

Class XI Session 2025-26  
Subject - Geography  
Sample Question Paper - 9

Time Allowed: 3 hours

Maximum Marks: 70

General Instructions:

Read the following instructions carefully and follow them:

- 1. This question paper contains 30 questions. All questions are compulsory.
- 2. Question paper is divided into five sections A, B, C, D and E.
- 3. Section A Questions no. 1 to 17 are Multiple Choice type questions. Each question carries 1 mark.
- 4. Section B Questions no. 18 and 19 are Source-based questions. Each question carries 3 marks.
- 5. Section C Questions no. 20 to 23 are Short Answer type questions. Each question carries 3 marks. Answer to these questions shall be written in 80 to 100 words.
- 6. Section D Questions no. 24 to 28 are Long Answer type questions. Each question carries 5 marks. Answer to these questions shall be written in 120 to 150 words.
- 7. Section E Questions no. 29 and 30 are Map-based questions. Each question carries 5 marks.
- 8. There is no overall choice given in the question paper. However, an internal choice has been provided in a few questions in all sections other than Section A.

Section A

1. **Assertion (A):** India stretches from 8°04' north latitude in the south to 37°06' north latitude in the north. [1]  
**Reason (R):** It is lying entirely in the Northern hemisphere.

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false but R is true.

2. Which of the following is incorrectly matched? [1]

Climatic Groups According to Koeppen	Averages of precipitation
(a) Mediterranean Climate	(i) Between 35 - 90 cm.
(b) Marine West Coast Climate	(ii) From 50-250cm.
(c) Cold Climate with Dry Winters	(iii) From 15-75 cm
(d) Humid Subtropical Climate	(iv) From 75-150 cm

- a) (c) - (iii)
- b) (b) - (ii)
- c) (a) - (i)
- d) (d) - (iv)

3. Which one of the following is a series of ranges such as the Karakoram, Ladakh, Zaskar and Pir Panjal? [1]

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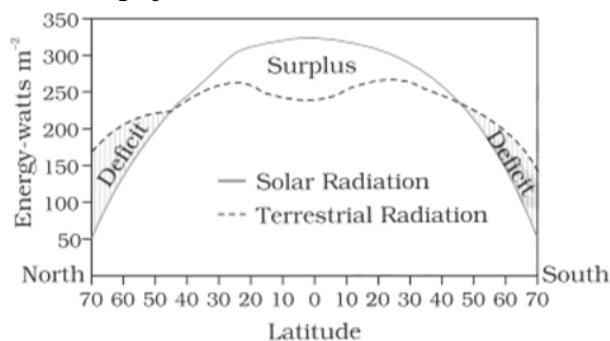
- a) (i) - (iv) - (iii) - (ii)  
c) (iii) - (ii) - (iv) - (i)
- b) (iv) - (ii) - (iii) - (i)  
d) (ii) - (i) - (iv) - (iii)
12. Wind circulation around a low-pressure center is called \_\_\_\_\_ circulation. [1]
- a) chinook  
c) anti-cyclonic
- b) trade winds  
d) cyclonic
13. How many of the Biosphere reserves from India are recognised by the UNESCO? [1]
- a) Two  
c) One
- b) Ten  
d) Four
14. Which of the following is incorrectly matched? [1]

Features surrounding Peninsular Plateau	Direction
(a) Delhi ridge	(i) North-west
(b) Rajmahal hills	(ii) East
(c) Gir	(iii) West
(d) Cardamom hills	(iv) North

- a) (a) - (i)
- b) (c) - (iii)
- c) (d) - (iv)
- d) (b) - (ii)

**Question No. 15 to 17 are based on the given text. Read the text carefully and answer the questions:**

Read the graph.



15. What does the given graph illustrate in terms of the earth's atmosphere system?
- a) Oceanic Currents and Radiation                      b) Landform Variation
- c) Latitudinal Net Radiation Balance                      d) Latitudinal Temperature Changes
16. According to the graph, where is there a surplus of net radiation balance on the Earth?
- a) Between 20 and 40 degrees north                      b) Near the Equator
- c) Between 40 degrees north and south                      d) Between 0 and 20 degrees north
17. How does the redistribution of surplus heat energy from the tropics prevent extreme heating of the tropics and freezing of the high latitudes?
- a) By causing freezing temperatures in the tropics                      b) By increasing the temperature in the tropics
- c) By reducing heat accumulation in the high latitudes                      d) By decreasing the surplus heat in the tropics

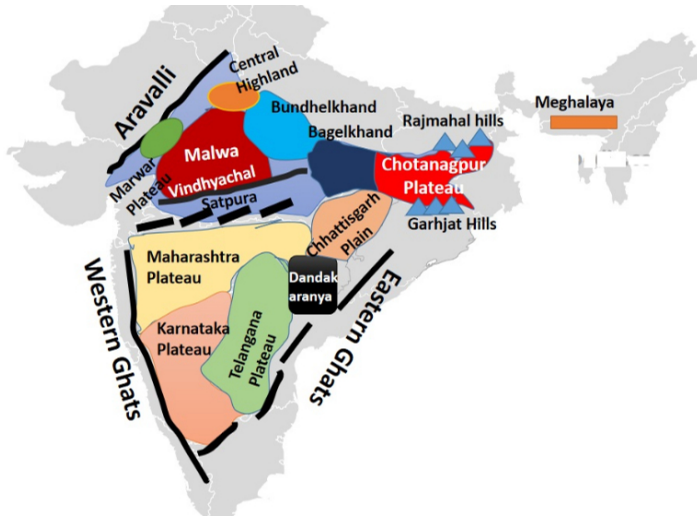
## Section B

18. Read the following text carefully and answer the questions that follow: [3]

The study of seismic waves provides a complete picture of the layered interior. An earthquake in simple words is shaking of the earth. It is a natural event. It is caused due to release of energy, which generates waves that travel in all directions. The release of energy occurs along a fault. A fault is a sharp break in the crustal rocks. Rocks along a fault tend to move in opposite directions. As the overlying rock strata press them, the friction locks them together. However, their tendency to move apart at some point of time overcomes the friction. As a result, the blocks get deformed and eventually, they slide past one another abruptly. This causes a release of energy, and the energy waves travel in all directions. The point where the energy is released is called the focus of an earthquake, alternatively, it is called the hypocentre. The energy waves travelling in different directions reach the surface. The point on the surface, nearest to the focus, is called epicentre. It is the first one to experience the waves. It is a point directly above the focus.

- Name the location where the energy is released during an earthquake. (1)
- How an earthquake originates? (1)
- Define Epicentre. (1)

19. Observe the given map: [3]



- Name the triangular plateau indicated in the map. (1)
- What borders the Deccan Plateau on its western side? (1)
- Which range is formed by a series of scarp plateaus on the south, generally at an elevation varying between 600-900 m above the mean sea level? (1)

20. Describe the importance of soils. [3]

OR

What are the various mobile and mighty exogenic geomorphic agents and what is the prime job they perform?

- Differentiate between Physical geography and Biogeography. [3]
- Differentiate between South-west monsoon and Retreating monsoon. [3]

OR

Enumerate the factors that influence the climate of the Subcontinent of India.

- Why is the troposphere the most important of all the layers of the atmosphere? [3]

## Section C

24. How do currents affect the temperature? How does it affect the temperature of coastal areas in the N. W. [5]

Europe?

25. List the stages in the evolution of the earth and explain each stage in brief. [5]

OR

Write an explanatory note on the Big Bang Theory.

26. How can people's participation be effective in conserving forests and wildlife? [5]

OR

**Natural vegetation is an outcome of climate.** Substantiate the statement by taking the example of Indian vegetation.

27. Describe the land and water frontiers of India. [5]

OR

India is often described as a sub-continent. Justify the statement.

28. Explain about Ganga River System. [5]

OR

Explain briefly the theory of the **IndoBrahm River** as believed by some geologists. Also mention the two principal grounds on which this theory has been discarded.

#### Section D

29. On the outline map of India, locate and label the following: [5]

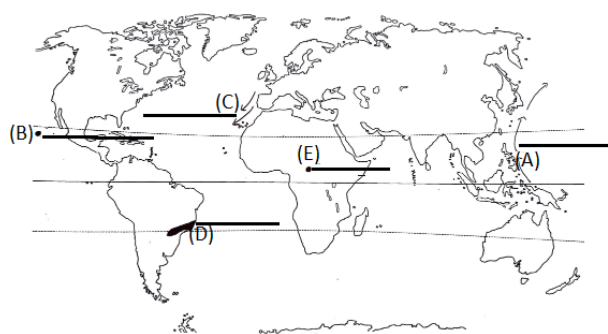
- i. Littoral and Swamp Forests
- ii. Aravali hills
- iii. Dfc regions according to Koppen's Scheme
- iv. Biosphere Reserve of Gulf of Mannar
- v. Mahanadi Delta



30. With the help of the following key, identify the areas marked as A, B, C, D and E on the given outline map of the World. Write the correct name of the place in the blank space given on the map: [5]

- A. A warm ocean current
- B. A Volcanic Hot spot
- C. A cold ocean current

- D. An ecological hotspot
- E. The second-largest continent



# Solution

## Section A

1. (a) Both A and R are true and R is the correct explanation of A.

**Explanation:**

India stretches from 8°04' north latitude in the south to 37°06' north latitude in the north, i.e. the mainland of India extends from Kanyakumari in the south to Kashmir in the north. The southernmost point of the Indian union is Indira Point which was previously known as Persons Pygmalion; is actually the southernmost point of Car Nicobar where it touches the parallel of 6°45' north.

2. (a) (c) - (iii)

**Explanation:**

Cold Climate with Dry Winters - From 15-75 cm

3. (a) Northwestern Himalayas

**Explanation:**

Northwestern Himalayas

- 4.

(b) Both the statements are true and statement II correctly present the reason for statement I

**Explanation:**

Both the statements are true and statement II correctly present the reason for statement I

- 5.

(d) Water vapour

**Explanation:**

Water vapour

- 6.

(c) Both erosion and deposition

**Explanation:**

The geomorphic agents like running water, groundwater, wind, glaciers, waves perform erosion. **Erosion** causes changes on the surface of the earth. **Deposition** follows erosion and because of deposition too, changes occur on the surface of the earth.

- 7.

(b) Both A and R are true but R is not the correct explanation of A.

**Explanation:**

On the basis of the size of the watershed, the drainage basins of India are grouped into three categories:

- i. Major river basins with more than 20,000 sq. km of the catchment area.
- ii. Medium river basins with a catchment area between 2,000-20,000 sq. km.
- iii. Minor river basins with a catchment area of less than 2,000 sq. km.

8. (a) Sheet erosion

**Explanation:**

Overland flow causes **sheet erosion**. Depending upon irregularities of the land surface, the overland flow may concentrate into narrow to wide paths.

- 9.

(d) 0 to 10

**Explanation:**

The magnitude scale is known as the **Richter scale**. The magnitude relates to the energy released during the quake. The magnitude is expressed in numbers, **0-10**.



10. (a) 50-100 cm

**Explanation:**

Western Uttar Pradesh, Delhi, **Haryana, Punjab**, Jammu and Kashmir, eastern Rajasthan, Gujarat, and Deccan Plateau are the areas of low rainfall and receive rainfall between **50-100 cm**.

11.

(b) (iv) - (ii) - (iii) - (i)

**Explanation:**

(iv) - (ii) - (iii) - (i)

12.

(d) cyclonic

**Explanation:**

The wind circulation around a low is called **cyclonic** circulation. Around a high, it is called anti-cyclonic circulation. The direction of winds around such systems changes according to their location in different hemispheres.

13.

(b) Ten

**Explanation:**

There are 18 Biosphere Reserves in India. **Ten** Biosphere Reserves have been recognised by the **UNESCO** on World Network of Biosphere Reserves.

14.

(c) (d) - (iv)

**Explanation:**

Cardamom hills - North

15. (c) Latitudinal Net Radiation Balance

**Explanation:**

Latitudinal Net Radiation Balance

16. (c) Between 40 degrees north and south

**Explanation:**

Between 40 degrees north and south

17. (c) By reducing heat accumulation in the high latitudes

**Explanation:**

By reducing heat accumulation in the high latitudes

**Section B**

18. i. The point where the energy is released is called the focus of an earthquake, alternatively, it is called the hypocentre.

ii. It is caused due to release of energy, which generates waves that travel in all directions

iii. The point on the surface, nearest to the focus, is called epicentre. It is the first one to experience the waves. It is a point directly above the focus.

19. i. The Peninsular Plateau

ii. The Western Ghats.

iii. The **Satpura range** is formed by a series of scarped plateaus on the south, generally at an elevation varying between 600-900 m above the mean sea level.

20. Soil is a valuable natural resource. Mankind has lived and continues to live on the soils. Many human and economic activities depend upon soils. All our food comes directly or indirectly from soils. Livestock farming depends upon the raising of grass on different soils. Soils form an important element for all living things. Soils have affected the march of civilizations. Ancient civilizations developed in fertile river valleys. Fertile soils attract human settlements.

OR



Weathering, mass movements, erosion, transportation as well as a deposition are the various mobile and mighty exogenic geomorphic agents. All these agents bring geomorphic changes on the surface of the earth.

21.	<b>Physical Geography</b>	<b>Biogeography</b>
	It is a study of landforms continents, mountains, plateaus, valleys, and other features.	Biogeography studies the distribution of plants and animals found on the earth's surface and in the hydrosphere.
	It has four main sub-branches: Geomorphology, Climatology, Hydrology, Soil Geography.	It has four main sub-branches: Plants Geography, Zoo Geography, Ecology, Environmental Geography.
	Its aims to understand the forces that produce and change rocks, oceans, weather, global flora and fauna patterns.	It aims to preserve biodiversity through informed management decisions at regional, continental, and global scales.
	Traditional physical geography has a very close link with the natural sciences as these derive their data from these sciences.	The interface between physical geography and human geography has lead to the development of Biogeography.

22. The differences between the South-West Monsoon and Retreating Monsoon:		
<b>Basis</b>	<b>South-West Monsoon</b>	<b>Retreating Monsoon</b>
Timing	These winds blow from June to September.	These winds blow during October and November.
Direction	The direction of these winds is from the West to the North East.	These winds are calm. These flow from North to South.
Rainfall	South West Monsoons cover the whole of India and give heavy rainfall. The humidity is high. The pressure is low on the land area.	The temperature increases again, the land being covered with rainy water, the humidity becomes high. The temperature goes up. The coastal areas of Tamil Nadu receive maximum rainfall from these retreating winds.

OR

India's climate is controlled by a number of factors which can be broadly divided into two groups as:

i. **Factors related to Location and Relief:**

- a. Latitude.
- b. The Himalayan Mountains.
- c. Distribution of land and water.
- d. Distance from the sea.
- e. Altitude.
- f. Relief.

ii. **Factors related to Air pressure and Wind:**

- a. distribution of air pressure and winds on the surface of the earth.
- b. Upper air circulation caused by factors controlling global weather and the inflow of different air masses and jet streams.
- c. The inflow of western cyclones generally known as distribution during the winter season and tropical depressions during the south-western monsoon period into India, creating weather conditions favourable to rainfall.

23. The troposphere is the lowermost layer of the atmosphere. Its average height is 13 km and extends roughly to a height of 8 km near the poles and about 18 km at the equator. It is the most important layer of the atmosphere because the thickness of the troposphere is greatest at the equator because heat is transported to great heights by strong convectional currents. This layer contains dust particles and water vapour. All changes in climate and weather take place in this layer. All biological activities take place in this layer.

**Section C**

24. Ocean currents act much like a conveyor belt, transporting warm water and precipitation from the equator toward the poles and cold water from the poles back to the tropics. Thus, currents regulate the global climate, helping to counteract the uneven distribution of solar radiation reaching the earth's surface. The impact of currents on temperature varies depending on whether currents are warm or cold.
- i. **Cold currents:** The ocean currents that flow from the polar areas towards the Equator are cooler compared to the surrounding water, so they are called cold currents. Cold currents bring cold water into warm water areas. These currents are usually found on the west coast of the continents in the low and middle latitudes (true in both hemispheres) and on the east coast in the

higher latitudes in the Northern Hemisphere; The Peru Current is a wind-driven cold current that flows along the coast of South America and another example for cold current is the Humboldt current.

- ii. **Warm currents:** Warm ocean currents flow away from the equatorial region on the western side of ocean basins. Warm currents bring warm water into cold water areas and are usually observed on the east coast of continents in the low and middle latitudes (true in both hemispheres). In the northern hemisphere, they are found on the west coasts of continents in high latitudes. The Gulf Stream in the North Atlantic and the Kuroshio Current in the North Pacific are examples of warm currents.

In North West Europe, warm currents exist. They increase the temperature in coastal areas of N. W. Europe.

25. The earth was mostly in a volatile state during its primordial stage. Due to the gradual increase in density the temperature inside has increased. As a result, the material inside started getting separated depending on their densities. This allowed heavier materials (like iron) to sink towards the centre of the earth and the lighter ones to move towards the surface. With the passage of time, it cooled further and solidified and condensed into a smaller size. This later led to the development of the outer surface in the form of a crust. It is through the process of differentiation that the earth forming material got separated into different layers. Starting from the surface to the central parts, we have layers like the crust, mantle, outer core and inner core. From the crust to the core, the density of the material increases.

The origin of life as a kind of chemical reaction, which first generated complex organic molecules and assembled them. This assemblage was such that they could duplicate themselves converting inanimate matter into living substance. The record of life that existed on this planet in different periods is found in rocks in the form of fossils. The microscopic structures closely related to the present form of the blue algae have been found in geological formations much older than some 3,000 million years. It can be assumed that life began to evolve sometime 3,800 million years ago.

OR

The most popular argument regarding the origin of the universe is the **Big Bang Theory**. It is also called expanding universe hypothesis. Edwin Hubble, in 1920, provided evidence that the universe is expanding. As time passes, galaxies move further and further apart. The Big Bang Theory considers the following **stages** in the development of the universe.

- (i) In the beginning, all matter forming the universe existed in one place in the form of a “tiny ball” (singular atom) with an unimaginably small volume, infinite temperature and infinite density.
- (ii) At the Big Bang, the “tiny ball” exploded violently. This led to a huge expansion. It is now generally accepted that the event of the big bang took place 13.7 billion years before the present. The expansion continues even to the present day. As it grew, some energy was converted into matter. There was particularly rapid expansion within fractions of a second after the bang. Thereafter, the expansion has slowed down. Within the first three minutes from the Big Bang event, the first atom began to form.
- (iii) Within 300,000 years from the Big Bang, the temperature dropped to 4,500K (Kelvin) and gave rise to atomic matter. The universe became transparent.
26. People’s participation can be very effective in conserving forests and wildlife. It is the common people who harm the wildlife and forests the most. They cut trees for shifting cultivation. They kill animals for entertainment. Therefore, in 1972, the government of India has passed the Wildlife Protection Act whereby it is illegal to do hunting. Since then the hunting and poaching cases have reduced to a great extent. The two main objectives of the Act are; to provide protection to the endangered species listed in the schedule of the Act and to provide legal support to the conservation areas of the country classified as National parks, sanctuaries and closed areas. This Act has been comprehensively amended in 1991, making punishments more stringent and has also made provisions for the protection of specified plant species and the conservation of endangered species of wild animals. There are 103 National parks and 535 wildlife sanctuaries covering an area of 15.67 million hectares in the country. These actions are taken by the government but their implementation and maintenance depend on the participation and cooperation of the people.

OR

India is a land of a great variety of natural vegetation. Himalayan heights are marked with temperate vegetation; the Western Ghats and the Andaman Nicobar Islands have tropical rain forests. Some important features of Indian vegetation are as follow:

- Tropical evergreen forests are found in warm and humid areas with annual precipitation of over 200 cm and mean annual temperature above 22°C. In these forests, trees reach at great heights up to 60 m or above. The semievergreen forests are found in the less rainy parts of these regions.
- Tropical deciduous forests are spread over regions that receive rainfall between 70-200 cm.
- The moist deciduous forests are more pronounced in the regions which record rainfall between 100-200 cm. Dry deciduous forest covers vast areas of the country, where rainfall ranges between 70-100 cm.
- Tropical thorn forests occur in the areas which receive rainfall less than 50 cm. In mountainous areas, the decrease in temperature with increasing altitude leads to a corresponding change in natural vegetation.
- The Himalayan ranges show a succession of vegetation from the tropical to the tundra, with a change in the altitude. Deciduous forests are found in the foothills of the Himalayas. It is succeeded by the wet temperate type of forests between an



altitude of 1,000-2,000 m. In the higher hill ranges of north-eastern India, hilly areas of West Bengal and Uttarakhand, evergreen broad-leaf trees such as oak and chestnut are predominant.

27. Land and Water Frontiers. India has a land border in the North, North-West and North-East. It is 15,200 kilometres in length. The Indian Ocean forms the water frontiers of India. India has a long coastline of 7516 kilometres.
- The Northern Border:** The great mountain wall in the North is a natural boundary. The high Himalayas form a natural bulwark between China, Tibet and India. These high mountains form the dividing line between India and China. It is known as the McMohan line.
  - The Western Border:** In the west, the border between Pakistan and India runs across Rajasthan (Thar desert) and Punjab Plains along Sutlej and Ravi rivers, J & K, Gujarat States.
  - The Eastern Border:** In the East, a series of mountain ranges separate India from Burma (Myanmar). The Ganges delta forms the boundary between India and Bangladesh. Bangladesh is bounded by India on three sides and the Bay of Bengal on the fourth. Assam, Meghalaya, Tripura, Mizoram and West Bengal are States.
  - The Southern Border, the Arabian Sea in the west. The Indian Ocean in the south, and the Bay of Bengal in the east form the water frontiers of India. A narrow stretch of water known as the Palk Strait and the Gulf of Mannar separate Sri Lanka from India.

OR

A subcontinent is a vast independent geographical unit and distinctly separated from the main continent. In the southern part of Asia, India stands as a sub-continent. Many facts justify this:

- The natural frontiers of India provide an isolated character to the vast Indian landmass. The Himalayas in the north, the Indian Ocean in the south, thick and dense forests on the east and the Thar desert on the west separate it from the main continent.
  - India is surrounded by the major realms of Asia on all sides. The great mountain wall encloses the Indian sub-continent and practically gives it an independent form.
  - India covers a fairly large area ranking seventh in the world. India is the second-largest populated country in the world. These two elements compare India with a sub-continent.
  - India is a land of severe contrasts. But it has a cultural unity behind this diversity.
  - Monsoon climate determines the life of people and the economic development of the country. These are independently and perfectly developed in India. It gives a distinct character of a sub-continent to this landmass.
  - The abundant agricultural resources, mineral resources and other natural resources also compare it with a sub-continent.
28. The Ganga is the most important river of India from the point of view of its basin and cultural significance.
- It rises in the Gangotri glacier near Gaumukh (3,900 m) in the Uttarkashi district of Uttarakhand. It is known as the Bhagirathi.
  - At Devprayag, the Bhagirathi meets the Alaknanda; hereafter, it is known as the Ganga.
  - The Alaknanda has its source in the Satopanth glacier above Badrinath.
  - The Ganga enters the plains at Haridwar. From here, it flows first to the south, then to the south-east and east before splitting into two distributaries, namely the Bhagirathi and the Hugli.
  - The river has a length of 2,525 km.
  - It is shared by Uttarakhand (110 km) and Uttar Pradesh (1,450 km), Bihar (445 km) and West Bengal (520 km).
  - The Ganga basin covers about 8.6 lakh sq. km area in India alone.
  - The Son is its major right-bank tributary.
  - The important left-bank tributaries are the Ramganga, the Gomati, the Ghaghara, the Gandak, the Kosi and the Mahananda.
  - The river finally discharges itself into the Bay of Bengal near the Sagar Island.

OR

**The Indo-Brahm River Theory:** The Indus, the Ganga, and Brahmaputra river systems have been evolved over a long course of time. These rivers rise in Tibet i.e. in trans Himalayas. These rivers flow parallel to the main axis of the Himalayas. These rivers are older than the Himalayas themselves. Some of the geologists believe that before the uplift of the Himalayas, a mighty stream flowed from Assam to Punjab, all along the foot of the Himalayas. The stream is referred to as 'Shiwalik' or the Indo-Brahm River'.

Due to the uplift of the Potwar Plateau, the direction of this river was reversed. The river was dismembered into three river systems of Indus, Ganga, and Brahmaputra. The Yamuna began to flow as a tributary of the Ganga. Due to headward erosion, the Ganga took a southerly course.

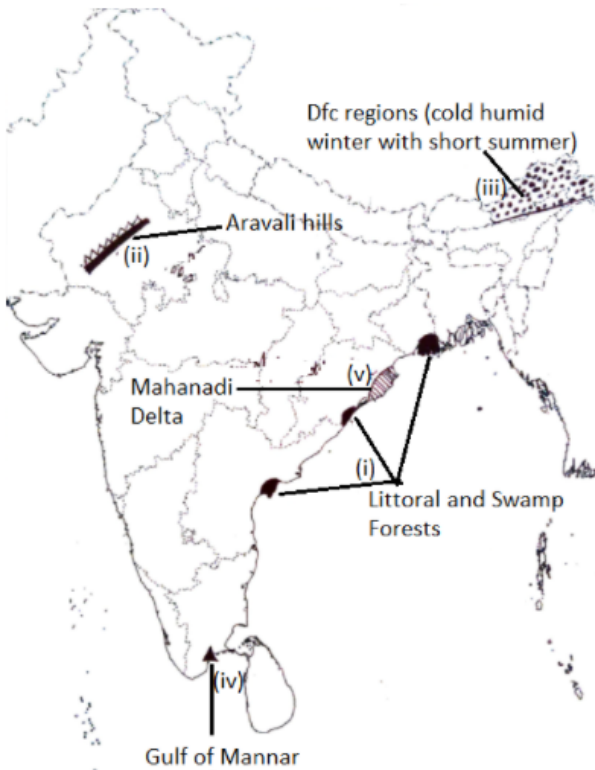
**Criticism:** The concept of the Indo-Brahm river has been challenged on many grounds, even then the theory cannot be discarded.



- i. It is not necessary to visualize such a mighty stream to explain the alluvial deposits of Shiwaliks. These might have been formed by alluvial fans.
- ii. The alluvial deposits between Rajmahal Hills and Shillong plateaus should have been laid down over a much longer period.

#### Section D

29. i. **Littoral and Swamp Forests:** Floodplains of the Brahmaputra. Other areas of significance are the Mahanadi, the Godavari and the Krishna deltas. (These forests cover multiple locations.)
- ii. **Aravali hills:** Spans four states- Gujarat, Rajasthan, Haryana, and Delhi. (Mainly in Rajasthan)
- iii. **Dfc regions:** Areas of Arunachal Pradesh.
- iv. **Gulf of Mannar:** Located in Tamil Nadu.
- v. **Mahanadi Delta:** Located in the state of Odisha.



30. A. Kuroshio current  
B. Hawaii  
C. Canary Current  
D. Atlantic Forests  
E. Africa

