

UPPCS PRE 24 MA ANSWER-38

1. Tropic of Cancer passes through how many of the following states of India?

1. Rajasthan
2. Odisha
3. Manipur
4. Nagaland

Code:

- (a) All four
- (b) Only three
- (c) Only two
- (d) Only one

1. Answer - (d)

- The Tropic of Cancer is the northernmost latitude line of the earth, on which the sun shines perpendicularly at noon.
- **23 degrees 30 minutes north latitude**, also known as the Tropic of Cancer, passes almost through the middle of India and divides India into northern and southern parts. This line passes through eight states of India (Gujarat, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal, Tripura and Mizoram).
- Ranchi, the capital of Jharkhand, is located on the Tropic of Cancer.



source: www.quora.com

Additional knowledge:

- The Tropic of Cancer passes through Bangladesh between West Bengal and Tripura. In India, the maximum length of the Tropic of Cancer is in the state of 'Madhya Pradesh' and the minimum length is in 'Rajasthan'

2. Indian Standard Time Line (82°30'E) passes through which of the following state(s)?

1. Uttar Pradesh
2. Madhya Pradesh

2. Answer - (a)

- Indian Standard Time (IST) is calculated on the basis of **82.5 degrees east** longitude from the clock tower located in Mirzapur, Uttar Pradesh. The standard meridian of India is **82°30'E** at Mirzapur in Uttar Pradesh, which was taken as the standard

<p>3. Chhattisgarh 4. Uttarakhand</p> <p>Code:</p> <p>(a) Only 1, 2 and 3 (b) Only 2 and 3 (c) Only 3 and 4 (d) Only 1, 3 and 4</p>	<p>meridian as it divides the country into two equal parts.</p> <ul style="list-style-type: none"> • The Indian Standard Time Line passes through the following 5 states - Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Odisha and Andhra Pradesh. <div data-bbox="539 349 1505 837" style="border: 1px solid black; padding: 5px;"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> • The 'International Standard Time Line' passes through 0° longitude at a place called Greenwich in London. • There is a time difference of 5 hours 30 minutes between 0° longitude and 82½° East longitude. Since India is located in the Eastern Hemisphere, the Indian Standard Time (82 ½ of East longitude) is 5 hours 30 minutes ahead of Greenwich time. That is, if it is 5:30 pm in India, then the daytime in London will be 12:00 pm. </div>
<p>3. Consider the following statements:</p> <ol style="list-style-type: none"> 1. 'Gaura Mata' or 'Guhar Moti' is the easternmost point of India. 2. There is a difference of about 4 hours between the northwestern and northeastern points of India. <p>Which of the above statements is/are correct?</p> <p>(a) Only 1 (b) Neither 1 nor 2 (c) Only 2 (d) Both 1 and 2</p>	<p>3. Answer - (b)</p> <ul style="list-style-type: none"> • The southernmost point of India is 'Indira Point' which is also called 'Pygmalion Point' or 'Parson Point'. • It is located on 'Big Nicobar Island' of Andaman Nicobar Islands. • Kibithu located in Arunachal Pradesh is the northeastern point of India while 'Gaura Mata' or 'Guhar Moti' in Gujarat is the northwestern point. • There is a difference of about 2 hours between the northwestern and northeastern points of India. <div data-bbox="539 1328 1505 1563" style="border: 1px solid black; padding: 5px;"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> • The area of India is '32,87,263 sq. km.' India is the seventh largest country in the world in terms of area after Russia, Canada, China, United States of America, Brazil and Australia. </div>
<p>4. Arrange the following states of India in decreasing order of area.</p> <ol style="list-style-type: none"> 1. Madhya Pradesh 2. Rajasthan 3. Uttar Pradesh 4. Maharashtra 	<p>4. Answer - (a)</p> <ul style="list-style-type: none"> • Among the states of India, the five largest states in terms of area are Rajasthan, Madhya Pradesh, Maharashtra, Uttar Pradesh and Gujarat respectively. • Before the formation of Telangana state, Andhra Pradesh was the fourth largest state of the country in terms of area. • The smallest state of India in terms of area is 'Goa'. In terms of

<p>Code:</p> <p>(a) 2 - 1 - 4 - 3</p> <p>(b) 3 - 1 - 4 - 2</p> <p>(c) 2 - 4 - 1 - 3</p> <p>(d) 3 - 4 - 1 - 2</p>	<p>population, the smallest state of India is 'Sikkim'.</p> <ul style="list-style-type: none"> • Among the states/union territories, the smallest union territory of India in terms of area is 'Lakshadweep'. <div data-bbox="539 297 1506 891"> <p>Additional knowledge:</p> <ul style="list-style-type: none"> • Nine states and four union territories are located on the Indian coast. • The extension of Indian coastal states is as follows - Gujarat (1600 km), Maharashtra (720 km), Goa (101 km), Karnataka (300 km), Kerala (550 km), Tamil Nadu (980 km), Andhra Pradesh (970 km), Odisha (484 km) and West Bengal (210 km). • While the union territories are Dadra and Nagar Haveli and Daman and Diu, Lakshadweep, Pondicherry and Andaman and Nicobar Islands. • There are a total of 1,208 islands (including uninhabited) in India </div>
<p>5. Consider the following pairs:</p> <ol style="list-style-type: none"> 1. Durand Line - Pakistan and Afghanistan 2. McMahon Line - China and Arunachal Pradesh 3. Radcliffe Line - India and Pakistan 4. Palak Strait - India and Sri Lanka <p>How many of the above pairs are correctly matched?</p> <p>(a) One pair</p> <p>(b) Two pairs</p> <p>(c) Three pairs</p> <p>(d) Four pairs</p>	<p>5. Answer - (d)</p> <p>Border lines between India and neighboring countries –</p> <ul style="list-style-type: none"> • Durand Line - Pakistan and Afghanistan • McMahon Line - China and Arunachal Pradesh • Radcliffe Line - India and Pakistan • Palk Strait - India and Sri Lanka <div data-bbox="539 1227 1506 2067"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> • The name of our country is 'Bharat'. From ancient times till now, India has been called by many names. In ancient times, the vast subcontinent of India was known as 'Bharatvarsh'. Probably India was named after the prominent people of the Rigvedic period 'Bharat'. • In another reference of Vayu Purana, there is a mention of 'Bharat', the son of Dushyant and Shakuntala, after whom this land was named 'Bharat'. In fact, the first mention of the word 'Bharat' is found in the Puranas only. • Bharat was the southern part of Jambu Dweep. Being the abode of the Aryans, it was named as 'Aryavart'. • Medieval historians (Persian and Arabic) addressed this country by the word 'Hind' or 'Hindustan'. • The word 'India', used as a synonym for India, is believed to have originated from the Greek word 'Indoi'. </div>

<p>6. Consider the following statements in the context of physical diversities of India:</p> <ol style="list-style-type: none"> 1. The relatively higher part of the northern plain is called 'Khadar'. 2. In Punjab, Khadar is called 'Bet'. <p>Which of the above statements is/are correct?</p> <p>(a) Only 2 (b) Both 1 and 2 (c) Neither 1, nor 2 (d) Only 1</p>	<p>6. Answer - (a)</p> <ul style="list-style-type: none"> • The relatively higher part of the northern plain is called 'Bangar'. Flood water of rivers never reaches this part. On the contrary, 'Khadar' is the relatively lower part of the plain, where flood water reaches every year. • In Punjab, Khadar is called 'Bet'. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Additional knowledge:</p> <ul style="list-style-type: none"> • India is a country of physical diversities. Almost all types of topography are found here. According to a rough estimate, mountains cover 29.3 percent of the total area of India, plateaus cover 27.7 percent and plains cover 43 percent. • Geomorphologically, India can be divided into four parts - <ul style="list-style-type: none"> • Northern Great Mountains • Northern Great Plains • Great Plateau • Coastal Plains and Islands </div>
<p>7. Consider the following statements:</p> <ol style="list-style-type: none"> 1. The area between the Tropic of Cancer and the Tropic of Capricorn is called the 'tropical region'. 2. India is a country with a 'tropical monsoon climate'. <p>Which of the above statements is/are correct?</p> <p>(a) Both 1 and 2 (b) Neither 1 nor 2 (c) Only 1 (d) Only 2</p>	<p>7. Answer - (a)</p> <ul style="list-style-type: none"> • India is a country with a 'tropical monsoon climate'. The area between the Tropic of Cancer and the Tropic of Capricorn is called the 'tropical region'. • In India, the area south of the 'Tropic of Cancer' comes under the tropical region while the area north of the 'Tropic of Cancer' comes under the temperate zone, despite this India is a region with a tropical monsoon climate. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Additional knowledge:</p> <ul style="list-style-type: none"> • Sri Lanka is separated from India by the 'Palak Strait'. • The nearest country to India across the sea is 'Sri Lanka', which is separated from the Indian territory Tamil Nadu by the Palk Strait. It connects the Bay of Bengal to the Gulf of Mannar. </div>
<p>8. Consider the following statements with reference to the eastern coastal plain of India:</p>	<p>8. Answer - (a)</p> <p>Coastal Plain</p> <ul style="list-style-type: none"> • The vast plateau of our country is surrounded on all sides. There are the Northern Great Plains in the north and coastal plains in the

<p>1. It is less wide than the western coastal plain.</p> <p>2. Chilka and Pulicat are the two large lagoons in this plain.</p> <p>Which of the above statements is/are correct?</p> <p>(a) Only 2</p> <p>(b) Both 1 and 2</p> <p>(c) Neither 1 nor 2</p> <p>(d) Only 1</p>	<p>south, east and west.</p> <ul style="list-style-type: none"> • The Eastern Coastal Plain is spread along the coast of the Bay of Bengal from the mouth of the Ganges River in the north to Kanyakumari. It is wider than the western coastal plain. This plain includes the deltas of Mahanadi, Godavari, Krishna and Kaveri rivers. Chilka and Pulicat are two large lagoons in this plain. <div data-bbox="539 454 1501 734"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> • 'Barren Island' is the only active volcano of India. It is located in the Andaman and Nicobar Islands. • 'Andaman and Nicobar Islands' are the extension of the North Eastern Himalayas in the Bay of Bengal. </div>
<p>9. Consider the following statements:</p> <p>1. The 'Lakshadweep group' lies in the Arabian Sea, west of the Kerala coast.</p> <p>2. The '8 degree channel' separates Minicoy Island from the main Lakshadweep Islands.</p> <p>3. The 'Lakshadweep group' consists of all volcanic islands.</p> <p>How many of the above statements are correct?</p> <p>(a) Only one</p> <p>(b) Only two</p> <p>(c) All three</p> <p>(d) None</p>	<p>9. Answer - (a)</p> <ul style="list-style-type: none"> • 'Lakshadweep Group' is located in the Arabian Sea, west of the Kerala coast. All of these are coral islands. Its capital is 'Kavaratti'. • '9 Degree Channel' separates Minicoy Island from the main Lakshadweep Islands. • '8 Degree Channel' separates India from the Maldives and is locally called 'Addigiri Kandu'. <div data-bbox="539 1126 1501 1406"> <p>Additional knowledge:</p> <ul style="list-style-type: none"> • Ten Degree Channel is the strait that separates the Small Andaman Island from the Car Nicobar Island in the Andaman and Nicobar Islands of India, which is located at 10 latitude north. </div>
<p>10. Consider the following statements:</p> <p>1. India is located on the globe in the northern and eastern hemisphere.</p>	<p>10. Answer - (d)</p> <p>India's position</p> <ul style="list-style-type: none"> • India's position on the globe is in the northern and eastern hemisphere. Its latitudinal extension is from 8 degrees 4 minutes north latitude to 37 degrees 6 minutes north latitude, and its longitudinal extension is spread between 68 degrees 7 minutes

<p>2. The latitudinal extent of India is from 8 degrees 4 minutes north latitude to 37 degrees 6 minutes north latitude.</p> <p>Which of the above statements is/are correct?</p> <p>(a) Only 1 (b) Neither 1 nor 2 (c) Only 2 (d) Both 1 and 2</p>	<p>east longitude to 97 degrees 25 minutes east longitude. This is the position of the mainland of India.</p> <ul style="list-style-type: none"> • Apart from this, 'Indira Point' located south of Great Nicobar Island in the southern part of the Andaman and Nicobar Islands of India is located at 6 degrees 45 minutes north latitude. • Its extension is approximately 3200 km from Kashmir in the north to Kanyakumari in the south and approximately 2900 km from Arunachal Pradesh in the east to Kutch in the west. <div data-bbox="539 555 1508 891"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> • The Indian state that shares a border with the maximum number of states is 'Uttar Pradesh'. It shares a border with eight states and one union territory of India namely Uttarakhand, Himachal Pradesh, Haryana, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Bihar, and Union Territory New Delhi. </div>
<p>11. Consider the following statements with reference to the Dharwar rocks of India:</p> <ol style="list-style-type: none"> 1. These are the oldest sedimentary rocks. 2. Fossils are found in these rocks. 3. Most of the metallic minerals are found in rocks of this order. <p>How many of the above statements are correct?</p> <p>(a) All four (b) Only three (c) Only two (d) Only one</p>	<p>11. Answer - (c)</p> <p>Rocks of Dharwad series</p> <ul style="list-style-type: none"> • These rocks are formed by the erosion and deposition of rocks of the 'Archean series'. Hence, these are the oldest sedimentary rocks. Fossils are not found in these rocks. • The Aravalli mountain range, which is one of the oldest folded mountains in the world, is formed by rocks of this series. • Rocks of Dharwad series are very important from the economic point of view, because most of the metallic minerals are found in the rocks of this series. • The rocks of this series are found in Dharwad and Shimoga districts of Karnataka, that is why they are named 'Dharwad'. Apart from this, these rocks are found in Kaveri river valley, Bellary district, Sassar mountain range of Jabalpur, Nagpur and Champaner mountain range of Gujarat. • In North India, rocks of Dharwad series are found in Ladakh, Jaskar, Garhwal and Kumaon range of Himalayas <div data-bbox="539 1787 1508 2060"> <p>Additional knowledge:</p> <p>Rocks of 'Kudappa series'</p> <ul style="list-style-type: none"> • They are named after 'Kudappa district' of Andhra Pradesh. • They are formed due to erosion of the rocks of 'Dharwad series' by rivers and various water activities. </div>

	<ul style="list-style-type: none"> • Its main area is also 'Andhra Pradesh'. Apart from this, these rocks are also found in Madhya Pradesh, Rajasthan and Maharashtra. • Economically, these are not as rich as Dharwar rocks, but metals like copper, nickel, cobalt etc. are also found in these rocks
<p>12. Consider the following statements with reference to the rocks of the Vindhyan series of India:</p> <ol style="list-style-type: none"> 1. The rocks of this series are mainly found in river valleys. 2. Evidence of fossils has been found in these rocks. <p>Which of the above statements is/are correct?</p> <p>(a) Only 2 (b) Neither 1, nor 2 (c) Only 1 (d) Both 1 and 2</p>	<p>12. Answer - (a)</p> <p>Rocks of the Vindhyan series</p> <ul style="list-style-type: none"> • These are sedimentary rocks, because they were formed by the deposition of sediments after the Kudappa rocks. • Evidence of fossils has been found in these rocks. • These rocks are found in regions like Malwa Plateau, Son Valley and Bundelkhand. • The Panna mines of Madhya Pradesh and the Golconda mines of Karnataka, from where diamonds are obtained, are located in the rocks of the Vindhyan series. • Many historical buildings like the Red Fort, Jama Masjid and Sanchi Stupa have been built from the red sandstone rocks found in this structure. Apart from this, limestone, dolomite etc. rocks are also found in this structure. <p>Additional knowledge:</p> <p>Rocks of the Gondwana series</p> <ul style="list-style-type: none"> • The rocks of this series are mainly found in river valleys. Its main expansion is in the valleys of Damodar, Mahanadi and Godavari. • The word 'Gondwana' originated from the name of the 'Gond' region of Madhya Pradesh. • Most of the 'coal' of India is found in the rocks of the Gondwana series. • During the Carboniferous period, many cracks were formed in peninsular India. Due to the sinking of the land along these cracks, basin-like depressions were formed. Coal was formed in these depressions due to the suppression of vegetation and the action of heat and pressure on it.
<p>13. Most of the coal in India is found in -</p>	<p>13. Answer - (b)</p> <ul style="list-style-type: none"> • About 98% of India's coal is found in the rocks of 'Gondwana

<p>(a) Archaean series rock (b) Gondwana series rocks (c) Cuddapah series rocks (d) Dharwad series rocks</p>	<p>order'. In India, coal is found in Damodar river valley, Mahanadi valley and Godavari river valleys.</p> <div data-bbox="534 246 1508 734" style="border: 1px solid black; padding: 10px;"> <p><u>Additional knowledge:</u></p> <p>A total of 6 types of rocks are found in India. Based on the formation period of the rocks, their order is as follows -</p> <ul style="list-style-type: none"> • Archean order rocks • Dharwad order rocks • Cuddapah order rocks • Vindhya order rocks • Gondwana order rocks • Deccan Trap </div>
<p>14. Arrange the following countries in the increasing order of the length of the border line with India?</p> <ol style="list-style-type: none"> 1. Bhutan 2. Nepal 3. Myanmar 4. Pakistan <p>Code:</p> <p>(a) 1, 2, 3, 4 (b) 1, 3, 2, 4 (c) 2, 3, 1, 4 (d) 2, 1, 3, 4</p>	<p>14. Answer - (b)</p> <p>The maximum length of India from north to south was '3214 km' and the maximum width from east to west was '2933 km'. The total length of India's terrestrial border is '15,200 km'. The longest terrestrial border with India is with 'Bangladesh'. The length of the border line with other countries is as follows.</p> <ul style="list-style-type: none"> • Country - Length of border line (in kilometers) • Bangladesh - 4096 • China - 3917 • Pakistan - 3310 • Nepal - 1752 • Myanmar - 1458 • Bhutan - 587 • Afghanistan - 80 <div data-bbox="534 1478 1508 2072" style="border: 1px solid black; padding: 10px;"> <p><u>Additional Knowledge:</u></p> <p><u>Shape and expansion of India</u></p> <ul style="list-style-type: none"> • The shape of our country is quadrangular. The area of India is 32,87,263 square km. The area of India is '2.4 percent' of the total area of the world. It is the seventh largest country in the world. • The length of the coastline of the mainland of India is '6100 km' and, by including the coastlines of Andaman Nicobar Islands and Lakshadweep, the length of the total coastline of India becomes '7516.6 km'. • The coastline of India is known by different names at different </div>

places. For example, the eastern coastline is known as Northern Sarkar, Southern Sarkar and Coromandel Coast from north to south while the western coastline is known as **Konkan, Kannada and Malabar** from north to south.

15. Which of the following was/were part of ancient 'Gondwanaland'?

1. Peninsular India
2. South America
3. North America
4. Europe

Code:

- (a) Only 1 and 2
- (b) Only 1, 3 and 4
- (c) Only 1 and 3
- (d) 1, 2, 3 and 4

15. Answer - (a)

Separation of Pangea and formation of various landmasses

- **Angaraland (Laurentia)** - Europe, Asia, North America, Greenland
- **Gondwanaland** - Peninsular India, Africa, Australia, South America, Antarctica, Madagascar

Additional Knowledge:

- The development of Indian geological structure begins with the division of **Pangea** into **Angaraland (Laurentia)** and **Gondwanaland**.
- The Indian geological structure developed due to the division of **Gondwanaland** and the **flow of a part of it to the north in different periods of time**.
- The Indian geological structure can be divided into different sections according to the historical chronology. **Various topographies developed here, from the Precambrian Archaean structure to Dharwad, Cuddapah, Vindhyan and Tertiary period.**
- While the **Aravalli Mountains, Chotanagpur plateau region, Vindhya range** etc. are prominent among the **Precambrian topographies** here, the **Tertiary Himalayan Mountains** developed in various sub-periods in the northern border region of India.

16. The following states of India are in increasing order of area -

1. West Bengal
2. Uttarakhand
3. Bihar
4. Assam

Code:

- (a) 2 - 1 - 4 - 3
- (b) 3 - 1 - 4 - 2
- (c) 2 - 4 - 1 - 3

16. Answer - (c)

- **State - Area (in sq km)**
- Tamil Nadu - 130,058
- Andhra Pradesh - 162,968
- **Bihar - 94,163**
- **West Bengal - 88,752**
- Arunachal Pradesh - 83,743
- Assam - 78,438
- Uttarakhand - 53,483
- Tripura - 10,486

(d) 3 - 4 - 1 - 2	<p>Additional Knowledge:</p> <p>Indian Subcontinent</p> <ul style="list-style-type: none"> • Due to the special geographical position and vast area of India, this landmass is also called the 'Indian Subcontinent'. • The north-western, northern and north-eastern parts of India are surrounded by high and huge mountain ranges. Due to which this region exists separately from the 'Asia continent'. • The 'Himalaya Mountains' along with its other ranges create a strong physical barrier and separate the Indian subcontinent from the rest of 'Asia'.
<p>17. How many of the following states/union territories of India share their border with three countries?</p> <ol style="list-style-type: none"> 1. Sikkim 2. West Bengal 3. Ladakh 4. Assam <p>Code:</p> <p>(a) Only two</p> <p>(b) Only one</p> <p>(c) All four</p> <p>(d) Only three</p>	<p>17. Answer - (d)</p> <p>Indian states surrounded by India's neighboring countries -</p> <ul style="list-style-type: none"> • Sikkim - surrounded by Nepal, China and Bhutan. • West Bengal - surrounded by Nepal, Bhutan and Bangladesh. • Ladakh - surrounded by China, Afghanistan and Pakistan. <p>India-Bhutan and India-Bangladesh border is connected to 'Assam' in some parts. Hence it shares its border with only two countries.</p> <p>Additional Knowledge:</p> <p>Indian states touching the border of India's neighboring countries</p> <ul style="list-style-type: none"> • Pakistan - Jammu and Kashmir, Ladakh, Punjab, Rajasthan and Gujarat. • China - Ladakh, Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh. • Myanmar - Arunachal Pradesh, Nagaland, Manipur and Mizoram. • Bangladesh - Mizoram, Tripura, Assam, Meghalaya and West Bengal • Nepal - Uttarakhand, Uttar Pradesh, Bihar and West Bengal • Bhutan - Sikkim, West Bengal, Assam and Arunachal Pradesh
<p>18. Consider the following statements:</p> <ol style="list-style-type: none"> 1. The Eastern and Western Ghats of India meet at Nilgiri. 2. The largest state of 	<p>18. Answer - (c)</p> <ul style="list-style-type: none"> • India is the only country after which an 'ocean' (Indian Ocean) has been named. • The Eastern and Western Ghats of India meet in 'Nilgiri'. • In terms of area, the largest state of India is Rajasthan and the smallest state is Goa.

India in terms of area is Rajasthan and the smallest state is Goa.

3. The largest union territory in terms of population is Delhi and the smallest is Lakshadweep.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

- In terms of population, the largest state of India is Uttar Pradesh and the smallest state is Sikkim.
- In terms of population, the largest union territory is Delhi and the smallest is Lakshadweep.
- The Gulf of Khambhat is situated between Daman and Diu.

Additional Knowledge:

- The Union Territory of Puducherry is located in a total of 4 places, which is spread over three states -
 - Mahe - Kerala
 - Puducherry and Karaikal - Tamil Nadu
 - Yanam - Andhra Pradesh
- India's northeastern state 'Tripura' is surrounded by Bangladesh on three sides.

19. Given below are two statements, one is Statement (A) and the other is Reason (R).

Statement (A): Vegetation ranging from tropical forests to tundra region is found in India.

Reason (R): India is a country of highly diverse climate and soil.

Choose the correct answer from the code given below:

- (a) Both A and R are correct but (R) is not the correct explanation of (A).
- (b) Both A and R are correct and (R) is the correct explanation of (A).
- (c) A is incorrect, but R is correct.
- (d) A is correct, but R is incorrect.

19. Answer - (b)

- India is a country of highly diverse climate and soil. That is why vegetation ranging from tropical forests to the tundra region is found here. Hence both A and R are correct and the correct explanation of (A) is (R).

Additional Knowledge:

- The part of the 'North-East Monsoon' which flows over North-East India, enters the east of the Bay of Bengal and receives sufficient moisture from the ocean. These heavy moisture-laden winds of the North-East monsoon reach Tamil Nadu and collide with the Eastern Ghats, which is the reason why it rains in winter on the Coromandel coast of Tamil Nadu.

20. Consider the following statements with reference to tropical evergreen forests:

1. These forests are found in areas with annual rainfall of more than 200 cm.
2. These forests are found only in the north-eastern part of India.
3. The wood of these forests is hard and the height of the trees is more than 60 meters.

How many of the above statements are correct?

- (a) All four
- (b) Only three
- (c) Only two
- (d) Only one

20. Answer - (c)

Tropical Evergreen Forests

- These forests remain green throughout the year. They are found in areas with more than 200 cm of rainfall.
- Major areas of these forests in India - Maharashtra to Kerala in Sahyadri (Western Ghats), Shillong Plateau of North-East India, Andaman-Nicobar Islands and Lakshadweep.
- The wood of these forests is hard and the height of the trees is more than 60 meters.

Main trees of these forests -

- Mahogany, ebony, bamboo, cane, jarul, ebony, coconut, palm.
- Cinchona and rubber are found in 'Southern Sahyadri' and Andaman-Nicobar Islands.

Additional knowledge:

Tropical moist deciduous forests

- These are also called deciduous or deciduous forests. These are mainly 'monsoon forests'. These are found in areas with 100 to 200 cm rainfall.
- Main areas of these forests - Eastern slopes of Sahyadri, north-eastern plateau part of peninsula, Bhabar and Terai region along the Shivalik range.
- Due to monsoon rains, rain is not received here throughout the year, due to which the trees found here shed their leaves after the winters are over or before the summers arrive to save water.
- The wood of these forests is 'soft and strong'.

Main trees of these forests -

- Teak, Sakhua, Shisham, Mango, Mahua, Bamboo, Khair, Khair, Triphala and Sandalwood.
- 'Sandalwood' is mainly found in Karnataka and Nilgiri hill areas.
- All these are valuable from an economic point of view.

21. Consider the following statements:

1. The 'temperate forests' found in north-eastern India are locally known as 'Sholas'.

21. Answer - (c)

Shola Forest

- The 'Temperate forests' found on Nilgiri, Annamalai and Palani hills are locally known as 'Sholas'.
- The word 'shola' is a corrupt form of the Tamil word 'cholai', which means - cold place or forest.

<p>2. Trees found in Shola forests include Magnolia, Laurel, Cinchona etc.</p> <p>Which of the above statements is/are correct?</p> <p>(a) Only 1 (b) Neither 1 nor 2 (c) Only 2 (d) Both 1 and 2</p>	<ul style="list-style-type: none"> The trees found in these forests are Magnolia, Laurel, Cinchona etc. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Additional knowledge:</p> <ul style="list-style-type: none"> In mountainous regions, due to the decrease in temperature with increasing altitude, there is a change in natural vegetation. Here, temperate natural vegetation is found in the high altitude areas and subtropical natural vegetation is found in the lower areas. The mountain ranges of Tamil Nadu, Kerala and Karnataka provinces fall in the tropical region and their height above sea level is about 1500 meters. </div>
<p>22. Arrange the following in order of their establishment year?</p> <ol style="list-style-type: none"> TATA Steel Limited Indian Iron and Steel Company Mysore Iron and Steel Works Steel Corporation of Bengal <p>Code:</p> <p>(a) 2, 3, 1, 4 (b) 1, 3, 2, 4 (c) 2, 1, 3, 4 (d) 1, 2, 3, 4</p>	<p>22. Answer - (d)</p> <p>Tata Steel Limited</p> <ul style="list-style-type: none"> Tata Steel (formerly Tata Iron and Steel Company Limited) also known as TISCO is the leading steel company of India. This factory located in Jamshedpur was established in the year 1907. <p>Indian Iron and Steel Company</p> <ul style="list-style-type: none"> Indian Iron and Steel Company (IISCO) is the merger of Indian Iron and Steel Company (1918) and Steel Corporation of Bengal (1937). Indian Iron and Steel Company and Steel Corporation of Bengal merged in 1953. IISCO has three different steel plants which are located in Kulti, Hirapur and Burnpur in West Bengal. <p>Mysore Iron and Steel Works</p> <ul style="list-style-type: none"> It was established in 1923 at a place called Bhadravati in Karnataka. Now it is known as Visvesvaraya Iron and Steel Company Limited (VISCL). <p>Steel Corporation of Bengal</p> <ul style="list-style-type: none"> It was established in 1937 in Burnpur (West Bengal). In 1953 it was merged with the Indian Iron and Steel Company. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> Rourkela Steel Plant (in 1959) - It was established in Orissa with the help of 'Germany'. Indian Iron and Steel Company (IISCO) - It was established in 1918. It is the largest iron transporting industry in India. It has three units in Burnpur, Hirapur, Kulti (West Bengal). Visakha Steel Plant is the first port based plant located in Visakhapatnam Andhra Pradesh which was started in the year </div>

1992. It is also India's first coastal factory.

23. Consider the following pairs:

Oil Refineries - State

1. Digboi - Assam
2. Noonmati - Telangana
3. Tatipaka - Gujarat
4. Barauni - Bihar

How many of the above pairs are correctly matched?

- (a) Two pairs
- (b) One pair
- (c) Four pairs
- (d) Three pairs

23. Answer - (a)

- **Digboi Oil Refinery** - It is located in Dibrugarh district (Assam). India's first oil refinery was built in 'Digboi' in 1901. It is also Asia's first oil refinery. It was established by 'Assam Oil Company Limited'.
- **Noonmati Oil Refinery** - It is located in Guwahati. This is the first oil refinery established in the year 1962 by 'Indian Oil Company Limited'. This is the first oil refinery in the public sector. It was established in collaboration with Romania.
- **Tatipaka Oil Refinery** - This oil refinery is located in East Godavari district of 'Andhra Pradesh'. It was established in the year 2001. This refinery is the first refinery of ONGC.
- **Barauni Oil Refinery** - This oil refinery has been operating in Bihar (Begusarai) since the year 1964. It is owned by Indian Oil Corporation Limited. It was established in collaboration with Russia and Romania. It is located on the banks of the Ganges River.

Additional Knowledge:

- **Oil Refineries - State**
- Numaligarh - Assam
- Bongaigaon - Assam
- Kolkata - West Bengal
- Haldia - West Bengal
- Paradip - Orissa
- Visakhapatnam - Andhra Pradesh
- Chennai (Manali) - Tamil Nadu
- Nagapatnam - Tamil Nadu
- Kochi - Kerala
- Mangalore - Karnataka
- Trombay - Maharashtra
- Koyali - Gujarat
- Jamnagar - Gujarat
- Vadinar - Gujarat
- Bhatinda - Punjab
- Panipat - Punjab
- Bina - Madhya Pradesh

- Mathura - Uttar Pradesh

24. Consider the following statements:

1. The first cotton textile mill in India was established in 1818 at Fort Gloster (Calcutta).
2. The Government of India has de-licensed the textile industry through the 'Textile Development and Regulation Order, 1993'.

Which of the statements given above is/are correct?

- (a) Only 2
(b) Neither 1 nor 2
(c) Only 1
(d) Both 1 and 2

24. Answer - (d)

'Textile Industry' in India

- The first cotton textile mill in India was established in Fort Gloster (Calcutta) in 1818 but this mill could not achieve its target.
- India's second mill '**Bombay Spinning and Weaving Company**' was established in Bombay by '**KGN Daber**' in 1854. After this, this industry continued to develop.
- At the time of independence (13 August, 1947) there were a total of 394 cotton textile mills in India.
- The Government of India has de-licensed this industry through the Textile Development and Regulation Order, 1993.
- The country's cotton textile industry is mainly concentrated in Maharashtra, Tamil Nadu and Gujarat.

Additional Knowledge:

- Cottonopolis of India - **Mumbai**
- Manchester of India - **Ahmedabad**
- Boston of East - **Ahmedabad**
- Manchester of South India - **Coimbatore**
- Manchester of North India - **Kanpur**

25. Which of the following is/are the main trees of 'Tropical Deciduous Forests'?

1. Shisham
2. Acacia
3. Mango
4. Mahua

Codes:

- (a) 1, 2, 3 and 4
(b) Only 2, 3 and 4
(c) Only 2 and 3
(d) Only 1, 3 and 4

25. Answer - (d)

Main trees of 'Tropical Deciduous Forests'

- Teak, Sandalwood, Sakhua, Shisham, Mango, Mahua, Bamboo, Khair, Triphala and Sandalwood etc.

Main trees of 'Dry and Thorny Forests'

Acacia, Khair, Date Palm, Prickly Pear, Cactus etc

Additional Knowledge:

Tropical Deciduous Forests

- These forests are found in the areas with high rainfall in the peninsula and in the plains of Uttar Pradesh and Bihar.
- These forests are found in abundance in India. They are also called 'Monsoon Forests'.
- These forests are found in the area with 70 to 200 cm annual rainfall.

- On the basis of water availability, these forests are divided into moist and dry deciduous forests.
- Moist deciduous forests**
 - Where the rainfall is 1000 to 200 cm.
 - These forests are found in the north-eastern states and foothills of the Himalayas, eastern slopes of the Western Ghats and Odisha.
 - Main trees - Teak, Sal, Shisham, Mahua, Amla, Kusum.
- Dry deciduous forests**
 - Where the rainfall is 70 to 100 cm.
 - These forests are found in the plains of Uttar Pradesh and Bihar.
 - Main trees - Palas, Amaltas, Bel and Khair.

26. Match List I (Major centers of paper industry) with List II (States):

List I	List II
A. Titagarh	1. Telangana
B. Tirupati	2. Andhra Pradesh
C. Bodhan	3. West Bengal
D. Shahdol	4. Madhya Pradesh

Select the correct answer from the codes given below:

- (a) A-3, B-1, C-2, D-4
 (b) A-3, B-2, C-1, D-4
 (c) A-4, B-1, C-2, D-3
 (d) A-4, B-2, C-1, D-3

26. Answer - (b)

Major centers of paper industry

- West Bengal** - Titagarh, Raniganj, Triveni, Kolkata, Chandrahati and Sewdifuli
- Andhra Pradesh** - Rajahmundry, Tirupati
- Telangana** - Bodhan, Sirpur-Kagaznagar
- Odisha** - Brajaraaj Nagar, Raigada
- Madhya Pradesh** - Indore, Bhopal, Shahdol, Sehore, Betul

Additional knowledge:

Paper Industry

- The first mill for making paper in the modern way in the country was established in '**Serampore**' in West Bengal in the **year 1812**, which was unsuccessful. The first successful paper factory was set up in Ballygunge, Kolkata in the **year 1867**.
- The first paper factory in Uttar Pradesh was set up in **Lucknow** in the year 1879. Apart from this, there are paper making **factories in Saharanpur, Meerut, Modinagar as well**.
- In this industry, cellulose pulp is used as raw material which is mainly obtained from states like **Madhya Pradesh, Chhattisgarh, Maharashtra, Jharkhand, Odisha and Andhra Pradesh**.
- The first newsprint mill in India **was** set up in 1947 in '**Nepanagar**', **Madhya Pradesh**.
- Apart from this, Hindustan Newsprint Ltd., Mysore Paper Mills

(Bhadravathi) and Tamil Nadu Newsprint and Paper Ltd. (Vellore) are the major producers of newsprint in the country.

- **India imports special quality paper** (currency printing paper, ivory board, vegetable parchment paper, etc.).

27. Which one of the following is not correctly matched?

- (a) Indian Sugar Research Institute - Lucknow
- (b) Indian Sugarcane Breeding Institute - Coimbatore
- (c) Central Potato Research Institute - Meerut
- (d) Central Coconut Research Institute - Kasargod

27. Answer - (c)

- **Indian Sugar Research Institute** - Lucknow (Uttar Pradesh)
- **Indian Sugarcane Breeding Institute** - Coimbatore (Tamil Nadu)
- **Central Potato Research Institute** - Shimla (Himachal Pradesh)
- **Central Coconut Research Institute** - Kasargod (Kerala)

Additional Knowledge:

- Central Environmental Engineering Research Institute - **Nagpur**
- Industrial Toxicology Research Centre - **Lucknow**
- Archaeological Survey of India - **Kolkata**
- Central Jute Technology Research Institute - **Kolkata**

28. Given below are two statements, one is Statement (A) and the other is Reason (R).

Statement (A): Sugar mills are generally established near sugarcane producing areas.

Reason (R): The raw material (sugarcane) used in the sugar industry is heavy, and its quality starts deteriorating when transported to long distances.

Choose the correct answer from the code given below:

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

28. Answer - (b)

- **Sugar industry** is a raw material (sugarcane) based weight loss industry.
- **Sugar mills** are generally established near sugarcane producing areas because the raw material (sugarcane) used in the sugar industry is heavy, which reduces its quality when transported to a long distance. **Hence both A and R are correct and the correct explanation of (A) is (R).**

Additional Knowledge:

Major sugar producing centers

- **Maharashtra** - Ahmednagar (major center), Kolhapur, Sholapur, Pune etc.
- **Uttar Pradesh** - Meerut, Moradabad, Saharanpur, Muzaffarnagar, Bijnor, Deoria, Gorakhpur, Basti, Gonda, Faizabad etc.
- **Tamil Nadu** - Coimbatore, Tiruchirappalli, Cuddalore, Ramanathapuram etc.
- **Karnataka** - Belgaum, Bellary, Shimoga, Chitradurga, Bijapur etc.
- **Bihar** - Champaran, Saran, Muzaffarpur, Darbhanga, Gaya,

<p>(c) A is incorrect , but R is correct .</p> <p>(d) A is correct ,but R is incorrect .</p>	<div data-bbox="539 141 1498 226" style="border: 1px solid black; padding: 5px; text-align: center;">Bhagalpur etc.</div>
<p>29. 'Tropical evergreen forests' are found in India –</p> <ol style="list-style-type: none"> 1. On the eastern slope of the Western Ghats 2. On the hills of the north-eastern region 3. In the Andaman-Nicobar Islands <p>Code:</p> <p>(a) Only 1</p> <p>(b) Only 2 and 3</p> <p>(c) Only 1 and 3</p> <p>(d) Only 3</p>	<p>29. Answer - (b)</p> <ul style="list-style-type: none"> • Tropical evergreen forests are multi-layered, dense forests that shelter a variety of fauna and flora. They receive heavy rainfall of more than 200 cm in a year. The forests look lush green due to dense vegetation, so they are called evergreen forests. • In India, 'Tropical Evergreen Forests' are found on the western slope of the Western Ghats and not on the eastern slope and these forests are also found in the hills of the north-eastern region, Lakshadweep and Andaman-Nicobar Islands. <div data-bbox="539 837 1498 1632" style="border: 1px solid black; padding: 10px;"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> • The main reasons for diversity in vegetation are - Different types of soils are found at different places which are the basis of different types of vegetation. For example - Thorny bushes are found in the loamy soil of the desert and deciduous forests are found in the delta region of rivers. • The terrain has a direct and indirect effect on vegetation. There is a difference in the vegetation of mountains, plateaus, plains and coastal areas. • The diversity and characteristics of vegetation depend on temperature and air humidity. On the slopes of the Himalayas and the hills of the peninsula, the fall in temperature above a height of 915 m affects the growth and development of vegetation. Areas with high rainfall have denser forests than areas with less rainfall. </div>
<p>30. Consider the following statements:</p> <ol style="list-style-type: none"> 1. The first match factory in India was established in West Bengal after independence. 2. Wood, paper, potassium chlorate and 	<p>30. Answer - (a)</p> <p>Match Industry</p> <ul style="list-style-type: none"> • The first match factory in India was established in 1921 in 'Ahmedabad' (Gujarat). It is a major cottage industry product. • Wood, paper, potassium chlorate and phosphorus are used as raw materials in making matches. • Soft wood of trees like salai, poplar, papaya, sundari and dhoop from Andaman-Nicobar and peninsular areas are considered good

<p>phosphorus are used as raw materials in making matches.</p> <p>Which of the above statements is/are correct?</p> <p>(a) Only 2 (b) Neither 1 nor 2 (c) Only 1 (d) Both 1 and 2</p>	<p>for this.</p> <ul style="list-style-type: none"> The match industry in the country is concentrated in states like West Bengal, Maharashtra, Tamil Nadu (Sivakasi), Gujarat, Uttar Pradesh (Bareilly, Meerut, Allahabad, Varanasi), Andhra Pradesh, Madhya Pradesh, Chhattisgarh and Rajasthan. <div data-bbox="539 403 1505 891"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> India's first cement factory was opened in Madras (now Chennai) in 1904 which was unsuccessful but between 1912–15 3 big cement factories were opened - Porbandar (Gujarat). Katni (Madhya Pradesh). Lakheri (Rajasthan). Under the industrial policy declared in 1991, the 'cement industry' was made license free. </div>
<p>31. Consider the following statements:</p> <ol style="list-style-type: none"> The 'Bhilai Iron-Steel Plant' was established in Chhattisgarh with the help of Britain. 'Bokaro Iron-Steel Factory' was established in Jharkhand with the help of Germany. <p>Which of the above statements is/are correct?</p> <p>(a) Only 2 (b) Neither 1, nor 2 (c) Only 1 (d) Both 1 and 2</p>	<p>31. Answer - (b)</p> <p>Names of major steel plants in India and their location</p> <ul style="list-style-type: none"> Rourkela Steel Plant - It was established in Orissa with the help of West Germany. Bhilai Iron-Steel Plant - It was established in Chhattisgarh with the help of Russia. Durgapur Steel Plant - It was established in West Bengal with the help of Britain. Bokaro Iron-Steel Factory - It was established in Jharkhand with the help of Russia. <div data-bbox="539 1429 1505 1966"> <p>Additional Knowledge:</p> <p>Aluminum Industry</p> <ul style="list-style-type: none"> Under the aluminum industry, it is manufactured from the raw metal of 'bauxite'. Due to the requirement of large quantities of coal to melt bauxite, aluminum factories are established in those areas where both the minerals are found together. The first aluminum factory in India was established in the year 1937 in J.K. Nagar in the name of 'Aluminium Corporation of India'. </div>
<p>32. Consider the following</p>	<p>32. Answer - (b)</p>

pairs:

Mangrove vegetation site - State

1. Pichavaram - Tamil Nadu
2. Kundapur - Karnataka
3. Sundarban - West Bengal
4. Bhitarkanika - Odisha

How many of the above pairs are correctly matched?

- (a) One pair
- (b) Four pairs
- (c) Three pairs
- (d) Two pairs

List of Mangrove Vegetation Sites in India

- **State/Union Territory - Mangrove Vegetation Sites**
- **West Bengal** - Sundarbans
- **Odisha** - Bhitarkanika, Mahanadi, Swarnarekha, Devi, Dharma, Kutch Plant Genetic Resource Centre, Chilika
- **Andhra Pradesh** - Coringa, East Godavari, Krishna
- **Tamil Nadu** - Pichavaram, Muthupet, Ramnad, Pulicat (on Andhra Pradesh and Tamil Nadu border), Kazhuveli
- **Andaman-Nicobar** - North Andaman-Nicobar
- **Kerala** - Vembanad, Kannur (North Kerala)
- **Karnataka** - Kundapur, Dakshina Kannada/Honnavar, Karwar, Mangaluru Forest Department
- **Goa** - Goa
- **Maharashtra** - Achara Ratnagiri, Devgad-VijayDurg, Veldur, Kundalika-Revdanda, Mumbra-Diva, Vikhroli, Shrivardhan, Vaitarna, Vasai-Manori, Malwan
- **Gujarat** - Gulf of Kutch, Gulf of Khambhat, Dumas Ubhra
- **Puducherry** - Yanam
- **Dadra and Nagar Haveli and Daman and Diu** - Daman, Diu

Additional Knowledge:

Tidal Vegetation

- This type of vegetation is found on the sea coast and in low deltaic areas. In these areas, salty water spreads due to high tide. **The nature of the soil here is marshy.**
- In India, tidal vegetation is mainly found in the deltaic areas of **Ganga, Brahmaputra, Mahanadi, Godavari and Krishna rivers, Andaman-Nicobar and Kutch region.**
- **Tidal vegetation** (Kutch vegetation) acts as a bridge (symbiotic contact) between marine and **terrestrial ecosystems**. In India, the **maximum tidal vegetation** is found in **West Bengal, followed by the coastal areas of Gujarat and Andaman-Nicobar Islands respectively.**
- Not all coastal areas are suitable for the growth of tidal vegetation because for their **growth and maintenance**, a proper mixture of fresh and salt water and **soft soil like muddy soil (soft place)** is also necessary.
- Mangrove, Sundari, Casuarina, Kevada and Bendi are the main

vegetation found here. Due to the abundance of Sundari trees / plants in the deltaic areas of West Bengal, this deltaic area is known as '**Sundarban Delta**'.

- **Mangrove vegetation plants also have roots that grow against gravity.**
- The area of tidal vegetation is counted among the areas with high biodiversity. These forests play an important role in protection from **tsunami, preventing coastal erosion, medicinal use and providing habitat for birds**, etc.
- **Tidal forests** are also known as Mangrove vegetation, swamp forest, Velanchali forest or mangrove forest.

33.Match List I (Major Industries) with List II (Related Towns):

List I	List II
A. Raniganj	1. Copper Industry
B. Katni	2. Coal Industry
C. Sindri	3. Cement Industry
D. Khetri	4. Chemical Fertilizers

Select the correct answer from the code given below:

- (a) A-1, B-2, C-3, D-4
 (b) A-2, B-3, C-4, D-1
 (c) A-4, B-3, C-1, D-2
 (d) A-3, B-4, C-2, D-1

33. Answer - (b)

Indian cities and their major industries

- Coal industry - Raniganj (West Bengal)
- Cement industry - Katni (Madhya Pradesh)
- Chemical fertilizers - Sindri (Bihar)
- Copper industry - Khetri (Rajasthan)

Additional knowledge:

- **Bhilai Steel Plant** is a steel factory located in **Bhilai, Chhattisgarh, India**. This plant was established in 1955 with the help of the **Soviet Union (Russia)**.

34. Consider the following statements with reference to 'Tropical Deciduous Forests':

1. These forests are spread over the largest

34. Answer - (d)

- **Tropical deciduous forests** are spread over the largest areas in India. These forests are also called monsoon forests. These forests are found in areas **where the annual rainfall is 70 to 200 cm**. Trees in this type of forest shed their leaves for **six to eight**

<p>area in India.</p> <p>2. These forests are also called 'monsoon forests'.</p> <p>3. These forests are found in areas where annual rainfall is less than 70 cm.</p> <p>How many of the above statements are correct?</p> <p>(a) None</p> <p>(b) All three</p> <p>(c) Only one</p> <p>(d) Only two</p>	<p>weeks during the dry summer season.</p> <div data-bbox="539 203 1508 734" style="border: 1px solid black; padding: 10px;"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> • Tropical deciduous forests are divided into moist and dry deciduous forests on the basis of availability of water. • Moist deciduous forests are found in those areas where rainfall is 100 to 200 cm. These forests are found in the eastern parts of the country, north-eastern states, foothills of the Himalayas, Jharkhand, Chhattisgarh and on the eastern slopes of the Western Ghats. Teak is the most important tree of these forests. Trees of species like bamboo, sandalwood, amla, mahua, safflower, arjun and mulberry are found in these forests. </div>
<p>35. Consider the following statements with reference to 'social forestry':</p> <p>1. Under this, 'plantation' is encouraged only on public land.</p> <p>2. Its main objective is to generate rural employment opportunities by reducing pressure on traditional forests and by using unused land or fallow land.</p> <p>Which of the above statements is/are correct?</p> <p>(a) Both 1 and 2</p> <p>(b) Only 2</p> <p>(c) Neither 1, nor 2</p> <p>(d) Only 1</p>	<p>35. Answer - (b)</p> <p>Social Forestry</p> <ul style="list-style-type: none"> • Under social forestry, plantation of trees is encouraged on public and private lands. The first suggestion for this was given by the National Agriculture Commission in 1976. • This program was started in 1978 and in 1980 it became a part of the Sixth Five Year Plan. • Its main objective is to reduce the pressure on traditional forests and generate rural employment opportunities by using unused land or fallow land. • The National Commission on Agriculture has divided the social forestry program into three categories - urban forestry, rural forestry and farm forestry. • Rural forestry includes agroforestry and community agroforestry. <div data-bbox="539 1601 1508 2033" style="border: 1px solid black; padding: 10px;"> <p>Additional knowledge:</p> <p>Urban Forestry</p> <ul style="list-style-type: none"> • Planting and managing trees in cities and around them on private and public lands, such as green belts, parks, roads, industrial and commercial sites comes from urban forestry. • Farm Forestry • Under this, farmers are encouraged to plant trees of commercial importance and other trees in their fields. </div>

- The **Forest Department provides** free saplings to farmers for this.

36. Arrange the following stages of 'soil erosion' in sequence?

1. Sheet erosion
2. Drop erosion
3. Gully erosion
4. Rill erosion

Code:

- (a) 2 - 1 - 4 - 3
(b) 3 - 1 - 4 - 2
(c) 2 - 4 - 1 - 3
(d) 3 - 4 - 1 - 2

36. Answer - (a)

Stages/Types of Soil Erosion

- **Splash Erosion** - This is the first stage of soil erosion. Under this, the soil particles get disintegrated due to the impact of raindrops on dry soil, due to which the upper layer of the soil disintegrates.
- **Sheet Erosion** - In the next stage of erosion, the soil starts eroding in the form of thin layers due to the continuous impact of the drops. This usually happens after heavy rainfall on flat lands. Although this is a very subtle process, it is more harmful because the subtle and very fertile layer of the soil gets eroded.
- **Rill Erosion** - Under this type of erosion, the fast flowing water starts flowing by creating small and less deep channels. It is usually seen on agricultural land and encroached lands.
- **Gully Erosion** - When the channels of rill erosion become large and wide, they break up agricultural lands into small pieces, making them unsuitable for agriculture. The region in which their number is high is called 'Ukhaat Bhoomi', for example - Chambal's rugged region.
- **Stream Channel Erosion** - When water starts flowing in the form of a thick stream and erodes the channel until it attains a stable slope

Additional Knowledge:

Soil Erosion

- '**Soil erosion**' means the destruction of the upper layers of the soil. The upper layer of the soil is eroded by erosional processes due to natural and human activities, which is called 'soil erosion'. There is a kind of balance in the process of soil erosion and soil formation occurring naturally, but due to human intervention, this balance gets disturbed and the rate of **soil erosion increases**.
- The **erosional factors responsible** for soil erosion include transported water, flowing wind, **unscientific methods** of agriculture and animal **husbandry**, **construction of human settlements**, mining and other human activities.

37. Consider the following

37. Answer - (a)

statements with reference to 'Alluvial soil':

1. This soil is found only in the northern plains of India.
2. This soil is found in the largest area in India.
3. It has an abundance of phosphorus, nitrogen and humus.
4. Intensive agriculture is usually done on this type of soil.

How many of the statements given above are correct?

- (a) Only two
- (b) Only three
- (c) All four
- (d) Only one

Alluvial Soil

- This soil is basically formed from the deposits of **sediments brought** by rivers originating from the **Himalayas or from the silt left by the sea after its retreat**. It is also called 'Kaap Mridha' or 'Kachari Mitti'.
- **Alluvial soil** has developed the most in the **northern plains of India**. Apart from this, this soil is also found in the river basins and **deltaic parts of coastal plains and peninsular India**.
- This soil extends up to **about 15 lakh square kilometers**. **Alluvial soil is found on most of the land in India**.
- This soil is developed by the deposition of sediments from various sources, hence it has more **mineral diversity** than other soils, which is more useful for agriculture. **Intensive agriculture is usually done on this type of soil**.
- It contains a **sufficient amount of potash** (highest quantity) and **lime, while phosphorus, nitrogen and humus are lacking**.
- Alluvial soils are found to be of sandy loam to **clayey soil (clay loam) nature in texture**.
- The water holding capacity of sandy loam soil is the lowest, because it contains large amounts of grains, while clayey alluvial soil has the highest water holding capacity.
- New alluvial soil is called 'khadar' and old **alluvial soil is called 'bangar'**.
- This soil is very fertile. Crops like wheat, **paddy, maize, oilseeds, pulses etc. are grown in it**.

Additional Knowledge:

Types of Soil in India

Indian Council of Agricultural Research has classified the soils of India into 8 parts which are as follows -

- Alluvial Soil
- Black Soil or Regur Soil
- Red Soil
- Laterite Soil
- Desert Soil
- Mountain or Forest Soil
- Saline and Alkaline Soil
- Peaty and Marshy Soil

38. Two statements are given below, one is Statement (A) and the other is Reason (R).

Statement (A): 'Regur soil' is also called self-ploughing soil.

Reason (R): It cracks after the moisture ends.

Choose the correct answer from the code given below:

- (a) Both A and R are correct but (R) is not the correct explanation of (A).
- (b) Both A and R are correct and (R) is the correct explanation of (A).
- (c) A is incorrect , but R is correct .
- (d) A is correct , but R is incorrect .

38. Answer - (b)

Black Soil

- In India, 'black soil' is mainly found in the lava area of the Deccan, it is also called 'regur soil'.
- This soil is formed from basalt rocks formed by volcanoes.
- This soil is also called **self-ploughing** soil because it cracks after the moisture ends. **Hence both A and R are correct and the correct explanation of (A) is (R).**
- 'Black soil' has a high moisture retention capacity due to which this soil is suitable for dry farming. The **color of this soil** is greenish black because it contains iron, lime, **aluminum and magnesium** in abundance and also has abundance of organic matter.
- 'Black soil' is **most suitable for cotton cultivation**. Other crops like wheat, jowar, millet etc. are also produced in it.

Additional Knowledge:

The four soils found on the largest area in India are (approximately %) -

- Alluvial soil (43%)
- Red soil (18%)
- Black soil (15%)
- Laterite soil (3.7%)

39. Which of the following is/are the main trees of 'mangrove forest'?

- 1. Kevada
- 2. Sundari
- 3. Mahua
- 4. Casuarina

Code:

- (a) Only 2 and 3
- (b) Only 1, 2 and 3
- (c) Only 1, 2 and 4
- (d) Only 3 and 4

39. Answer - (c)

- **Flower plants of tidal forest or mangrove forest** - Mangrove, Sundari, Casuarina, Phoenix, Bendi etc.
- **Mahua trees** are found in deciduous forests spread across central India and other **parts of the country**.

Additional Knowledge:

Mountain forests in Himalayas

- **Up to 1500 Meter** - Evergreen and deciduous forests
- **1500 Meter to 2500 Meter** - Temperate broadleaf forests - Pine, Oak, Birch, Maple.
- **2500 Meter to 4500 Meter** - Coniferous forests - Pine, Spruce, Fir, Ficus, Bluepine
- **4500 Meter to 4800 Meter** - Tundra vegetation - Moss, grass, lichen.
- **Above 4800** - No vegetation found

40. According to 'India State of Forest Report 2021', arrange the following states in descending order according to forest cover percentage?

1. Mizoram
2. Arunachal Pradesh
3. Meghalaya
4. Manipur

Code:

- (a) 1, 3, 2, 4
(b) 1, 2, 3, 4
(c) 2, 3, 1, 4
(d) 2, 1, 3, 4

40. Answer - (b)

India Forest Status Report 2021

- This report is prepared every 2 years by the 'Indian Forest Survey - Dehradun'. This institute comes under the Ministry of Environment, Forest and Climate Change.
- Issued by - Ministry of Environment, Forest and Climate Change
- The 17th India Forest Status Report was released on 13 January 2022.
- This report uses data obtained from the Indian remote sensing satellite 'Resourcesat-2' to assess forests and forest resources. Scientific method has been adopted to check the data to bring accuracy in the report.
- Three categories of forests have been surveyed which include - very dense forest (more than 70% canopy density), moderately dense forest (40-70%) and open forest (10-40%).

According to 'India Forest Status Report 2021', the states with the highest forest cover percentage in India -

- State - % of geographical area of the state
- Mizoram - 84.53%
- Arunachal Pradesh - 79.33%
- Meghalaya - 76.00%
- Manipur - 74.34%
- Nagaland - 73.90%

Additional knowledge:

National Forest Policy

- The first forest policy in India was formulated in 1894 AD, which was revised in 1952 AD and in 1988 AD.
- The revised policy of 1988 AD emphasizes on the protection, conservation and development of forests.
- According to the 'National Forest Policy-1988', a target has been set to achieve 33 percent forest area in India. According to this, there is a need to cover 20 percent of the plains and 60 percent of the mountainous areas with forests.