged mountains experiencing headward erosion and river capturing; In plains meandering and shifting of course	Smaller, fixed course with well-adjusted valleys
5.	Catchment area	Very large basins	Relatively smaller basin
6.	Age of the river	Young and youthful, active and deepening in the valleys	Old rivers with graded profile, and have almost reached their base levels

Mention major problems in using river water.

- (i) No availability in sufficient quantity
- (ii) River water pollution
- (iii) Load of silt in the river water
- (iv) Uneven seasonal flow of water
- (v) River water disputes between states
- (vi) Shrinking of channels due to the extension of settlements.

CC BY 4.0 SURYAVEER SINGH