

## Chapter

## 1

# Location and Physical Features of India

**Location :**

- The position of India is between latitudes  $8^{\circ} 4' N$  to  $37^{\circ} 6' N$  and longitudes  $68^{\circ} 7' E$  to  $97^{\circ} 25' E$ . Tropic of Cancer passes at  $23^{\circ} 30' N$  and divides it into two equal parts.

**Size :**

- India is seventh largest country in world having 2.4 percent of total geographical area.
- Total land mass - 3.28 million square kms.
- Land boundary - 15,200 kms.
- Total coastline (including Andaman and Nicobar & Lakshadweep) - 7,516.6 km.

**Boundary :**

The Indian peninsula is bounded on the west by the Arabian Sea, on the east by Bay of Bengal and on the south by Indian Ocean.

**Indian standard time:-**

- The country's east-west distance of more than 2,000 km covers over 28 degrees of longitude.
- The sun is rising and setting almost two hours earlier on India's eastern border than in the Rann of Kutch in the far west.
- Indian Standard Time is calculated on the basis of  $82.30' E$  longitude, from a clock tower in Mirzapur.

**Location of India in the world :**

- India is located on the southern part of Asia.
- The Trans Indian Ocean routes which connect the countries of Europe in the West and the countries of East Asia provide a strategic central location to India.
- On the south, India projects into and is bounded by the Indian Ocean - in particular, by the Arabian Sea on the southwest and the Bay of Bengal on the southeast.

**India's neighbours :**

- India shares its land boundaries with Pakistan and Afghanistan in the northwest,
- China (Tibet), Nepal and Bhutan in the north, Myanmar and Bangladesh in the east, Sri Lanka & Maldives found at south.
- Palk Strait & Gulf of Mannar separate Sri Lanka from India.
- Maldives is present to the south of Lakshadweep Island.

**Physical features of India**

Due to vast land area, different type of landforms are found in India i.e. mountains, plains, deserts, plateaus and islands. Different types of rock & soil found in India, because soil is formed out of different types of rocks.

**Theory of plate tectonics :** The geologists believe that the continents are moving as plate on semi liquid surface. This theory is known as plate tectonics. This is based on the studies of the past magnetism of the earth as well as the new discoveries of the earth floors.

- Convergent boundary - When some plates come towards each other and form convergent boundary
- Divergent boundary - Some plates move away from each other and form divergent boundary.
- Transform boundaries- occur when two plates are sliding along each other in opposing directions.

On the basis of geological complexities and geo-morphological diversities it has been divided into five physiographic divisions-

- The Himalayan Mountains
- The Great plain of North India
- The Peninsular Plateau
- The Coastal Plains
- The Desert
- The Islands

**1. The Himalayan Mountain System:**

- (1) It consists of the youngest and the loftiest, rugged mountain chains of the world.
- (2) It is characterized by youthfulness, great deal of folding and deformation tectonic origin and great erosive powers of rivers.
- (3) It stretches for a distance of over 2400 km (over 22 degree longitude) from Indus gorge in the west to the Brahmaputra gorge (Dihang gorge) in the east.
- (4) The width of the Himalayas varies from 500 km in Kashmir to 200 km in Arunachal Pradesh i.e., it becomes narrower from west to east.

**The Great Himalayas:** This is also known as inner Himalaya or Himadri.

- It is mainly formed of central crystallines (granite and gneisses) overlain by metamorphosed sedimentary rocks.
- It is the most continuous range consisting of loftiest peaks with an average height of 6000 meters.

**The Middle or lesser Himalaya :** It is also known as the Himachal or Lower Himalaya.

- It is mainly composed of metamorphic rocks and unfossiliferous sedimentary rocks.
- The southern slopes are bare and rugged while the northern slopes are thickly forested. The altitude varies from 3700 - 4500 m while the width is 50 km.
- The Pir Panjal, the Dhauladhar, the Mussoorie range, Nag Tiba and the Mahabharat are the important ranges.
- The Pir Panjal in Kashmir is the longest and the most important range.
- Most of the hill stations (Shimla, Mussoorie, Ranikhet, Nainital, Almora and Darjeeling etc.) lie in this section.

**Some Highest Peaks of the Himalayas**

| Peak         | Country | Height in metres |
|--------------|---------|------------------|
| Mt. Everest  | Nepal   | 8848             |
| Kanchenjunga | India   | 8598             |
| Makalu       | Nepal   | 8481             |
| Dhaulagiri   | Nepal   | 8172             |
| Nanga Parbat | India   | 8126             |
| Annapurna    | Nepal   | 8078             |
| Nanda Devi   | India   | 7817             |
| Kamet        | India   | 7756             |
| Namcha Barwa | India   | 7756             |

**The Siwaliks or the Outer Himalayas :**

- Consists of foothills which runs almost from Potwar plateau to Brahmaputra valley.
- These ranges are mainly made up of fluvial deposits like sand, clay, rounded stones, gravels, slates et.
- This section is characterized by poor drainage, which is more pronounced in Tarai region.
- Its eastern part upto Nepal is thickly forested but the forest cover becomes thin in the west.
- Average elevation is 900-1100 m while average width is 10-50 km.
- The gorges of Tista and Raidak have jointly formed a gap 80-90 km wide in the Shiwalik range.

**Kumaon Himalaya :**

- Stretches from Satluj to Kali river for about 320 km and the general elevation is higher than Punjab Himalayas.
- Its western part is called Garhwal Himalaya while eastern part is known as Kumaon Himalaya proper.
- **Important peaks :** Nanda Devi, Kamet, Trishul, Badrinath, and Kedarnath.

**Central Himalaya :**

- Extends from river Kali to Tista for about 80 km.
- Most of it lies in Nepal and hence it is also called as Nepal Himalaya.
- This section has some of the world's highest peaks, such as, Mt. Everest, Kanchanjunga, Dhaulagiri, Annapurna, Gosainthan.
- This section is known as Sikkim Himalaya in Sikkim, Darjeeling Himalaya in West Bengal and Bhutan Himalaya in Bhutan.

**Eastern Hills or the Purvanchal Hills:** After crossing the Dihang gorge (Brahmaputra gorge), the Himalayas suddenly turn southward and form a series of comparatively low hills running in the shape of a crescent with its convex side pointing towards the west, these hills are collectively called the Purvanchal because they are located in the eastern part of the country.

- It extends from Arunachal Pradesh in the north of Mizoram in the south and form boundary between India and Myanmar.

**2. The Great Northern Plain:**

- Lying between the Himalayas in the north and the stable tableland of the peninsula in the south, it stretches from the

arid and semi-arid plains of Rajasthan in the west to the Ganga delta in the east.

- It is drained by three major river systems; the Ganga system, the Indus system, the Brahmaputra system.
- The plain is believed to be formed from infilling of the marine depression or fore deep, that formed dome to Himalaya uplift and subsidence of the north flank of the plateau, by alluvial deposits brought by both rivers Himalayan river and Peninsular rivers.

**Characteristic and geomorphological features of the Great plain:**

From north to south these can be divided into;

- **Bhabar :** is a narrow belt of about 8-16 km width running in east-west direction along the foot of the Siwalik with a remarkable continuity from the Indus to the Tista, where rivers descending from the Himalaya deposit their load along the foothills in the form of alluvial fans.
- These are porous, gravel-ridden plain and due to high porosity the streams in this zone get lost in the ground except during rainy seasons.

**Punjab- Haryana Plain:** This plain is drained by five important rivers namely, Jhelum, Chenab, Ravi, Beas and Sutlej, and the Punjab-doabs (Doabs- the land between two rivers).

**Ganga Plain :** This is the largest unit of the Great Plain of North India stretching from Delhi to Kolkata in the states of U.P., Bihar, and West Bengal. The general slope of the entire plain is east - and south - east.

**Ganga - Yamuna - Doab :**

- It is the largest doab between Ganga and Yamuna. The Bhangar upland along the Yamuna and Chambal courses have been broken into intricate maze of ravines and gullies.
- Bhabar plains, Tarai, Bhangar, Khadar are striking features of this section. Khots are intervening slopes between Bhangar and Khadar.
- Another unusual topographic feature of the upper doab is Bhur which is formed of alluvial deposits during Pleistocene period.

**Tarai :**

- The streams that disappear in Bhabar belt reappear in Tarai region. It is 10-20 km wide ill drained, marshy, thickly forested area having a variety of wildlife.
- Most of the Tarai land, especially in Punjab, Uttar Pradesh and Uttarakhand, has been reclaimed and turned into agricultural land which gives good crops of sugarcane, rice and wheat. Dudhwa National Park is situated in this region.

**3. The Peninsular Plateau:**

- The Peninsular plateau is a tableland composed of the old crystalline, igneous and metamorphic rocks. It was formed due to the breaking and drifting of the Gondwana land and thus, making it a part of the oldest landmass.
- It is surrounded by the hill ranges on all the three sides, to its north state the Aravali range, the Vindhya, the Satpura the Bharmar and Rajmahal hills while Western Ghats (Sahyadris) and Eastern Ghats form its western and eastern boundaries respectively.
- It covers a total area of about 16 lakh sq km which is about half of the total land area of the country, and thus it is the largest physiographic unit of India.

- The general slope of the plateau is from west to east with the exception of Narmada-Tapti rift which slopes westwards.

#### Deccan plateau :

- The largest unit of peninsular plateau (5 lakh sq.km), it is a triangular plateau bounded in north by Bindhya, Satpura, Mahadev and Maikal ranges, Western Ghats in the west and Eastern Ghats in the east.
- Average elevation is about 600 m (more in south than north) and general slope is from west to east.

#### Chotanagpur Plateau :

- The north - eastern projection of the Indian Peninsula, east of Baghelkhand, lies mostly in Jharkhand, northern part of Chhattisgarh and Purulia district of West Bengal.
- It is composed mainly of Gondwana rocks with patches of Archaean granite and gneisses and Deccan Lavas. Plateau lands (high level laterite plateau) are the highest points of this region.
- The Damodar river flows through the middle of this region in a rift valley from west to east where Gondwana coal fields are found.

**Western Ghats :** Running parallel to Arabian sea coast in north - south direction it extends from Tapti valley in Kanyakumari for a distance of 1600 km.

**Eastern Ghats :** A chain of highly broken and detached hills starting from Mahanadi in Odisha to the Vagai river in Tamil Nadu.

#### 4. The Coastal Plain -

##### A. East Coastal Plain:

- Wider and drier (receives less rainfall) than the west coast plain.
- Contains shifting sandiness and stretches of saline soil.
- Deficient in rainfall.
- In Chennai and Andhra Pradesh, it is called Pyan Ghat.

##### B. West Coastal Plain -

- Stretches from Rann of Kutch in the north to Kanyakumari in the south.

- Narrower than East coastal plain, quite narrow in the middle and a bit broader in the northern and southern parts.

**North Circar:** Between the Mahanadi and the Krishna river.

**Carnatic:** Between the Krishna and the Cauvery river.

**Coromandal:** Between the Cauvery river out of Kanyakumari.

#### C. Konkan Plain:

- Lying south of Gujarat plain it stretches from Daman to Goa.
- It is Characterised by cliffs of basaltic rocks.
- The submerged forests near the Bombay city suggest that the sea level rose on the Konkan coast in the past.

#### 5. Deserts:

- It is an undulating sandy plain covered with sand dunes. This region receives very low rainfall below 150 mm per year. It has arid climate with low vegetation cover. Streams appear during the rainy season.
- Luni is the only large river in this region.
- Barchans (crescent shaped dunes) cover larger areas but longitudinal dunes become more prominent near the Indo-Pakistan boundary.

#### 6. The Islands:

- Islands of Bay of Bengal are more habitable than those of the Arabian Sea.
- Islands of Bay of Bengal (Andaman & Nicobar group) represent elevated portion of Submarine Mountain while the group of Arabian sea islands (Amindivi & Lakshadweep islands) are of coral origin.
- Narcondam island and Barren island of Bay of Bengal are the only volcanoes (both are now extinct) within Indian territory.
- Interview and Anderson islands, of west coast of north and middle Andaman, are composed of limestone.
- Port Blair, the main port of the great Andaman lies in the south Andaman.

## Exercise

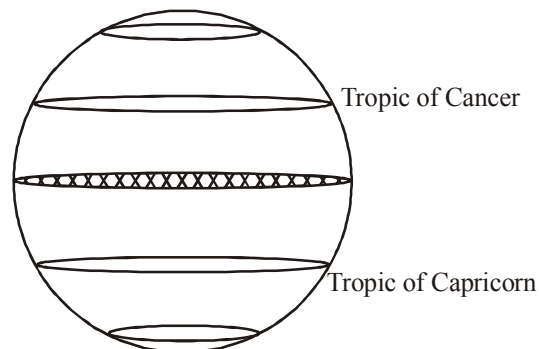
# 1

**DIRECTIONS :** This section contains multiple choice questions. Each question has 4 choices (1), (2), (3) and (4) out of which only one is correct.

- Which line divides India into equal parts?
  - Tropic of Cancer
  - Tropics of Capricorn
  - Equator
  - Arctic Circle
- Find out the southern point, which got submerged in tsunami 2004?
  - Andaman
  - Lakshadweep
  - Indira Point
  - Kanyakumari
- What is the total geographical area of India ?
  - 3.28 million square kms
  - 2.5 million square kms
  - 1.9 million square kms
  - 3.6 million square kms
- Which water bodies surround the India ?
  - East-Bay of Bengal
  - West-Arabian Sea
  - South-Indian Ocean
  - All of the above
- Which is the 7th largest country of the world?
  - Australia
  - Pakistan
  - Canada
  - India
- Which canal has reduced the distance between Europe and India ?
  - Suez canal
  - Panama canal
  - Palk strait
  - none of these
- Which place is situated on three seas?
  - Mumbai
  - Chennai
  - Kanyakumari
  - Portblair
- How many states and union territories are there in India?
  - 29 & 7
  - 30 & 7
  - 29 & 9
  - 28 & 8

9. Name the island groups lying in the Arabian Sea.
  - (1) Andaman (2) Lakshadweep island
  - (3) Nicobar (4) all of the above
10. Which island group of India lies to its south east?
  - (1) Lakshadweep island
  - (2) Andaman and Nicobar
  - (3) all of the above
  - (4) none the above
11. Which island countries are our southern neighbours ?
  - (1) Afghanistan & Pakistan
  - (2) Bhutan & Nepal
  - (3) China & Tibet
  - (4) Sri Lanka & Maldives
12. Which of the following countries is/are larger than India?
  - (1) Russia (2) Canada
  - (3) China (4) All of the above
13. The Indus basin is situated in the state of
  - (1) Jammu and Kashmir (2) Punjab
  - (3) Uttar Pradesh (4) Himachal Pradesh
14. In which of the following water bodies are Lakshadweep islands situated?
  - (1) Arabian Sea (2) Bay of Bengal
  - (3) Indian Ocean (4) Atlantic Ocean
16. How much of the total geographical area of world does India account for?
  - (1) 32.8% (2) 2.5%
  - (3) 2.4% (4) 10.0%
17. With which country does India share its northern boundary?
  - (1) Myanmar (2) Bangladesh
  - (3) China (4) Pakistan
18. What is understood by the term 'Doab'?
  - (1) The region found near the sea
  - (2) The region or plain lying between two rivers.
  - (3) The region found between two valley
  - (4) None of these
19. Which valley is called 'The Paradise on Earth'?
  - (1) The Kashmir Valley
  - (2) Green valley, Shimla
  - (3) Valley of Nilgiri hills
  - (4) All the above
20. Which is/are the tributaries of the Ganga?
  - (1) The Ghaghara (2) The Gomti
  - (3) The Gandak (4) All the above
21. How does India stand apart from the rest of Asia?
  - (1) Because of being separated from rest of Asia by the Himalayas
  - (2) Because of its peninsular situation
  - (3) Because of being situated in the south
  - (4) Because of all these
22. Why is a time lag of two hours from Gujarat to Arunachal Pradesh?
  - (1) Because of India's east-west extent
  - (2) Because of India's north-south extent
  - (3) Because of India's proximity to oceans
  - (4) Because of India's landmass
23. How does India occupy an important strategic position in South Asia?
  - (1) Due to being situated on the head of the Indian Ocean
  - (2) Due to being situated in South Asia
  - (3) Due to being an independent country
  - (4) Due to being a peninsular country
24. At which parallel of latitude does India begin to taper towards south?
  - (1) 23° 30' N (2) 22° N
  - (3) 8° 4' N (4) 68° 7' E
25. Which is the name of major river of Peninsular India?
  - (1) The Ganga (2) The Brahmaputra
  - (3) The Narmada (4) The Bhagirathi
26. Which rivers of India flow in rift valleys?
  - (1) The Narmada
  - (2) The Kaveri
  - (3) Tapi rivers.
  - (4) All the above
27. Which coast is known for its back waters?
  - (1) The Malabar Coast in Kerala.
  - (2) Rann of Kutch of Gujarat
  - (3) Konkan coast
  - (4) Coast of Sundarban
28. Which is/are the main physical features of the North plain?
  - (1) Bhabar (2) Tarai
  - (3) Bhangar (4) All the above
29. North Plains subdivide into
  - (1) The Indus Basin
  - (2) The Ganga Basin
  - (3) The Brahmaputra Valley
  - (4) All the above
30. Name any three countries larger than India?
  - (1) Russia
  - (2) Brazil
  - (3) China
  - (4) All the above
32. Which states share the drainage of the Mahanadi?
  - (1) Chhattisgarh (2) Jharkhand
  - (3) Orissa (4) All the above
33. The Tropic of Cancer does not pass through
  - (1) Rajasthan (2) Orissa
  - (3) Chhattisgarh (4) Tripura
34. Which one of the following is the southernmost Latitude of India?
  - (1) 8° 4' North (2) 8° 4' South
  - (3) 6° 4' South (4) 6° 4' North
35. Palk Strait separates India from which country?
  - (1) Myanmar (2) Maldives
  - (3) Sri Lanka (4) Lakshadweep
36. Which one of the following water bodies separate Sri Lanka from India ?
  - (1) Palk strait and Gulf of Khambhat
  - (2) Palk Strait and Gulf of Mannar
  - (3) Gulf of Mannar and 10° Channel
  - (4) 10° Channel and Gulf of Khambhat
37. Which of the following neighbouring countries share the longest land boundary with India?
  - (1) Pakistan (2) Nepal
  - (3) China (4) Bangladesh
38. Which is the largest state in India in terms of area?
  - (1) Uttar Pradesh (2) Rajasthan
  - (3) Maharashtra (4) Madhya Pradesh
39. In terms of area, which is the smallest state in India?
  - (1) Sikkim (2) Arunachal Pradesh
  - (3) Goa (4) Nagaland

40. Which country among the India's neighbours is the smallest?  
 (1) Nepal (2) Bhutan  
 (3) Sri Lanka (4) Bangladesh
41. What is the position of India in the world in respect of area?  
 (1) 8th position (2) 7th position  
 (3) 6th position (4) 2nd position
42. Which is India's longest river?  
 (1) Ganga (2) Yamuna  
 (3) Godavari (4) Krishna
43. Which State in India is called the 'Land of Five Rivers'?  
 (1) Uttar Pradesh (2) Haryana  
 (3) Punjab (4) Bihar
44. In which state of India is the Thar Desert primarily located?  
 (1) Gujarat (2) Haryana  
 (3) Punjab (4) Rajasthan
45. The tropic of cancer passes through the state(s)  
 (a) Gujarat (b) Bihar  
 (c) Assam (d) Mizoram  
 (1) (a), (b) and (d) (2) (a) and (b)  
 (3) (a), (c) and (d) (4) (a), (b), (c) and (d)
46. The latitude of a place expresses its angular position relative to the place of  
 (1) axis of the earth (2) equator  
 (3) north pole (4) south pole
47. Which of the following best describes longitude ?  
 (1) An imagery line joining north and south pole.  
 (2) The distance between a place east or west of the Greenwich meridian.  
 (3) The angular distance east or west of the Greenwich meridian  
 (4) The position of a place on earth's surface with reference to the prime meridian.
48. Study the diagram and identify the marked area ?



- (1) Tropic of Capricorn (2) Arctic Circle  
 (3) Tropic of Cancer (4) Equator
49. Which of the following is / are true of fold mountain ?  
 (1) They are often found next to a stable area of old crystalline rocks.  
 (2) They have a core of metamorphic and igneous rocks.  
 (3) They have rugged peaks often covered with snow and ice.  
 (4) All the above.

## Exercise

## 2

### Matching Based MCQ

**DIRECTIONS (Qs. 1 to 4) :** Match Column-I with Column-II and select the correct answer using the codes given below the columns.

1. **Column I** **Column II**  
 (A) A total land area mass of India (p) 7,516.6 km  
 (B) Total land boundary of India (q) 3.28 million sq. km  
 (C) Total length of coast line of India (r) 15,200 km.  
 (1) A → (r); B → (q); C → (p)  
 (2) A → (q); B → (r); C → (p)  
 (3) A → (q); B → (p); C → (r)  
 (4) A → (p); B → (q); C → (r)
2. **Column I** **Column II**  
**(Countries)** **(Shares the boundary)**  
 (A) Pakistan & Afghanistan (p) East  
 (B) Nepal & Bhutan (q) South

- (C) Myanmar & Bangladesh (r) North - West  
 (D) Sri Lanka & Maldives (s) North  
 (1) A → (q); B → (r); C → (s); D → (p)  
 (2) A → (r); B → (s); C → (q); D → (p)  
 (3) A → (r); B → (s); C → (p); D → (q)  
 (4) A → (p); B → (q); C → (r); D → (s)
3. **Column I** **Column II**  
**Plate movement types** **Plate movement processes**  
 (A) Convergent boundary (p) When some plates move away from each other.  
 (B) Transform boundary (q) When some plates come towards each other.  
 (C) Divergent boundary (r) When two plates are sliding along each other in opposing direction  
 (1) A → (r); B → (q); C → (p)  
 (2) A → (q); B → (r); C → (p)  
 (3) A → (q); B → (p); C → (r)  
 (4) A → (p); B → (q); C → (r)

4. 

| Column I<br>Mountain peak | Column II<br>Height in metres |
|---------------------------|-------------------------------|
| (A) Mt. Everest           | (p) 8172                      |
| (B) Kanchenjunga          | (q) 8598                      |
| (C) Dhaulagiri            | (r) 8848                      |
| (D) Nanda Devi            | (s) 7817                      |
- (1)  $A \rightarrow (q); B \rightarrow (r); C \rightarrow (s); D \rightarrow (p)$   
 (2)  $A \rightarrow (r); B \rightarrow (s); C \rightarrow (p); D \rightarrow (q)$   
 (3)  $A \rightarrow (s); B \rightarrow (r); C \rightarrow (q); D \rightarrow (p)$   
 (4)  $A \rightarrow (r); B \rightarrow (q); C \rightarrow (p); D \rightarrow (s)$

**Statement Based MCQ**

5. With reference to the location of Himalayan rivers, consider the following statements.  
 (a) The Kali and Tista rivers demarcates the Nepal Himalaya.  
 (b) The part of Himalayas lying between Indus and Satluj is known as Punjab Himalaya.  
 Which of the statement(s) given above is / are correct ?  
 (1) (a) only (2) (b) only  
 (3) Neither (a) and (b) (4) Both (a) and (b)
6. Consider the following statements :  
 (a) Gondwana land is the southern part of ancient super continent Pangea.  
 (b) The sedimentary rock which were accumulated in the geosyncline known as Tethys.  
 Which of these statement(s) is/are correct?  
 (1) (a) only (2) (b) only  
 (3) Both (a) and (b) (4) Neither (a) nor (b)
7. With reference to Western Ghats consider the following statements.  
 (a) Western Ghats are lower than the Eastern Ghats.  
 (b) Aravali Hills lie on the Western Ghats.  
 Which of the statement(s) is / are correct ?  
 (1) (a) only (2) (b) only  
 (3) Both (a) and (b) (4) Neither (a) nor (b)
8. Consider the following statements.  
 (a) Time lag between Gujarat to Arunachal Pradesh is more than two hours.  
 (b) Standard meridian of India passes through Mirzapur.  
 Which of these statement(s) is/are correct?  
 (1) (a) only (2) (b) only  
 (3) Neither (a) and (b) (4) Both (a) and (b)

**Passage Based MCQ**

**DIRECTIONS (Qs. 9 and 10) :** Read the passage given below and answer the questions that follow.

**PASSAGE - I**

The location of points on earth's surface is done by a system of measuring the lengths of arcs along meridians and parallels, or in terms of the **longitudes** and **latitudes**.

The longitude of a place can be defined as the arc, measured in degrees, of a parallel between the place and the prime meridian or east or west of the prime meridian. The prime meridian is at  $0^\circ$ ,

passing through the Royal observatory at Greenwich near London and England. It is often referred to as the meridian.

9. The prime meridian ( $0^\circ$ ) has passed in which town ?  
 (1) London (2) Washington  
 (3) Greenwich (4) Berlin
10. A longitude is the angular distance of a place north or south of the equator. The statement defines which of the followings ?  
 (1) Longitude (2) Latitude  
 (3) Arc (4) None of these

**Assertion Reason Based MCQ**

**DIRECTIONS (Qs. 11 and 12) :** Following questions consist of two statements, one labelled as the '**Assertion**' and the other as '**Reason**'. You are to examine these two statements carefully and select the answer to these items using the code given below.

**Code :**

- (1) Both A and R are individually true and R is the correct explanation of A.  
 (2) Both A and R are individually true but R is not the correct explanation of A.  
 (3) A is true but R is false.  
 (4) If both A and R are false.
11. **Assertion :** The standard time in India is the local time of a place at  $82.5^\circ$  E longitude at Mirzapur.  
**Reason :** This meridians also divide India approximately into half.
12. **Assertion :** 'The Tropic of Cancer passes through the center of the country.'  
**Reason :** The tropic of Cancer is same as equator.

**Correct Definition Based MCQ**

13. Which of the following is correct definition of bhangar ?  
 (1) Wet, swampy and marshy region of northern plain.  
 (2) The new alluvial soil forms a plain after flood.  
 (3) The older alluvial soil lie above the flood plains of the rivers and present a terrace like feature.  
 (4) The land between two water bodies.
14. Which of the following is the correct definition of distributaries ?  
 (1) The water channels which connects to the main stream.  
 (2) Due to deposition of silt the river divides into numerous channels.  
 (3) The rivers in their lower course split into numerous channels due to the deposition of silt.  
 (4) None of these



**Feature Based MCQ**

15. On the basis of following features identify correct option  
 (I) The ocean origins in mesozoic age  
 (II) Divides Gondwana land from Laurasia.  
 (1) Caspian Sea (2) Bay of Bengal  
 (3) Tethys Sea (4) None of these
16. On the basis of following features identify correct option  
 (I) Fold mountain,  
 (II) Composed of rocks, loftiest peaks, steep south slope and gentle north slope.  
 (III) Average height is 6000 mts.  
 Which mountain range has been discussed above ?  
 (1) Himalayan Ranges (2) Nilgiri Hills  
 (3) Eastern Ghats (4) Western Ghats.

# Hints & SOLUTIONS

**Exercise 1**

1. (1) Tropic of Cancer ( $23\frac{1}{2}^{\circ}\text{N}$ )  
 2. (3) Indira point, which got submerged under sea water during Tsunami in 2004.  
 3. (1) 4. (4)  
 5. (4) The 7th largest country of the world is India.  
 6. (1) Suez canal reduces the distance between Europe and India.  
 7. (3) Kanyakumari is present at the mid point of Bay of Bengal, Indian ocean and Arabian sea.  
 8. (1) There are 29 states and 7 union territories in Indian union.  
 9. (2)  
 10. (2) Andaman and Nicobar  
 11. (4) Our southern neighbour island countries are :  
 (i) Sri Lanka (ii) Maldives.  
 12. (4) Three larger countries than India are : (i) Russia (ii) Canada (iii) China  
 13. (1) Jammu and Kashmir  
 14. (1) Arabian sea  
 16. (3) 2.4%  
 17. (3) China  
 18. (2)  
 19. (1) The Kashmir Valley.  
 20. (4) 21. (1) 22. (1) 23. (1)  
 24. (2) 25. (3)  
 26. (4) The Narmada and the Tapi rivers.
27. (1) 28. (4) 29. (4) 30. (4)  
 32. (4)  
 33. (2) The Tropic of Cancer does not pass through Orissa.  
 34. (4) 35. (3)  
 36. (2) Palk Strait and Gulf of Mannar  
 37. (4) Bangladesh (4096 km) (With China:3488km, Pakistan:3323km, Nepal:1751km, Myanmar:1643km, Bhutan:699, Afghanistan:106 km, Total:15106 km)  
 38. (2) Rajasthan  
 39. (3) Goa  
 40. (2) Bhutan  
 41. (2) 7th position  
 42. (1) Ganga  
 43. (3) Punjab: The five rivers are Ravi, Beas, Sutlej, Chenab and Jhelum.  
 44. (4) Rajasthan  
 45. (1) Tropic of Cancer also passes through Tripura.  
 46. (1) 47. (3)  
 48. (4) Equator divides the earth into 2 halves.  
 49. (4)

**Exercise 2**

1. (2) 2. (3) 3. (2) 4. (4)  
 5. (4) 6. (3) 7. (2) 8. (2)  
 9. (3) 10. (2) 11. (1) 12. (2)  
 13. (3) 14. (2) & (3)  
 15. (3) Tethys Sea  
 16. (1) Himalayan Ranges