



PRELIMS QUESTION TREND INDIA

With reference to the Himalayan rivers Joining the Ganga downstream of Prayagraj from West to East, *which one of the following sequences is correct?*

- (a) Ghaghara – Gomati – Gandak – Kosi
- (b) Gomati – Ghaghara – Gandak - Kosi**
- (c) Ghaghara – Gomati – Kosi - Gandak
- (d) Gomati – Ghaghara – Kosi - Gandak



Consider the following statements about turmeric during the year 2022-23:

- I. India is the largest producer and exporter of turmeric in the world.
- II. More than 30 varieties of turmeric are grown in India.
- III. Maharashtra, Telangana, Karnataka and Tamil Nadu are major turmeric producing States in India.

Which of the statements given above are correct?

- (a) I and II only
- (b) II and III only
- (c) I and III only
- (d) I, II and III**



REMEMBER! →

India dominates the world production scenario contributing 80% followed by China (8%), Myanmar (4%), Nigeria (3%) and Bangladesh (3%).



India is the largest producer, consumer and exporter of turmeric in the world. In the year 2022-23, an area of 3.24 lakh ha was under turmeric cultivation in India with a production of 11.61 lakh tonnes (over 75% of global turmeric production). More than 30 varieties of Turmeric are grown in India and it is grown in over 20 states in the country. The largest producing states of Turmeric are Maharashtra, Telangana, Karnataka and Tamil Nadu.

India has more than 62% share of world trade in turmeric. During 2022-23, 1.534 lakh tonnes of turmeric and turmeric products valued at 207.45 million USD was exported by more than 380 exporters. The leading export markets for Indian Turmeric are Bangladesh, UAE, USA and Malaysia. With the focused activities of the Board, it is expected that turmeric exports will reach USD 1 Billion by 2030.

The World Bank warned that India could become one of the first places where wet-bulb temperatures routinely exceed 35 °C. Which of the following statements best reflect(s) the implication of the above- report?

- I. Peninsular India will most likely suffer from flooding, tropical cyclones and droughts.
- II. The survival of animals including humans will be affected as shedding of their body heat through perspiration becomes difficult.

Select the correct answer using the code given below.

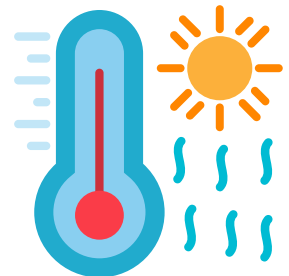
- (a) I only
- (b) II only
- (c) Both I and II**
- (d) Neither I nor II

The heat index is a measure that combines air temperature and relative humidity to determine how hot it actually feels to the human body, also known as the "apparent temperature". It is important because high humidity slows down the evaporation of sweat, which is the body's natural cooling mechanism, making the heat feel more intense than the thermometer reading



Relative Humidity %	Air temperature °C										
	21	24	27	29	32	35	38	41	43	46	49
0	18	21	23	26	28	31	33	35	37	39	42
10	18	21	24	27	29	32	35	38	41	44	47
20	19	22	25	28	31	34	37	41	44	49	54
30	19	23	26	29	32	36	40	45	51	57	64
40	20	23	26	30	34	38	43	51	58	66	
50	21	24	27	31	36	42	49	57	66		
60	21	24	28	32	38	46	56	65			
70	21	25	29	34	41	51	62				
80	22	26	30	36	45	58					
90	22	26	31	39	50						
100	22	27	33	42							

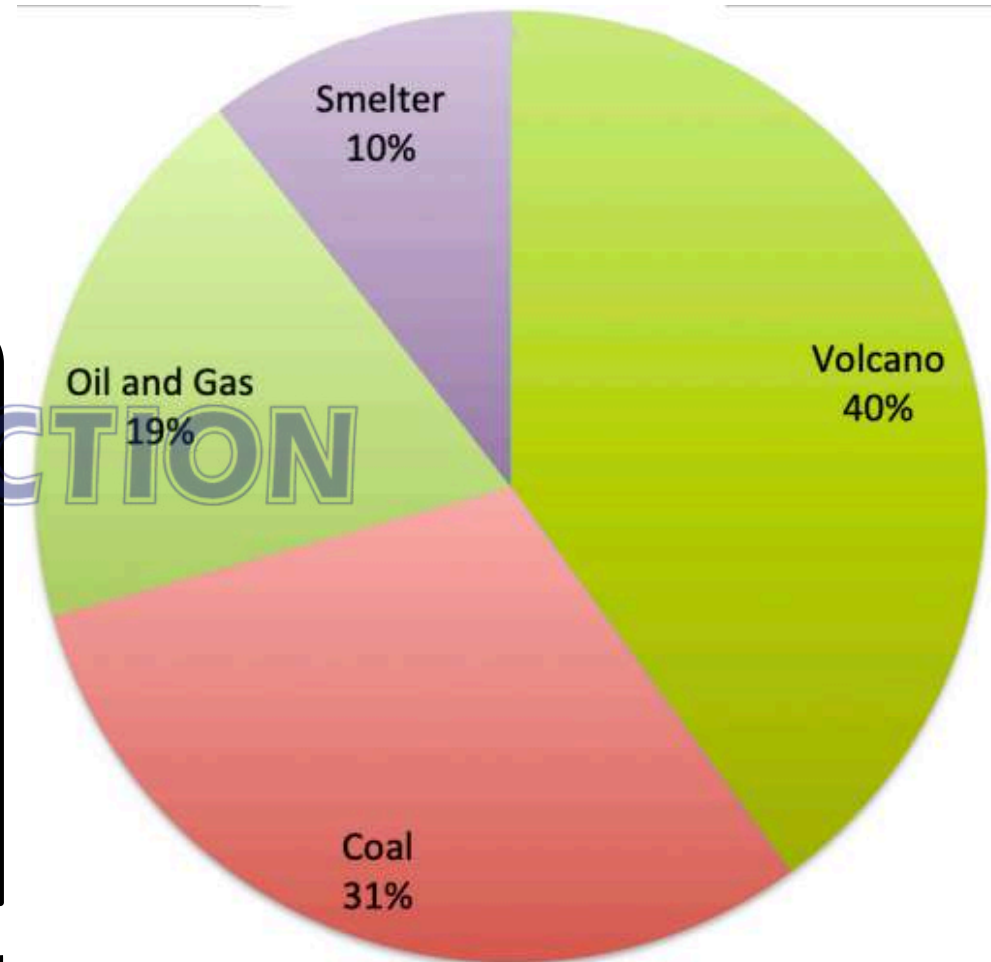
- Serious risk to health - heatstroke imminent
- Prolonged exposure and activity could lead to heatstroke
- Prolonged exposure and activity may lead to fatigue



According to the Environmental Protection Agency (EPA), which one of the following is the largest source of sulphur dioxide emissions?

- (a) Locomotives using fossil fuels
- (b) Ships using fossil fuels
- (c) Extraction of metals from ores
- (d) Power plants using fossil fuels**

India is the world's largest emitter of anthropogenic sulphur dioxide SO_2 , contributing over 15% of global emissions, primarily driven by coal-fired power plants and industrial activity. While India leads in total emissions, the Norilsk smelter complex in Russia is the largest individual industrial SO_2 hotspot, followed by Mpumalanga in South Africa.



The U.S. Environmental Protection Agency (EPA) (est. 1970) is an independent federal agency tasked with protecting human health and the environment by developing and enforcing regulations based on laws passed by Congress.

REMEMBER

DON'T FORGET!

FGD, or Flue-Gas Desulfurisation, is a widely used pollution control technology meant to remove sulfur dioxide (SO₂) from the exhaust gases of coal-fired power plants. The process is fairly straightforward yet effective: flue gases are passed through a scrubbing solution—usually lime or limestone—which reacts with SO₂ to form by-products like calcium sulfite or calcium sulfate. These residues, whether in wet sludge or dry powder form, can then be repurposed in sectors like cement and wallboard manufacturing.

FGDs are generally classified into wet and dry systems, depending on the nature of the scrubbing process. While their operational costs are notable, the health and environmental benefits they provide—by cutting down SO₂—are significant.

A full decade after the FGD mandate, the Ministry of Environment significantly revised the policy. Now, only a select group of thermal plants were required to comply.

India's worst emission hotspots	(kilo tonne/year)
Singrauli	507
Talcher	347
Jharasuguda	201
Chennai	215
Visakhapatnam	171
Ramagundam	157

These were grouped into new categories:

- **Category A** included plants within 10 km of the National Capital Region (NCR) or any city with a population of over 1 million. These units must install FGDs by December 2027.
- **Category B** encompassed plants located near critically polluted areas or non-attainment cities. These would be reviewed case-by-case.
- **Category C**—which covers a staggering 78% of all thermal plants—was fully exempted from installing FGDs.

India is one of the founding members of the International North-South Transport Corridor (INSTC), a multimodal transportation corridor, which will connect

(a) India to Central Asia to Europe via Iran

(b) India to Central Asia via China

(c) India to South-East Asia through Bangladesh and Myanmar

(d) India to Europe through Azerbaijan

REMEMBER! →

The International North-South Transport Corridor (INSTC) is a 7,200-km multi-modal network connecting India, Iran, Russia, and Central Asia via ship, rail, and road. It reduces travel time and costs by up to 40% compared to traditional, longer sea routes via the Suez Canal

Originally signed by India, Iran, and Russia in 2000, it has expanded to include 13+ members, including Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Ukraine, Belarus, Oman, Syria, and Bulgaria.



Consider the following information :

	Waterfall	Region	River
1.	Dhuandhar	Malwa	Narmada
2.	Hundru	Chota Nagpur	Subarnarekha
3.	Gersoppa	Western Ghats	Netravati

In how many of the above rows is the given information correctly matched?

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

The **Dhuandhar Waterfall** is located on the Narmada River in Bhedaghat, Jabalpur, Madhya Pradesh, India, where the river plunges through the Marble Rocks, creating a smoky mist that gives it its name. **Gersoppa Falls**, also known as Jog Falls, is actually on the Sharavathi River, not the Netravati, and is located in the Western Ghats.



Important Waterfalls of India

- **Kunchikal Falls (455m):** Varahi River Situated in Shimoga district, Karnataka, it is the highest waterfall in India.
- **Barehipani Falls (399m):** Budhabalanga River. Located in Simlipal National Park, Odisha, it is a two-tiered waterfall.
- **Nohkalikai Falls (340m):** East Khasi Hills district in Meghalaya, this is the tallest plunge waterfall in the country.
- **Nohsngithiang Falls (315m):** Mawsmai Falls Also known as the Seven Sisters Waterfall in Meghalaya.
- **Dudhsagar Falls (310m):** a spectacular four-tiered waterfall located on the Mandovi River, Known as the "Sea of Milk," located on the border of Goa and Karnataka.
- **Kynrem Falls (305m):** Located in Meghalaya, it is a three-tiered waterfall.
- **Meenmutty Falls (300m):** Kalliyar River, a tributary of the Kabani. A three-tiered, 300-meter-high fall in Wayanad, Kerala.
- **Thalaiyar Falls (297m):** Manjalar River, a tributary of the Vaigai River, Also known as Rat Tail Falls, located in Tamil Nadu.

- **Jog Falls (253m):** A major, dramatic cascade waterfall four distinct cascades (Raja, Rani, Roarer, Rocket) and is one of India's highest plunge waterfalls, Formed by the Sharavathi River.in Shimoga, Karnataka.
- **Vajrai Falls (560m):** three-tiered waterfall it's the source of the Urmodi River.Situated in Satara district, Maharashtra, it is often cited as the second-tallest.
- **Athirappilly Falls (Kerala):** Kerala's largest waterfall, located in the Thrissur district on the Chalakudy River, Often called the "Niagara of India".
- **Chitrakote Falls (Chhattisgarh):** on the Indravati River Known as the "Niagara Falls of India" due to its width.
- **Shivanasamudra Falls (Karnataka):** the Kaveri River.dividing it into the Gaganachukki and Bharachukki falls. known for having one of Asia's first hydroelectric projects.
- **Hundru Falls (Jharkhand):** Subarnarekha A popular waterfall near Ranchi.
- **Dhuandhar Falls (Madhya Pradesh):** Narmada River Located near Jabalpur.
- **Courtallam Falls (Tamil Nadu):** A famous series of waterfalls in the Western Ghats Chittar River"Spa of the South" due to the medicinal properties in its waters. Key falls include Main Falls (Peraruvi), Five Falls (Aintharuvi), and Honey Falls (Thenaruvi)

1. Consider the following statements:

1. Jhelum River passes through Wular Lake.
2. Krishna River directly feeds Kolleru Lake.
3. Meandering of the Gandak River formed Kanwar Lake.

How many of the statements given above are correct?

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



India has expanded its network of globally recognized wetlands to **96**, cementing its position as a top nation for Ramsar sites in Asia. The latest additions include Siliserh Lake in Rajasthan and Kopra Reservoir (Kopra Jalashay) in Chhattisgarh. These inclusions align with India's "**Amrit Dharohar**" initiative, which emphasizes the conservation of wetlands, community participation, and eco-tourism.

Oxbow Lakes

Kanwar Jheel (Kabartal Wetland) - Bihar: Located in Begusarai district, this is the first Ramsar site of Bihar and the largest freshwater oxbow lake in Asia. Formed by the meandering Burhi Gandak River, it is a vital stopover on the Central Asian Flyway for migratory waterbirds.

Gogabeel Lake - Bihar: Designated as India's 94th Ramsar site (Nov 2025), it is located in the Katihar district between the Ganga and Mahananda rivers. It is significant as Bihar's first community-managed reserve, providing a habitat for over 90 bird species.

Udaipur Jheel - Bihar: A freshwater oxbow lake in West Champaran, it was designated a Ramsar site in September 2025. It acts as a wintering ground for over 35 species of migratory birds, including the common pochard.

Gokul Jalashay - Bihar: Located in the Buxar district, this oxbow lake was added to the list in late 2025, supporting fishing, farming, and flood protection for local communities.

Major Lakes of India

Criteria	Lake	State/UT
Largest Freshwater Lake in India	Wular Lake	Jammu & Kashmir
Largest Saltwater Lake in India	Sambhar Lake	Rajasthan
Largest Brackish Water Lake in India	Chilika Lake	Odisha
Largest Artificial Lake in India	Govind Ballabh Pant Sagar	Uttar Pradesh
Longest Lake in India	Vembanad Lake	Kerala

Consider the following pairs:

Port

1. Kamarajar Port
2. Mundra Port
3. Visakhapatnam

Well known as

- First major port in India registered as a company
- Largest privately owned port in India
- Largest container port in Port India

How many of the above pairs are correctly matched?

- (a) Only one pair (c) All three pairs
- (b) **Only two pairs** (d) None of the pairs



Ports in India	Name of The Port
Biggest Port in India	Mumbai Port, Maharashtra
Newest Port in India	Vadhavan, Maharashtra
Deepest Port in India	Visakhapatnam port (natural depth > 16.5 meters)
Oldest Port in India	Syama Prasad Mookerjee Port Trust, Kolkata
Private Major Port in India	Mundra (run by Adani Ports and SEZ Limited – APSEZ), Gujarat
Busiest Port in India	Jawaharlal Nehru Port Trust (JNPT) / Nhava Sheva port, Maharashtra

Port Name	State/UT	Notable Feature
Kolkata Port	West Bengal	Eastern gateway with twin dock system
Paradip Port	Odisha	Coal and iron ore hub on the east coast
Visakhapatnam Port	Andhra Pradesh	India's deepest natural port
Kamarajar (Ennore) Port	Tamil Nadu	India's only corporatized major port
Chennai Port	Tamil Nadu	One of the oldest handles containers
Tuticorin (VOC) Port	Tamil Nadu	Pearl fishery and industrial cargo
Cochin Port	Kerala	Gateway to southwest India
New Mangalore Port	Karnataka	Known for fertilizer and petroleum
Mormugao Port	Goa	Iron ore exports and cruise tourism
Mumbai Port	Maharashtra	One of India's busiest natural harbors
Jawaharlal Nehru Port	Maharashtra	Largest container port in India
Kandla (Deendayal) Port	Gujarat	Handles grains, salt, and oil
Port Blair Port	Andaman & Nicobar Islands	Crucial for island logistics

Consider the following trees:

1. Jackfruit (*Artocarpus heterophyllus*)
2. Mahua (*Madhuca indica*)
3. Teak (*Tectona grandis*)

How many of the above are deciduous trees?

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

REMEMBER



The jackfruit is **the largest tree fruit**, reaching as much as 55 kg

It is an evergreen tree

jackfruit is considered a **false fruit** (or accessory fruit/pseudocarp) because its fleshy edible part develops from the entire inflorescence (cluster of flowers) and other floral parts, not solely from the ovary as in true fruits.

It's a type of composite fruit where many individual flowers fuse to form one large fruit structure.

- Teak (*Tectona grandis*): The most dominant species, known for durable timber, found heavily in central and southern India.
- Sal (*Shorea robusta*): A major timber tree, common in moist areas of northern and central India.
- Sandalwood (*Santalum album*): Known for its fragrance, primarily found in the southern parts of India.
- Mahua (*Madhuca longifolia*): Valued for flowers, used for food and local liquor, found in tropical forests.
- Shisham (*Dalbergia sissoo*): A prominent, high-quality timber species.
- Amla (*Phyllanthus emblica*): Important for its fruit (medicinal properties).
- Semul (*Bombax ceiba*): Known as the silk cotton tree, which sheds leaves and produces large red flowers.
- Palash (*Butea monosperma*): Known as the "Flame of the Forest," valued for dyes and medicine.
- Kusum (*Schleichera oleosa*): A tree species frequently found in deciduous forests.
- Bamboo: A fast-growing, essential plant in both dry and moist deciduous ecosystems.
- Neem (*Azadirachta indica*): Known for its extensive medicinal properties.

Consider the following statements:

1. India has more arable area than China.
2. The proportion of irrigated area is more in India as compared to China.
3. The average productivity per hectare in Indian agriculture is higher than that in China.

How many of the above statements are correct?

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



IMPORTANT!

- **Arable area-** India: ~156–170 million hectares (approx. 51–52% of its land area). China: ~108–135 million hectares (approx. 11–13% of its land area).
- **irrigation cover-** China's is roughly 53.8%–57.5% of its cultivated land, while India's is around 36.6%–48%
- **agricultural productivity -** China often achieves higher per hectare (4.7 tonnes/ha) compared to India (2.7 tonnes/ha).

Which one of the following is the best example of repeated falls in sea level, giving rise to present-day extensive marshland?

- (a) Bhitarkanika Mangroves
- (b) Marakkanam Salt Pans
- (c) Naupada Swamp
- (d) Rann of Kutch**



The Bhitarkanika Mangroves in Odisha, India, form the nation's second-largest mangrove ecosystem, a vital network of rivers and creeks known for its dense forests, unique biodiversity, abundant saltwater crocodiles, and rich birdlife, earning it the nickname "Mini Amazon of India" and recognition as a Ramsar Site.

The Marakkanam salt pans in Tamil Nadu's Villupuram district are vast, sprawling over 4,000 acres, making them a major salt production hub in the state, second only to Thoothukudi

The Naupada swamp, located in the Srikakulam district of Andhra Pradesh, India, is a vital, sensitive 15-20 sq. km brackish wetland known as a key breeding ground for spot-billed pelicans and painted storks. It is also known as the "Salt Bowl of Andhra Pradesh" due to extensive salt pans in the area.

Ilmenite and rutile, abundantly available in certain coastal tracts of India, are rich sources of which one of the following?

- (a) Aluminium
- (b) Copper
- (c) Iron
- (d) Titanium**

remember

Ilmenite and rutile along with other heavy minerals are important constituents of beach sand deposits found right from Moti Daman-Umbrat coast Gujarat) in the west to Odisha coast in the east.

These minerals are concentrated in five well defined zones:

- Kollam district, Kerala (known as 'Chavara' deposit after the main mining centre).
- Kanyakumari district, Tamil Nadu (known as MK deposit).
- Ganjam district, Odisha (known as 'OSCOM' deposit after IREL's Orissa Sands Complex).
- Brahmagiri deposit in Puri district, Odisha.
- Bhavanapadu coast in Srikakulam district, Andhra Pradesh.

Consider the following statements:

1. Amarkantak Hills are at the confluence of Vindhya and the Sahyadri Ranges.
2. Biligirirangan Hills constitute the easternmost part of Satpura Range.
3. Seshachalam Hills constitute the southernmost part of Western Ghats.

How many of the statements given above are correct?

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



DIRECTION

remember

- **The Amarkantak Hills in Madhya Pradesh, India**, are a significant hill range where the Vindhya and Satpura mountains meet, origin of the Narmada River, Mahanadi, and Son rivers
- **The Biligirirangan Hills (BR Hills)** are a range of hills in South India, situated in the Chamarajanagar district of Karnataka at the border with Tamil Nadu. As the meeting point of the Western and Eastern Ghats
- **The Seshachalam Hills** are a major hilly range of the Eastern Ghats in southern Andhra Pradesh, India, primarily located in the Tirupati and Kadapa districts

With reference to coal-based thermal power plants in India, consider the following statements:

1. None of them uses seawater.
2. None of them is set up in water-stressed district.
3. None of them is privately owned.

How many of the above statements are correct?

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

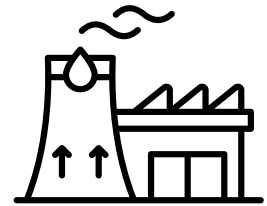


REMEMBER

Coal-based thermal power plants (TPPs) in India are massive water users, accounting for roughly 70-87.8% of total industrial water consumption

Nearly 48% of India's coal-fired capacity is in water-stressed regions, including Nagpur (Maharashtra), Raichur (Karnataka), Korba (Chhattisgarh), and Chandrapur (Maharashtra).

Top 10 Major Coal-Based Thermal Power Plants in India



- **Vindhyachal Super Thermal Power Station (4,760 MW) - Madhya Pradesh:** Operated by NTPC, this is India's largest thermal power plant.
- **Mundra Thermal Power Station (4,620 MW) - Gujarat:** Operated by Adani Power, this is a major private-sector plant.
- **Mundra Ultra Mega Power Project (4,000 MW) - Gujarat:** Owned by Tata Power.
- **Sasan Ultra Mega Power Plant (3,960 MW) - Madhya Pradesh:** Operated by Reliance Power.
- **Tiroda Thermal Power Plant (3,300 MW) - Maharashtra:** Owned by Adani Power.
- **Talcher Super Thermal Power Station (3,000 MW) - Odisha:** Operated by NTPC.
- **Rihand Thermal Power Station (3,000 MW) - Uttar Pradesh:** Operated by NTPC.
- **Sipat Super Thermal Power Station (2,980 MW) - Chhattisgarh:** Operated by NTPC.
- **Chandrapur Super Thermal Power Station (2,920 MW) - Maharashtra:** Operated by Maharashtra State Power Generation Company.
- **NTPC Dadri (2,637 MW) - Uttar Pradesh:** Mixed coal and gas station operated by NTPC.

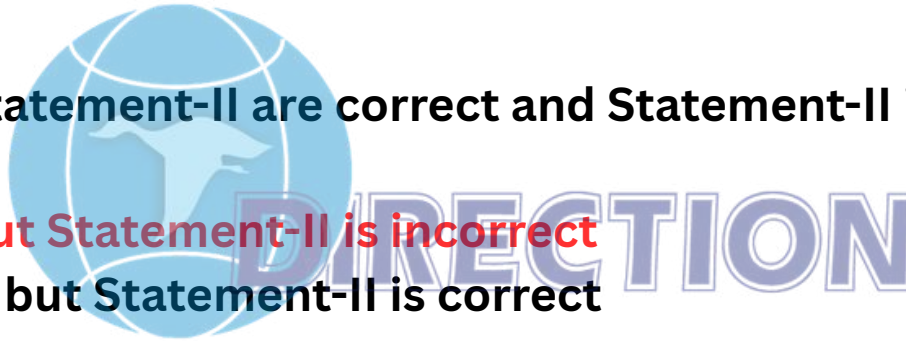
Consider the following statements:

Statement-I: India, despite having uranium deposits, depends on coal for most its electricity production.

Statement-II: Uranium, enriched to the extent at least 60%, is required for the production of electricity.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- (c) Statement-I is correct but Statement-II is incorrect
- (d) Statement-I is incorrect but Statement-II is correct



Commercial nuclear power plants typically use low-enriched uranium (LEU) with an enrichment level of only 3-5% to produce electricity. Uranium enriched to 60% or higher is considered Highly Enriched Uranium (HEU), used in specialized research reactors or for nuclear weapons.

Major power generation players in India include public sector giant NTPC Limited and private conglomerates like Adani Power and Tata Power. These companies dominate the sector through large-scale thermal, hydro, and increasingly, renewable energy (solar/wind) projects, catering to the country's growing electricity demands. Key players, including Adani Green Energy and JSW Energy, are rapidly shifting focus towards renewable, targeting significant capacity expansion by 2030.

Consider the following States:

1. Andhra Pradesh
2. Kerala
3. Himachal Pradesh
4. Tripura

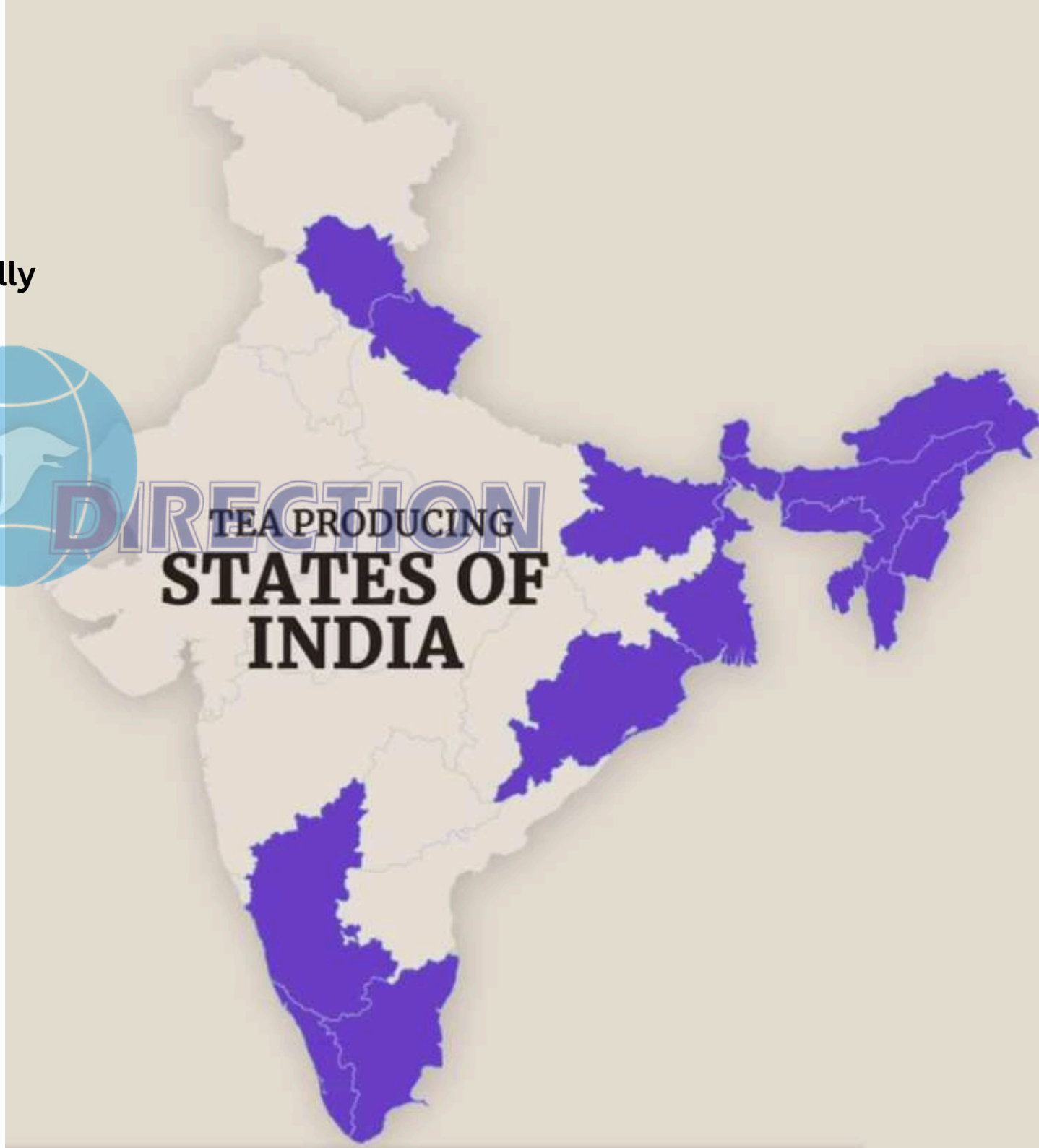
How many of the above are generally known as tea-producing States?

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

Assam is India's largest tea-producing state, contributing over half of the nation's total output, followed by West Bengal, Tamil Nadu, Kerala, and Karnataka. Together with Tripura and Himachal Pradesh, these regions produce approximately 96% of India's tea, spanning Darjeeling, Dooars, Nilgiri, and Assam valley regions.



DIRECTION
TEA PRODUCING
**STATES OF
INDIA**



Consider the following pairs:

Reservoirs	States
1. Ghataprabha –	Telangana
2. Gandhi Sagar –	Madhya Pradesh
3. Indira Sagar –	Andhra Pradesh
4. Maithon –	Chhattisgarh

How many pairs given above are not correctly matched?

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

- Ghataprabha- Karnataka
- Indira Sagar- MP
- Maithon - Jharkhand

- Andhra Pradesh & Telangana: Srisailem Dam (Krishna), Nagarjuna Sagar Dam (Krishna), Singur Dam (Manjira), Sriram Sagar Reservoir (Godavari).
- Karnataka: Tungabhadra Dam (Tungabhadra), Linganamakki Dam (Sharavathi), Krishnaraja Sagara Dam (Kaveri), Almatti Dam (Krishna).
- Kerala: Idukki Dam (Periyar), Mullaperiyar Dam (Periyar), Banasura Sagar Dam (Kabini).
- Maharashtra: Koyna Dam (Koyna), Jayakwadi Dam (Godavari), Ujani Dam (Bhima).
- Madhya Pradesh: Indira Sagar Dam (Narmada), Gandhi Sagar Dam (Chambal), Bansagar Dam (Sone).
- Gujarat: Sardar Sarovar Dam (Narmada), Ukai Dam (Tapti), Dharoi Dam (Sabarmati).
- Odisha: Hirakud Dam (Mahanadi), Rengali Dam (Brahmani).
- Himachal Pradesh: Bhakra Dam (Sutlej), Pandoh Dam (Beas), Maharana Pratap Sagar (Beas).
- Uttarakhand: Tehri Dam (Bhagirathi), Ramganga Dam (Ramganga).
- Tamil Nadu: Mettur Dam (Kaveri), Bhavanisagar Dam (Bhavani).
- Jharkhand: Panchet Dam (Damodar), Maithon Dam (Barakar).
- Jammu & Kashmir: Baglihar Dam (Chenab), Salal Dam (Chenab).
- Rajasthan: Rana Pratap Sagar Dam (Chambal), Jawahar Sagar Dam (Chambal).

- **Tehri Dam (Uttarakhand):** Located on the Bhagirathi River, it is India's highest dam 260.5 meters and among the world's tallest.
- **Hirakud Dam (Odisha):** Built on the Mahanadi River, it is one of the world's longest earthen dams, spanning nearly 26 km.
- **Bhakra Nangal Dam (Himachal Pradesh/Punjab):** A high-gravity dam on the Sutlej River, crucial for irrigation in North India and hydropower generation.
- **Sardar Sarovar Dam (Gujarat):** Located on the Narmada River, it is a massive project providing water and electricity to Gujarat, Rajasthan, Maharashtra, and Madhya Pradesh.
- **Nagarjuna Sagar Dam (Andhra Pradesh/Telangana):** A major masonry dam on the Krishna River known for its vast reservoir capacity.
- **Indira Sagar Dam (Madhya Pradesh):** Built on the Narmada River, it has one of the largest reservoirs in India.
- **Idukki Dam (Kerala):** A double-curvature arch dam on the Periyar River, it is one of the highest in Asia.
- **Koyna Dam (Maharashtra):** Known as the "lifeline of Maharashtra" for its role in hydroelectric power generation.
- **Mettur Dam (Tamil Nadu):** A significant dam on the Kaveri River that supports agriculture in the region.
- **Tungabhadra Dam (Karnataka):** A crucial multipurpose dam on the Tungabhadra River for irrigation and power.

Gandikota canyon of South India was created by which one of the following rivers?

(a) Cauvery

(b) Manjira

(c) Pennar

(d) Tungabhadra

- **Gandikota Canyon (Andhra Pradesh):** Located in the Kadapa district, this, or "Gandi" (canyon) and "Kota" (fort), offers breathtaking views of the Pennar River flowing between red granite rocks.
- **Bhedaghat/Marble Rocks (Madhya Pradesh):** Famed for stunning, high white marble cliffs along the Narmada River near Jabalpur, with the dramatic Dhuandhar Falls nearby.
- **Laitlum Canyons (Meghalaya):** Located in the East Khasi Hills, these "end of the hills" gorges offer panoramic views of deep, lush green valleys and steep cliffs.
- **Raneh Falls Canyon (Madhya Pradesh):** A unique, deep canyon of crystalline granite located on the Ken River near Khajuraho.
- **Gongoni Danga (West Bengal):** A natural canyon-like gorge formed by the Silabati River, often referred to as the "Grand Canyon of Midnapore".
- **Zaskar Canyons (Ladakh):** Formed by the Zaskar River, these create a stark, high-altitude landscape of deep gorges.
- **Sandhan Valley (Maharashtra):** Known as the "Valley of Shadows," a deep, narrow gorge in the Sahyadri range suitable for trekking and canyoning.
- **Mekedatu Gorge (Karnataka):** A deep gorge formed by the Kaveri River, where it cuts through hard granite rock.
- **Lyari Canyon (Gujarat) :** Dhinodhar Hill, standing at 384 meters and the second-highest peak in Kutch, is a volcanic plug formed from solidified magma within a dormant volcano's vent

Consider the following pairs:

1. Namcha Barwa Garhwal Himalaya
2. Nanda Devi – Kumaon Himalaya
3. Nokrek – Sikkim Himalaya

Which of the pairs of peak and mountains given above is/are correctly matched?

- (a) 1 and 2
- (b) 2 only
- (c) 1 and 3
- (d) 3 only



With reference to India, consider the following statements?

1. Monazite is a source of rare earths.
2. Monazite contains thorium.
3. Monazite occurs naturally in the entire Indian coastal sands in India.
4. In India, Government bodies only can process or export monazite.

Which of the statements given above are correct?

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



IMPORTANT!

DIRECTION

Beach Sand Minerals (BSM) which is the principal ore of Rare Earths (RE) in India. In BSM ore, the prescribed substance monazite occurs, which is a phosphate mineral of Rare Earth Element containing Uranium and Thorium.

IREL (India) Limited (IREL), a PSU under Department of Atomic Energy produces Rare Earth Elements in the form of high pure rare earth oxides from RE bearing mineral Monazite in India. IREL has been operating in three locations having the facility for integrated mining and processing of mineral sands and a facility each for extraction and refining of rare earths. **To develop RE value chain in the country, following actions have been initiated :**

- For strategic sector, a Rare Earth Permanent Magnet plant has been operationalized at Vizag for production of Samarium Cobalt magnets.
- IREL has established mini plants for production of Lanthanum, Cerium and Neodymium metals at Rare Earth & Titanium Theme Park, Bhopal as part of the development of RE value chain in the country.
- IREL has set up a Rare Earth Element recycling plant at Rare Earth Titanium Theme Park, Bhopal to recover the magnetic Rare Earths from end-of life magnets.

Consider the following pairs:

Wetland/Lake Location

1. Hokera Wetland – Punjab
2. Renuka Wetland – Himachal Pradesh
3. Rudrasagar Lake – Tripura
4. Sasthamkotta Lake – Tamil Nadu

How many pairs given above are correctly matched?

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



'Queen Wetland of Kashmir', **Hokera** is a designated Ramsar site is located in Srinagar, Jammu and Kashmir. It is a natural perennial wetland contiguous to the Jhelum basin. It gets water from the Doodhganga River (Tributary of Jhelum).

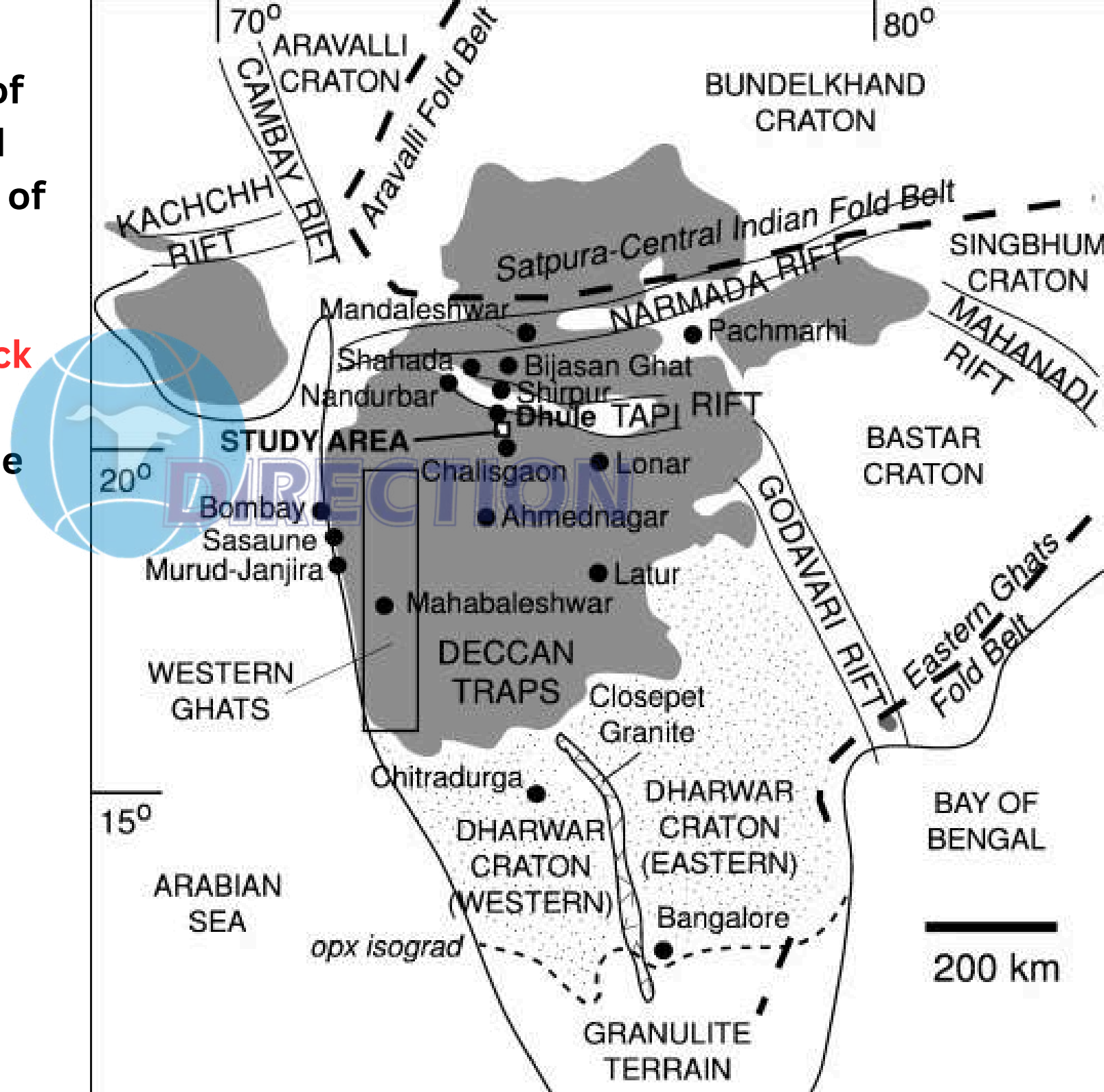
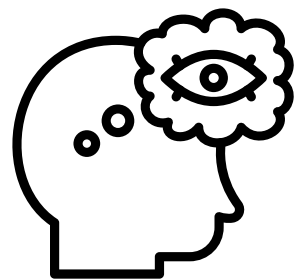
Sasthamkotta Lake, located 29 km from Kollam, is the largest freshwater lake in Kerala and a designated Ramsar site of international importance. Known as the "Queen of Lakes,"

Renuka Wetland, located in Himachal Pradesh's Sirmour district, is India's smallest Ramsar site (designated in 2005), covering 20 hectares.



The black cotton soil of India has been formed due to the weathering of

- (a) brown forest soil
- (b) fissure volcanic rock**
- (c) granite and schist
- (d) shale and limestone




With reference to the Indus River system, of the following four rivers, three of them pour into one of them which joins the Indus direct. Among the following, which one is such river that joins the Indus direct?

- (a) Chenab
- (b) Jhelum
- (c) Ravi
- (d) Sutlej**



With reference to India, Didwana, Kuchaman, Sargol and Khatu are the names of

- (a) glaciers
- (b) mangrove areas
- (c) Ramsar sites
- (d) saline lakes**

- 
- **Sambhar Salt Lake:** An elliptical, shallow wetland and the premier source of salt, also designated as a Ramsar site.
 - **Panchpadra Lake:** Located in Barmer, known for high-quality salt containing nearly 98% sodium chloride.
 - **Deedwana Lake:** Located in the Nagaur district, primarily produces salt used for industrial purposes.
 - **Lunkaransar Lake:** A playa lake situated near Bikaner.
 - **Phalodi Lake:** Situated in the Phalodi district, this area is known as a "salt city" due to its salt production industry.

Consider the following rivers:

1. Brahmani

2. Nagavali

3. Subarnarekha

4. Vamsadhara

Which of the above rise from the Eastern Ghats?

(a) 1 and 2 (b) 2 and 4

(c) 3 and 4 (d) 1 and 3

- **Rushikulya River (Odisha):** Originates from the Rushyamala hills of the Eastern Ghats and is known for not forming a delta at its mouth near Chatrapur.
- **Bahuda River (Odisha/Andhra Pradesh):** Originates from the Singharaj hills of the Eastern Ghats flowing through Odisha and Andhra Pradesh before joining the Bay of Bengal.
- **Vamsadhara River (Odisha/Andhra Pradesh):** Rises in the Eastern Ghats in Kalahandi district, flowing through Rayagada and Gajapati districts in Odisha before entering Andhra Pradesh.
- **Nagavali River (Odisha/Andhra Pradesh):** Originates from the eastern slopes of the Eastern Ghats Kalahandi district, flowing through Odisha and Andhra Pradesh.
- **Budhabalanga River (Odisha):** Originates from the Similipal range of the Eastern Ghats in Mayurbhanj district.


Among the following, which one is the least water-efficient crop?

(a) Sugarcane

(b) Sunflower

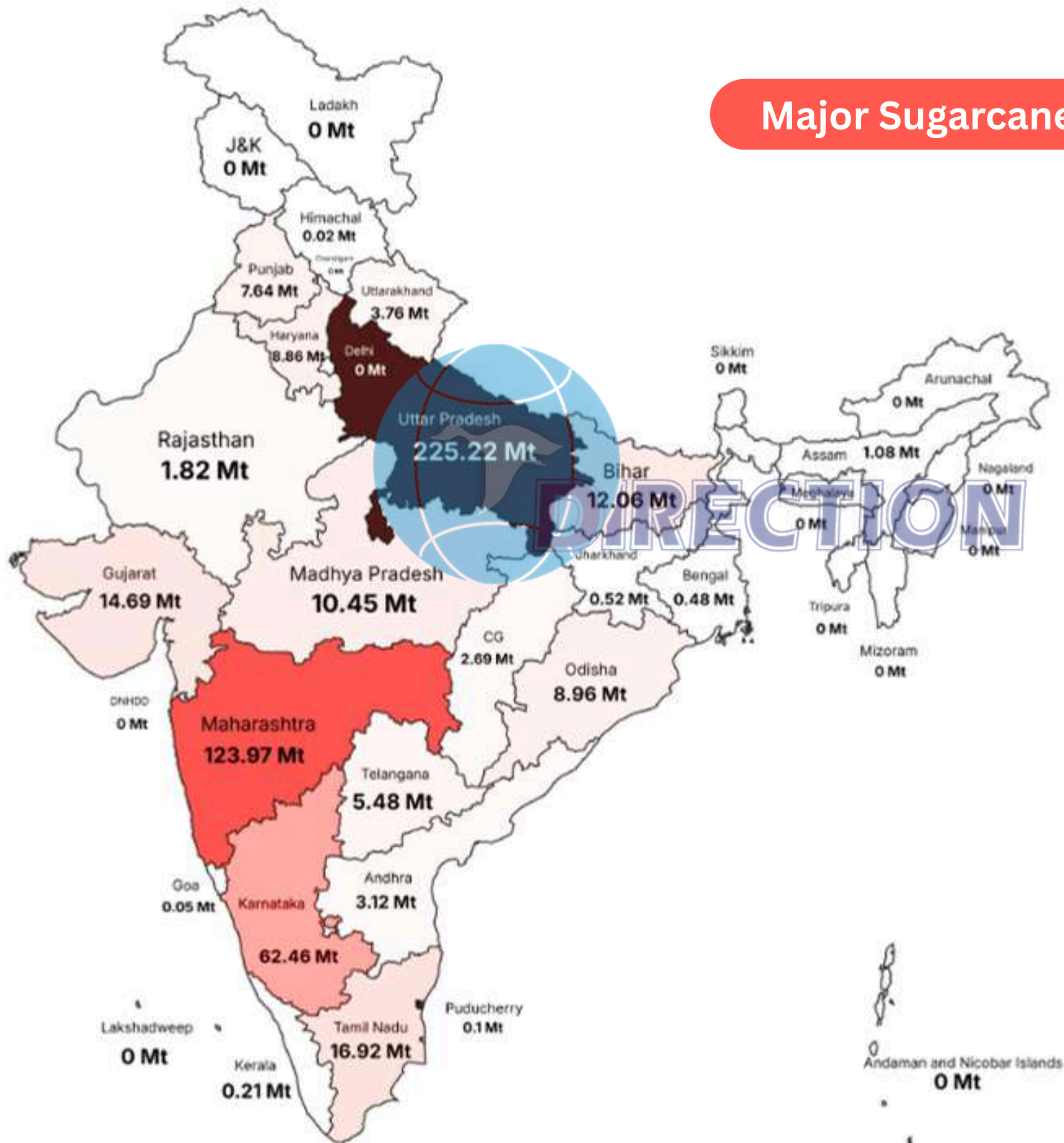
(c) Pearl millet

(d) Red gram



Crops	Duration (days)	Water requirement (cm)
Rice	100	95–100
Ragi	105	45–50
Pulses	70	20–25
Pulses (long duration)	150–250	30–50
Maize	100	40–45
Cotton	165	60–75
Groundnut	105	60–65
Sugarcane	300	225–250

Major Sugarcane Producers



Siachen Glacier is situated to the

(a) East of Aksai Chin

(b) East of Leh

(c) North of Gilgit

(d) North of Nubra Valley

Glacier	Region/Valley	Range
Siachen	Nubra Valley (Ladakh)	Eastern Karakoram
Baltoro	Shigar Valley (Gilgit-Baltistan)	Karakoram
Hispar	Nagar/Hispar Valley (Gilgit-Baltistan)	Karakoram
Batura	Upper Hunza Valley (Gilgit-Baltistan)	Karakoram



DIRECTION



Ceded by
Pakistan to China

CHINA



PAKISTANI-
ADMINISTERED
KASHMIR

**Siachen
Glacier**

DIRECTION

Aksai Chin
(Chinese-
administered)

Line of Control

INDIAN-ADMINISTERED
KASHMIR

PAKISTAN

JAMMU &
KASHMIR

LADAKH

INDIA

With reference to chemical fertilizers in India, consider the following statements:

1. At present, the retail price of chemical fertilizers is market-driven and not administered by the Government.
2. Ammonia, which is an input of urea, is produced from natural gas.
3. Sulphur, which is a raw material for phosphoric acid fertilizer, is a by-product of oil refineries.

Which of the statements given above is/are correct?

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



India has achieved near self-sufficiency in key Fertilizers:

- Around 87% of urea consumption is domestically met.
- 90% of NPK Fertilizers are also produced within the country.
- However, for DAP, only about 40% comes from local production.
- In the case of Muriate of Potash (MOP), 100% is still imported.

Sector-Wise Contribution

- The public sector contributed about 17.43% to total Fertilizer production.
- The cooperative sector accounted for 24.81%.
- The private sector contributed the largest share at 57.77%.

Consider the following statements:

- 1.Moringa (drumstick tree) is a leguminous evergreen tree.**
- 2.Tamarind tree is endemic to South Asia.**
- 3.In India, most of the tamarind is collected as minor forest produce.**
- 4.India exports tamarind and seeds of moringa.**
- 5.Seeds of moringa and tamarind can be used in the production of biofuels.**

Which of the statements given above are correct?

- (a) 1, 2, 4 and 5**
- (b) 3, 4 and 5**
- (c) 1, 3 and 4**
- (d) 1, 2, 3 and 5**



- Moringa Deciduous tree (drops leaves), fast-growing, and highly drought-tolerant.**
- The tamarind tree is indigenous to tropical Africa, particularly in savanna regions and Madagascar**

As of 2024–2025, India leads in tamarind exports, targeting the USA, Australia, and the UAE, and provides 80% of the world's moringa powder demand, with key markets including the US and UK.

According to India's National Policy on Biofuels, which of the following can be used as raw materials for the production of biofuels?

- 1. Cassava**
- 2. Damaged wheat grains**
- 3. Groundnut seeds**
- 4. Horse gram**
- 5. Rotten potatoes**
- 6. Sugar beet**



Select the correct answer using the code given below:

- | | |
|-------------------------------|--------------------------------|
| (a) 1, 2, 5 and 6 only | (b) 1, 3, 4 and 6 only |
| (c) 2, 3, 4 and 5 only | (d) 1, 2, 3, 4, 5 and 6 |

India's National Policy on Biofuels (2018), amended in 2022, promotes a diverse range of domestic feedstocks to achieve 20% ethanol blending in petrol by 2025-26. Key approved feedstocks include agricultural residues (straw, stover), surplus food grains, sugar-based materials, bamboo, and industrial waste to produce 1G/2G/3G biofuels, reducing oil imports.

With reference to pulse production in India, consider the following statements:

1. Black gram can be cultivated as both kharif and rabi crop.
2. Green-gram alone accounts for nearly half of pulse production.
3. In the last three decades, while the production of kharif pulses has increased, the production of rabi pulses has decreased.

Which of the statements given above is/are correct?

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

The country's primary pulses among Kharif crops are - pigeon pea/red gram, Black gram, green gram, Moth, and Horse gram. Tur/ arhar has the lion's share of area (36%) and production (48%) followed by Urad bean and Mung bean. The main **Rabi pulse crops** are Black gram, chickpeas, lentils, Field peas, Urad, Mung, kidney beans etc.

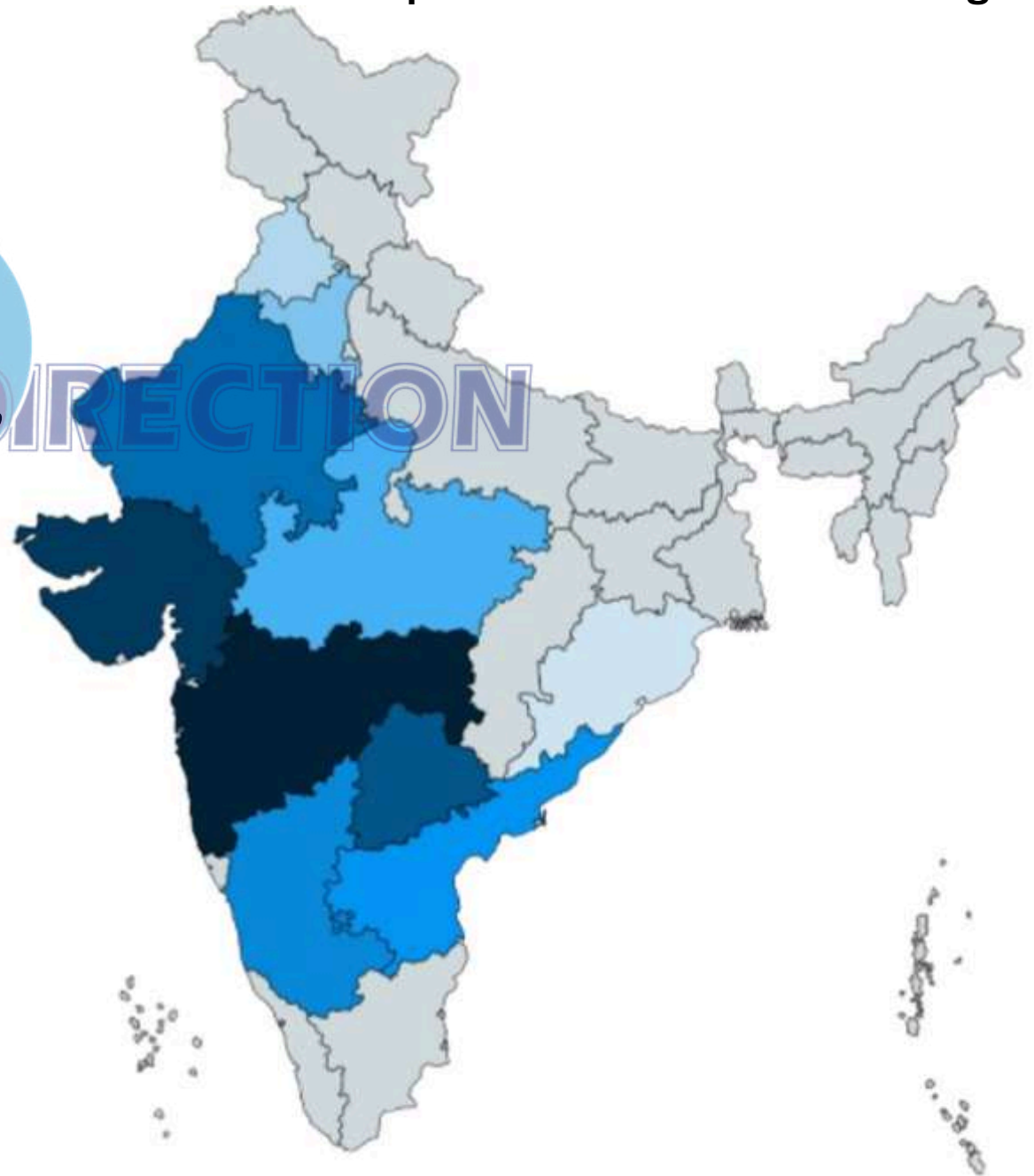
India is the largest producer and consumer of pulses in India. The top pulse-producing states of India are Rajasthan, Madhya Pradesh, Maharashtra, Uttar Pradesh, and Karnataka. Growing pulses is a sustainable agricultural practice as it improves soil biodiversity and intercropping. Pulses are a low-carbon future food and to fulfil the needs of the growing population, 39 million tonnes of pulses are needed by 2050.

Among all pulses chickpea is the major pulse and ranks first in terms of area, production and productivity at the national level.

“The crop is subtropical in nature. A hard frost is injurious to it. It requires at least 210 frost-free days and 50 to 100 centimeters of rainfall for its growth. A light well-drained soil capable of retaining moisture is ideally suited for the cultivation of the crop.” Which one of the following is that crop?

- (a) Cotton
- (b) Jute
- (c) Sugarcane
- (d) Tea

Cotton cultivation requires a warm, tropical/sub-tropical climate, with optimal temperatures between 21 degree C and 30 degree C and a frost-free period of at least 210 days. It thrives in well-drained, deep, nutrient-rich soils, particularly black clayey soil, with moderate rainfall (50–100 cm) and dry conditions during harvesting to prevent pest issues.



With reference to the current trends in the cultivation of sugarcane in India, consider the following statements:

1. A substantial saving in seed material is made when 'bud chip settlings' are raised in a nurse, and transplanted in the main field.
2. When direct planting of setts is done, the germination percentage is better with single-budded setts as compared to setts with many buds.
3. If bad weather conditions prevail when setts are directly planted, single-budded setts have better survival as compared to large setts.
4. Sugarcane can be cultivated using settlings prepared from tissue culture.

Which of the statements given above is/are correct?

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

Bud Chip Technique: Utilizing single-bud chips instead of traditional multi-bud setts reduces seed requirement by 75-80% and ensures higher germination rates.

Tissue Culture: Used for rapid multiplication of disease-free, high-yield varieties.

When directly planting sugarcane setts in the field, setts with multiple buds (2-3 buds) typically exhibit a higher germination percentage and better survival rates compared to single-budded setts, as they possess more stored nutrients and moisture to support initial growth. Single-budded setts are highly effective when raised in a nursery first (as "bud chips") and then transplanted, but they underperform when directly placed in the field.

In the context of India, which of the following is/are considered to be practice(s) of eco-friendly agriculture?

1. Crop diversification
2. Legume intensification
3. Tensiometer use
4. Vertical farming

Select the correct answer using the code given below:

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



A soil tensiometer is an instrument used to measure soil matric potential (soil moisture tension), helping to manage irrigation by indicating how hard plant roots must work to extract water. It consists of a water-filled tube with a porous ceramic tip, which is installed in the root zone to measure tension.

Consider the following minerals:

- 1. Bentonite**
- 2. Chromite**
- 3. Kyanite**
- 4. Sillimanite**

In India, which of the above is/are officially designated as major minerals?

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



DIRECTION

Barytes, Felspar, Mica and Quartz from the list of minor minerals to the category of major minerals, following the National Critical Mineral Mission

Baryte has various industrial applications which is used for oil and gas drilling, electronics, TV screens, rubber, glass, ceramics, paint, radiation shielding and medical applications

Quartz, Felspar and Mica are found in pegmatite rocks, which are an important source of many critical minerals such as Beryl, Lithium, Niobium, Tantalum, Molybdenum, Tin, Titanium, Tungsten, etc. These minerals have vital role in various new technologies, in energy transition, spacecraft industries, healthcare sector, etc.

Steel slag can be the material for which of the following?

- 1. Construction of base road**
- 2. Improvement of agricultural soil**
- 3. Production of cement**

Select the correct answer using the code given below:

- (a) 1 and 2 only**
- (b) 2 and 3 only**
- (c) 1 and 3 only**
- (d) 1, 2 and 3**



Steel slag is a versatile byproduct used extensively in road construction (asphalt, base material), cement/concrete, agriculture (soil conditioner), and environmental remediation (acid mine drainage, heavy metal stabilization), leveraging its strength, chemical properties, and ability to improve soil or treat water.

India generates approximately 19 million tonnes of steel slag annually, a byproduct of its status as the world's second-largest steel producer, with production expected to reach 60 million tonnes by 2030

Consider the following pairs

Glacier	River
1. Bandarpunch	Yamuna
2. Bara Shigri	Chenab
3. Milam	Mandakini
4. Siachen	Nubra
5. Zemu	Manas

Which of the pairs correctly matched?

(a) 1, 2 and 4

(b) 1, 3 and 4

(c) 2 and 5

(d) 3 and 5

- **Gangotri Glacier (Uttarakhand):** Source of the Bhagirathi River, the headstream of the Ganga.
- **Yamunotri Glacier (Uttarakhand):** Source of the Yamuna River, located on the western slopes of the Banderpunch range.
- **Satopanth Glacier (Uttarakhand):** Source of the Alaknanda River, a primary headstream of the Ganga.
- **Siachen Glacier (Ladakh):** Source of the Nubra River, which feeds the Shyok and Indus rivers.
- **Milam Glacier (Uttarakhand):** Source of the Gori Ganga River.
- **Bara Shigri Glacier (Himachal Pradesh):** Feeds the Chenab River.
- **Chorabari Glacier (Uttarakhand):** Source of the Mandakini River.
- **Zemu Glacier (Sikkim):** Feeds the Teesta River, a tributary of the Brahmaputra.



What is common to the places known as Aliyar, Isapur and Kangsabati?

- (a) Recently discovered uranium deposits**
- (b) Tropical rain forests**
- (c) Underground cave systems**
- (d) Water reservoirs**



DIRECTION

Aliyar Dam (Tamil Nadu): Located in the Anaimalai Hills of the Western Ghats near Pollachi, Coimbatore district.

Isapur Dam (Maharashtra): An earth-fill dam constructed on the Penganga River in the Hingoli/Nanded district.

Kangsabati Dam (West Bengal): Part of a major reservoir project built in 1956 to provide irrigation for Midnapur, Bankura, and Hooghly districts, utilizing the Kangsabati, Shilabati, and Bhoiobbanki rivers

With reference to the management of minor minerals in India, consider the following statements:

1. Sand is a 'minor mineral' according to the prevailing law in the country.

2. State Governments have the power to grant mining leases of minor minerals, but the powers regarding the formation of rules related to the grant of minor minerals lie with the Central Government.

3. State Governments have the power to frame rules to prevent illegal mining of minor minerals.

Which of the statements given above is/are correct?

(a) 1 and 3 only

(b) 2 and 3 only

(c) 3 only

(d) 1, 2 and 3



DIRECTION



Minor minerals in India are building and industrial materials defined under the Mines and Minerals (Development and Regulation) Act, 1957, primarily managed by state governments. They include building stones (granite, marble), sand, gravel, clay, and specific minerals like limestone, barytes, and ochre, typically used in local construction and small-scale industries.

With reference to the cultivation of Kharif crops in India in the last five years, consider the following statements:

- 1. Area under rice cultivation is the highest.**
- 2. Area under the cultivation of jowar is more than that of oilseeds.**
- 3. Area of cotton cultivation is more than that of sugarcane.**
- 4. Area under sugarcane cultivation has steadily decreased.**

Which of the statements given above are correct?

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



Sowing Area Coverage of Kharif Crops - increase in area coverage by 13.92 % compared to last year in the country. The crop wise area sown is as under:

- Rice: About 266.60 lakh ha area**
- Pulses: About 111.91 lakh ha area**
- Coarse Cereals: About 148.34 lakh ha area**
- Oilseeds: About 175.34 lakh ha area**
- Sugarcane: About 51.78 lakh ha area**
- Jute & Mesta: About 6.95 lakh ha area**
- Cotton: About 121.25 lakh ha area**

Consider the following statements:

1. In India, State Governments do not have the power to auction non-coal mines.

2. Andhra Pradesh and Jharkhand do not have gold mines.

3. Rajasthan has iron ore mines.

Which of the statements given above is/are correct?

(a) 1 and 2 only

(b) 2 only

(c) 1 and 3 only

(d) 3 only

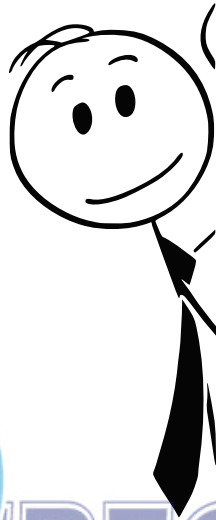


The Iron-Ore Deposits are located in the district of Jaipur, Udaipur, Jhunjhunu, Sikar, Bhilwara, Alwar, Bharatpur, Dausa and Banswara.

- Hutti Gold Mines, Karnataka
- Kolar Gold Fields (KGF), Karnataka
- Sonbhadra Gold Mines, Uttar Pradesh
- Ramgiri Gold Field, Andhra Pradesh
- Parasi Gold Mine, Jharkhand
- Gadag Gold Mine, Karnataka
- Chigargunta-Bisanatham Gold Mine, Andhra Pradesh
- Hira-Buddini Gold Mine, Karnataka
- Kunderkocha Gold Mine, Jharkhand
- Ganajur Gold Mine, Karnataka

Among the following cities, which one lies on a longitude closest to that of Delhi?

- (a) Bengaluru
- (b) Hyderabad
- (c) Nagpur
- (d) Pune



**Major City Capital Longitudes
(degrees E)**

- New Delhi (Delhi): 77.2
- Mumbai (Maharashtra): 72.8
- Kolkata (West Bengal): 88.4
- Bengaluru (Karnataka): 77.6
- Chennai (Tamil Nadu): 80.3
- Hyderabad (Telangana): 78.5

Standard Meridian of India: 82.5 degrees E

Westernmost state capital (approx): Gandhinagar -approx. 72 degrees E

Easternmost state capital approx: Kohima/Itanagar 94 degrees E

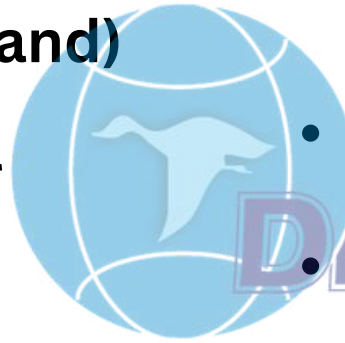
Which one of the following is an artificial lake?

(a) Kodaikanal (Tamil Nadu)

(b) Kolleru (Andhra Pradesh)

(c) Nainital (Uttarakhand)

(d) Renuka (Himachal Pradesh)



- **Govind Vallabh Pant Sagar (Rihand Dam):** Located in Uttar Pradesh, it is the largest man-made lake in India.
- **Dhebar Lake (Jaisamand Lake):** Located in Rajasthan, it is the second-largest artificial lake in India
- **Gobind Sagar Lake:** Situated in Himachal Pradesh, this lake is formed by the Bhakra-Nangal Dam on the Sutlej River.
- **Hussain Sagar Lake:** A historic lake in Hyderabad, Telangana,
- **Bhojtal (Upper Lake):** Located in Bhopal, Madhya Pradesh, it is a major source of drinking water for the city.
- **Hirakud Lake:** Located in Odisha, it is created by the Hirakud Dam on the Mahanadi River.
- **Rana Pratap Sagar Lake:** Located in Rajasthan, it is part of the Chambal Valley Project.
- **Lake Pichola:** An artificial freshwater lake in Udaipur, Rajasthan.
- **Barapani Lake (Umiam Lake):** Located in Shillong, Meghalaya.
- **Osman Sagar Lake:** Located in Telangana.

Consider the following statements:

1. The Barren Island volcano is an active volcano located in the Indian territory.

2. Barren Island lies about 140 km east of Great Nicobar.

3. The last time the Barren Island volcano erupted was in 1991 and it has remained inactive since then.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 and 3

(c) 3 only

(d) 1 and 3



The Barren Island volcano, India's only active volcano in the Andaman and Nicobar Islands, erupted most recently on September 13 and 20, 2025. These were considered minor eruptions involving lava flows and ash plumes, following previous activity in November 2022 and earlier in the 2017–2022 period.

Which of the following practices can help in water conservation in agriculture?

- 1.Reduced or zero tillage of the land**
- 2.Applying gypsum before irrigating the field**
- 3.Allowing crop residue to remain in the field**

Select the correct answer using the code given

- (a) 1 and 2 only**
- (b) 3 only**
- (c) 1 and 3 only**
- (d) 1, 2 and 3**



Conservation Tillage/No-Till: Minimizing soil disturbance maintains structure and water-holding capacity.

Mulching: Covering soil with organic materials (straw, wood chips) to reduce evaporation and retain moisture.

Gypsum is a key amendment in water conservation agriculture, enhancing soil structure, improving water infiltration by 50%–100% and reducing runoff.

Which of the following is geographically closest to Great Nicobar?

- (a) Sumatra
- (b) Borneo
- (c) Java
- (d) Sri Lanka

An initial segment of the maritime boundary nearest the coasts of the States' relevant islands was delimited through a bilateral agreement that was reached on 17 December 1974. The boundary was then extended in 1977 in both directions; to the northeast into the Andaman Sea, and to the southwest into the Indian Ocean.

The India-Indonesia maritime boundary is almost 300 nautical miles in length and delimits the overlapping maritime entitlements generated by India's Nicobar Islands and Indonesia's Sumatra Island.

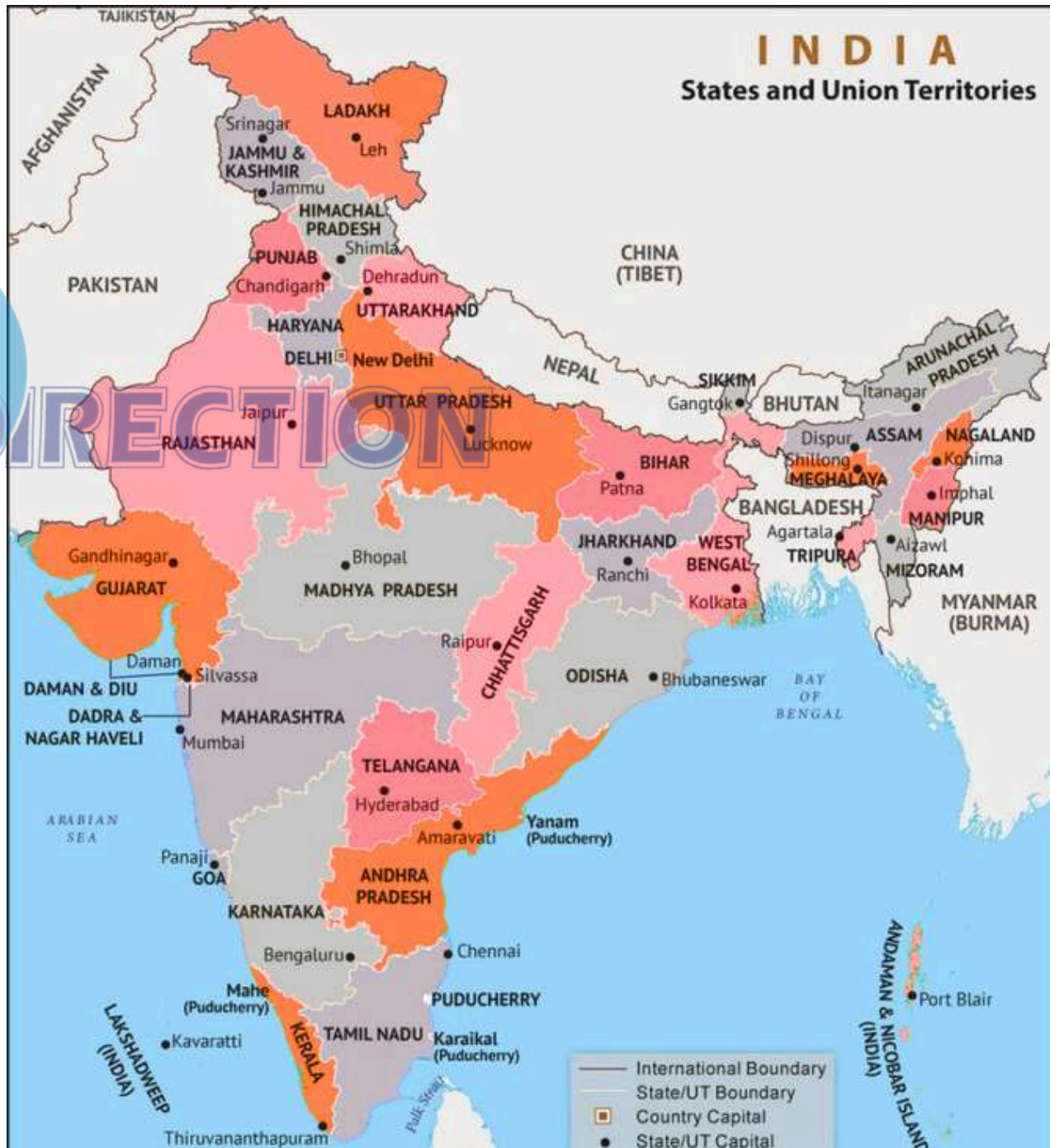
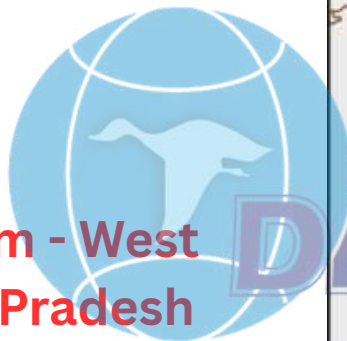
On 22 June 1978, India, Indonesia, and Thailand signed an agreement fixing the location of their tripoint in the Andaman Sea at point T.



If you travel by road from Kohima to Kottayam, what is the minimum number of States within India through which you can travel, including the origin and the destination?

- (a) 6
- (b) 7
- (c) 8
- (d) 9

Nagaland(Kohima) - Assam - West Bengal - Odisha - Andhra Pradesh - Tamil Nadu - Kerala (Kottayam).



Consider the following statements:

1. In India, the Himalayas are spread over five States only.

2. Western Ghats are spread over five States only.

3. Pulicat Lake is spread over two States only.

Which of the statements given above is/are correct?

(a) 1 and 2 only

(b) 3 only

(c) 2 and 3 only

(d) 1 and 3 only



- The Himalayas covers 13 states/union territories- Jammu and Kashmir, Ladakh, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Assam and West Bengal)
- Western Ghats are spread over six States-Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra and Gujarat
- *The Western Ghats are often divided into the Sahyadri (north), Nilgiri Hills (central), and Anaimalai/Cardamom Hills (south).*

With reference to 'Indian Ocean Dipole (IOD)' sometimes mentioned in the news while forecasting Indian monsoon, which of the following statements is/are correct?

1. IOD phenomenon is characterised by a difference in sea surface temperature between tropical Western Indian Ocean and tropical Eastern Pacific Ocean.

2. An IOD phenomenon can influence an El Niño's impact on the monsoon.

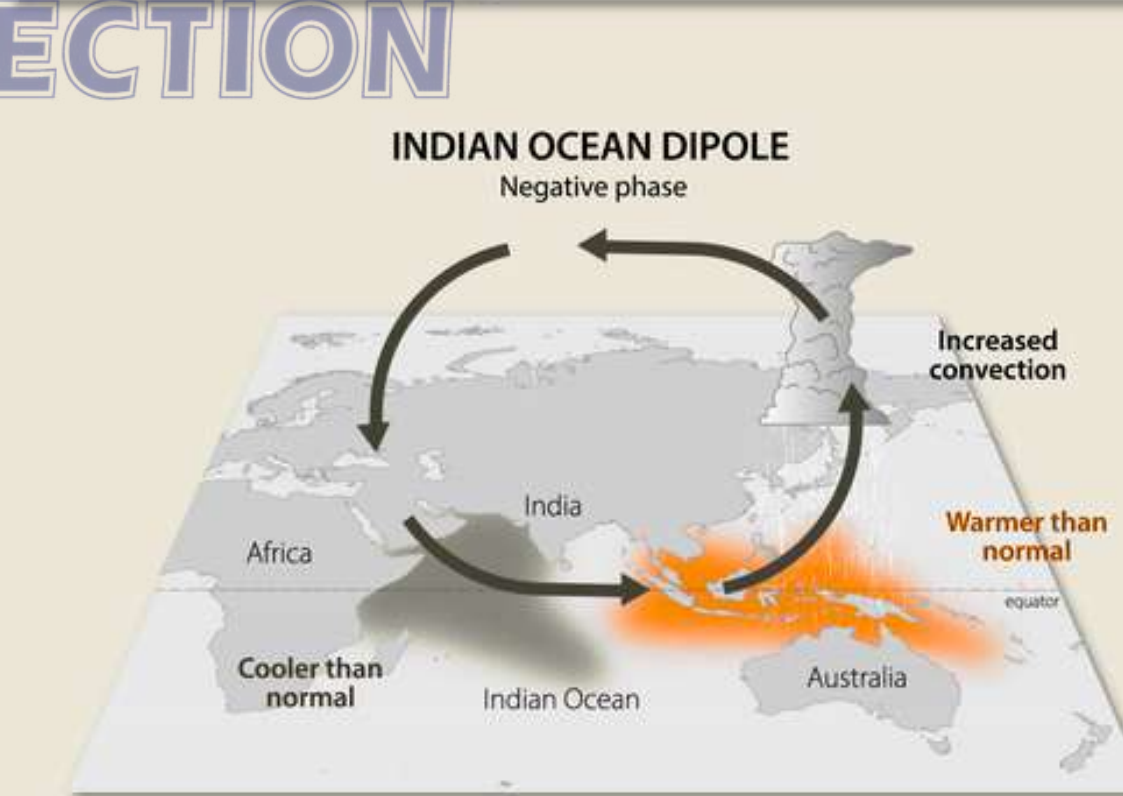
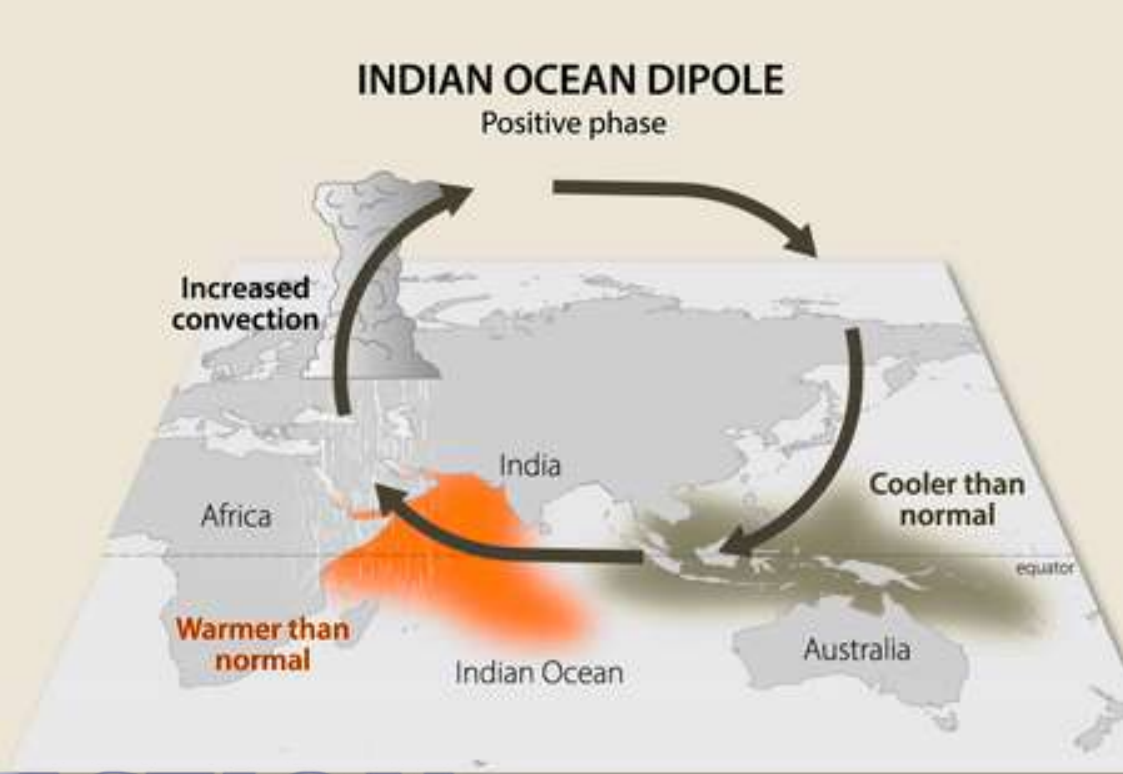
Select the correct answer using the code given below:

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2



At one of the places in India, if you stand on the seashore and watch the sea, you will find that the sea water recedes from the shore line a few kilometres and comes back to the shore, twice a day, and you can actually walk on the sea floor when the water recedes. This unique phenomenon is seen at

- (a) Bhavnagar
- (b) Bheemunipatnam
- (c) Chandipur**
- (d) Nagapattinam



REMEMBER

Chandipur Beach in Odisha, India, is famous for a unique, daily, twice-a-day phenomenon where the sea water recedes up to 5 kilometers (roughly 3 miles) during low tide.

Due to a very flat coastal slope, the sea retreats significantly during low tide, leaving a vast, walkable seabed, and returns to the shore during high tide.

With reference to river teesta, consider the following statements

- 1.The source of river Teesta is the same as that of Brahmaputra but it flows through Sikkim
- 2.River Rangeet originates in Sikkim and it is a tributary of river Teesta.
- 3.River Teesta flows into Bay of Bengal on the border of India and Bangladesh.

Which of the statements given above is/are correct?

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



DIRECTION

The **Teesta and Rangit** are the two most prominent, perennial, glacier-fed rivers of Sikkim, India, with the Rangit serving as the largest tributary of the Teesta. The Teesta originates from the Pahunri/Tso Lhamo lake and flows 414 km through Sikkim and West Bengal, while the Rangit rises from the Mount Kabru glacier. They confluence at Triveni



Why does the Government of India promote the use of 'Neem-coated Urea' in agriculture?

- (a) Release of Neem oil in the soil increases nitrogen fixation by the soil microorganisms**
- (b) Neem coating slows down the rate of dissolution of urea in the soil**
- (c) Nitrous oxide, which is a greenhouse gas, is not at all released into atmosphere by crop fields**
- (d) It is a combination of a 1,veedicide and a fertilizer for particular crops**



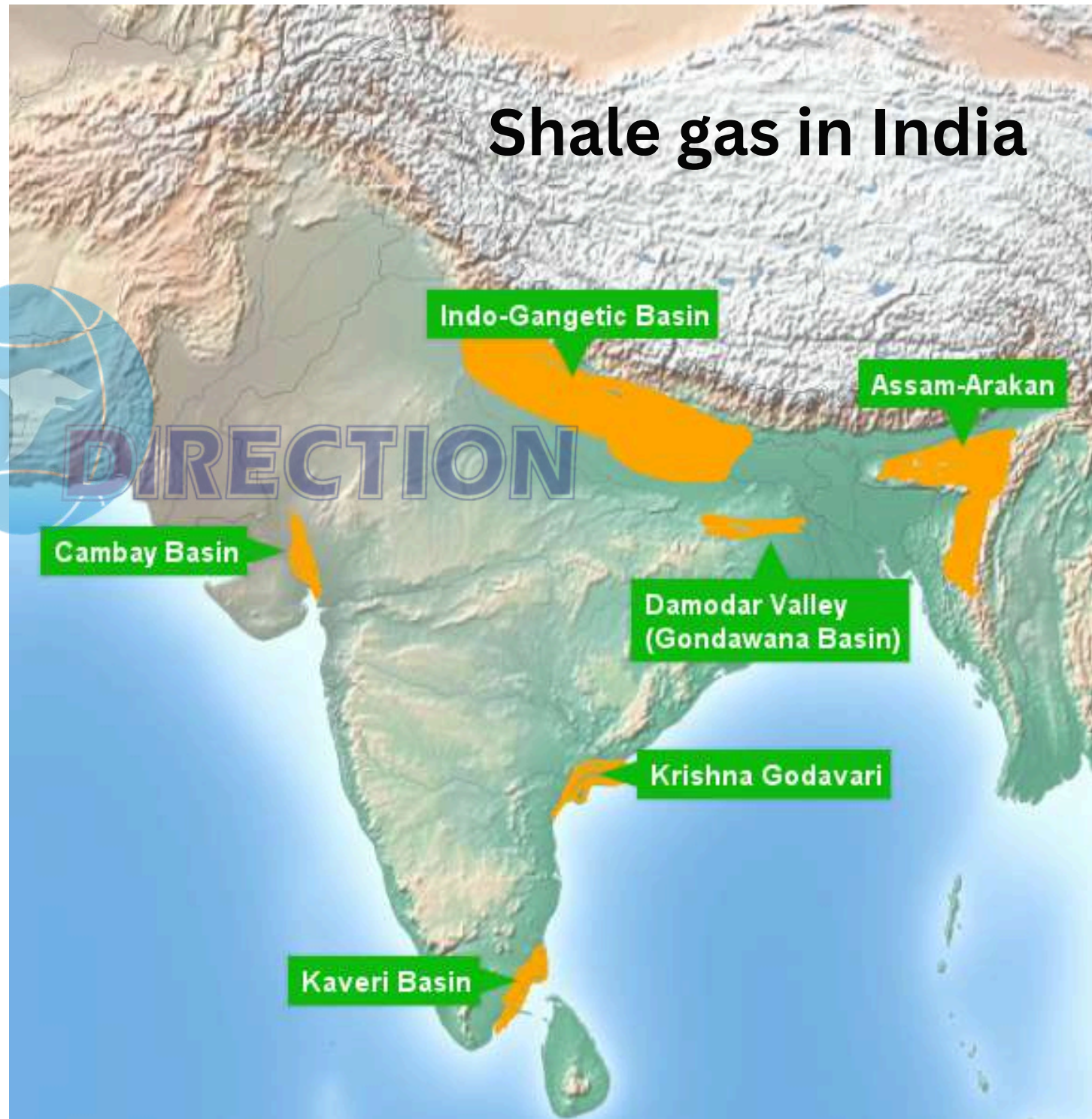
Neem-coated urea (NCU) enhances agricultural productivity and sustainability by providing a slow-release source of nitrogen, which increases fertilizer efficiency by 30–40%. It improves soil health, reduces urea consumption, boosts crop yields (15-30% increase), and prevents illegal diversion of subsidized urea for industrial use.

In which of the following regions of India are shale gas resources found?

1. Cambay Basin
2. Cauvery Basin
3. Krishna-Godavari Basin

Select the correct answer using the code given below.

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



Which of the following is/are tributary/tributaries of Brahmaputra?

1. Dibang
2. Kameng
3. Lohit

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3**



With reference to 'Red Sanders', sometimes seen in the news, consider the following statements:

1.It is a tree species found in a part of South India.

2.It is one of the most important trees in the tropical rain forest areas of South India.

Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Red Sanders) is native to the Southern Eastern Ghats range in South India, specifically endemic to the dry deciduous forests of Andhra Pradesh. They thrive in rocky, degraded lands at altitudes of 150-900 meters in Kadapa, Chittoor, Anantapur, and Kurnool districts.

- it is extreme rare,
- slow growth rate (decades to mature),
- high global demand for its valuable red heartwood,
- restrictive government regulations (it's endangered),
- illegal poaching, and
- difficult harvesting (uprooting the whole tree for roots and trunk)

Consider the following pairs:

Famous Place:Region

1. Bodhagaya : Baghelkhand
2. Khajuraho : Bundelkhand
3. Shirdi : Vidarbha
4. Nasik (Nashik) : Malwa
5. Tirupati : Rayalaseema

Which of the pairs given above are correctly matched?

- (a) 1, 2 and 4
(b) 2, 3, 4 and 5
(c) 2 and 5 only
(d) 1, 3, 4 and 5

DON'T FORGET

- Bodh Gaya is located in the Gaya district of the Indian state of Bihar, specifically in the historical Magadh region
- Shirdi is located in the Ahmednagar district of the Indian state of Maharashtra, specifically in the Nashik Division
- Nashik is located in the northwestern part of the state of Maharashtra in western ghats

Which one of the following pairs of States of India indicates the easternmost and westernmost State?

- (a) Assam and Rajasthan
- (b) Arunachal Pradesh and Rajasthan
- (c) Assam and Gujarat
- (d) Arunachal Pradesh and Gujarat**



Consider the following pairs:

Place of Pilgrimage Location

1.Srisailam : Nallamala Hills

2.Omkareshwar : Satmala Hills

3.Pushkar : Mahadeo Hills

Which of the above pairs is/are correctly matched?

(a) 1 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3



Remember

Omkareshwar is located in the Khandwa district of the Malwa region in Madhya Pradesh

Pushkar is located in the Ajmer district of Rajasthan. It is nestled in the Aravalli Range and is famous for the Pushkar Lake.

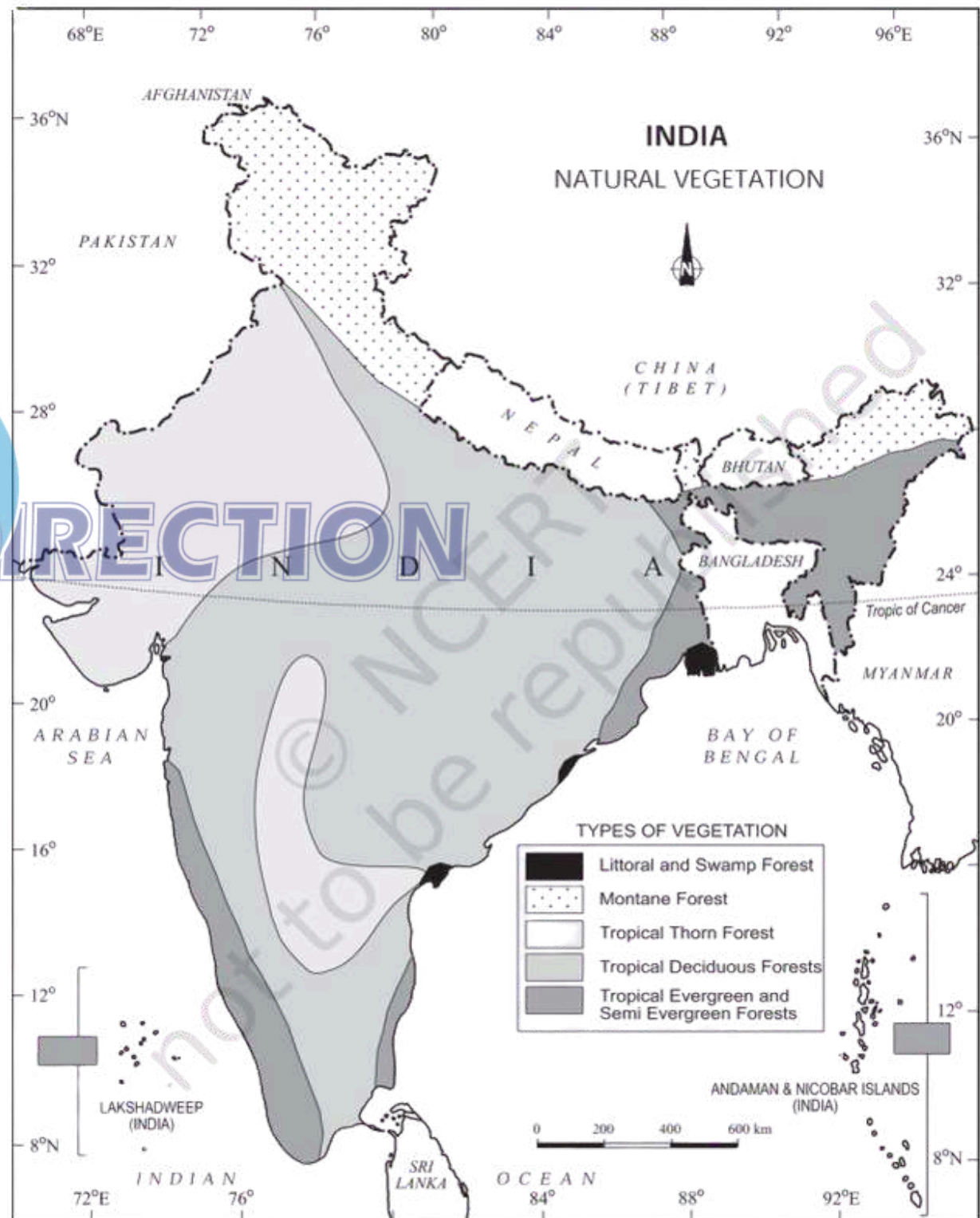
Which one of the following regions of India has a combination of mangrove forest, evergreen forest and deciduous forest?

(a) North Coastal Andhra Pradesh

(b) South-West Bengal

(c) Southern Saurashtra

(d) Andaman and Nicobar Islands



Consider the following States:

- 1.Arunachal Pradesh**
- 2.Himachal Pradesh**
- 3.Mizoram**

In which of the above States do 'Tropical Wet Evergreen Forests' occur?

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



DIRECTION



These forests are found in the western slope of the Western Ghats, hills of the northeastern region and the Andaman and Nicobar Islands. They are found in warm and humid areas with an annual precipitation of over 200 cm and mean annual temperature above 22°C. Species found in these forests include rosewood, mahogany, aini, ebony, etc.

In India, in which one of the following types of forests is teak a dominant tree species?

- (a) Tropical moist deciduous forest**
- (b) Tropical rain forest**
- (c) Tropical thorn scrub forest**
- (d) Temperate forest with grasslands**



DIRECTION



The Moist deciduous forests are more pronounced in the regions which record rainfall between 100-200 cm. These forests are found in the northeastern states along the foothills of Himalayas, eastern slopes of the Western Ghats and Odisha. Teak, sal, shisham, hurra, mahua, amla, semul, kusum, and sandalwood etc. are the main species of these forests.

Which one of the following National Parks has a climate that varies from tropical to subtropical, temperate and arctic?

- (a) Khangchendzonga National Park
- (b) Nandadevi National Park
- (c) Neora Valley National Park
- (d) Namdapha National Park**

Namdapha National Park, located in Arunachal Pradesh, India, is the renowned national park whose climate varies from tropical and subtropical to temperate and arctic. Situated in the eastern Himalayas, its extreme elevation range—from roughly 200m to over 4,500m—causes this unique, dramatic shift in climate and vegetation, featuring everything from lush forests to alpine meadows.

Khangchendzonga National Park & Nanda Devi National Park: Situated at very high altitudes in the Himalayas, these parks primarily feature temperate, sub-alpine, and alpine (arctic) climates. They do not possess the low-altitude, warm, and humid tropical zones needed to span the entire spectrum.

Neora Valley National Park: Located in West Bengal, it ranges from subtropical to alpine, but generally lacks the extreme low-elevation tropical forests required for the complete, comprehensive climatic spectrum.

In a particular region in India, the local people train the roots of living tree into robust bridges across streams. As the time passes these bridges become stronger. These unique 'Living Root Bridges' are found in

(a) Meghalaya

(b) Himachal Pradesh

(c) Jharkhand

(d) Tamil Nadu



— natural suspension bridges, formed by training the aerial roots of *Ficus elastica* (rubber fig trees) to span rivers, a practice developed by the Khasi and Jaintia tribes

In India, the problem of soil erosion is associated with which of the following?

1. Terrace cultivation
2. Deforestation
3. Tropical climate

Select the correct answer using the codes given below

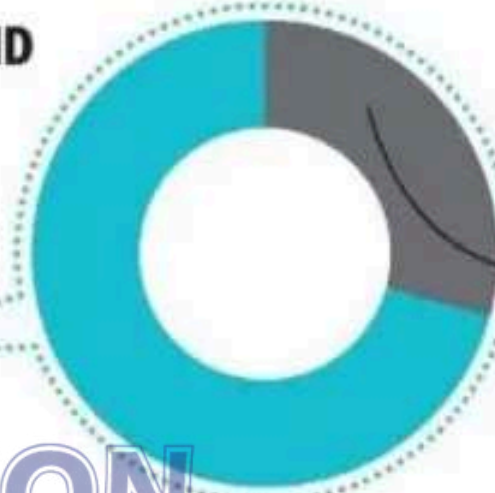
- (a) 1 and 2 only
(b) 2 only
(c) 1 and 3 only
(d) 1, 2 and 3

INDIA'S 2030 TARGET

INDIA RAMPS UP ITS LAND RESTORATION TARGET

India's total geographical area:

328.7 million hectares (Mha)



Land under degradation:

96.4 Mha

(It's 29.3% of India's total geographical area)

Restoration of degraded and deforested land by 2030:



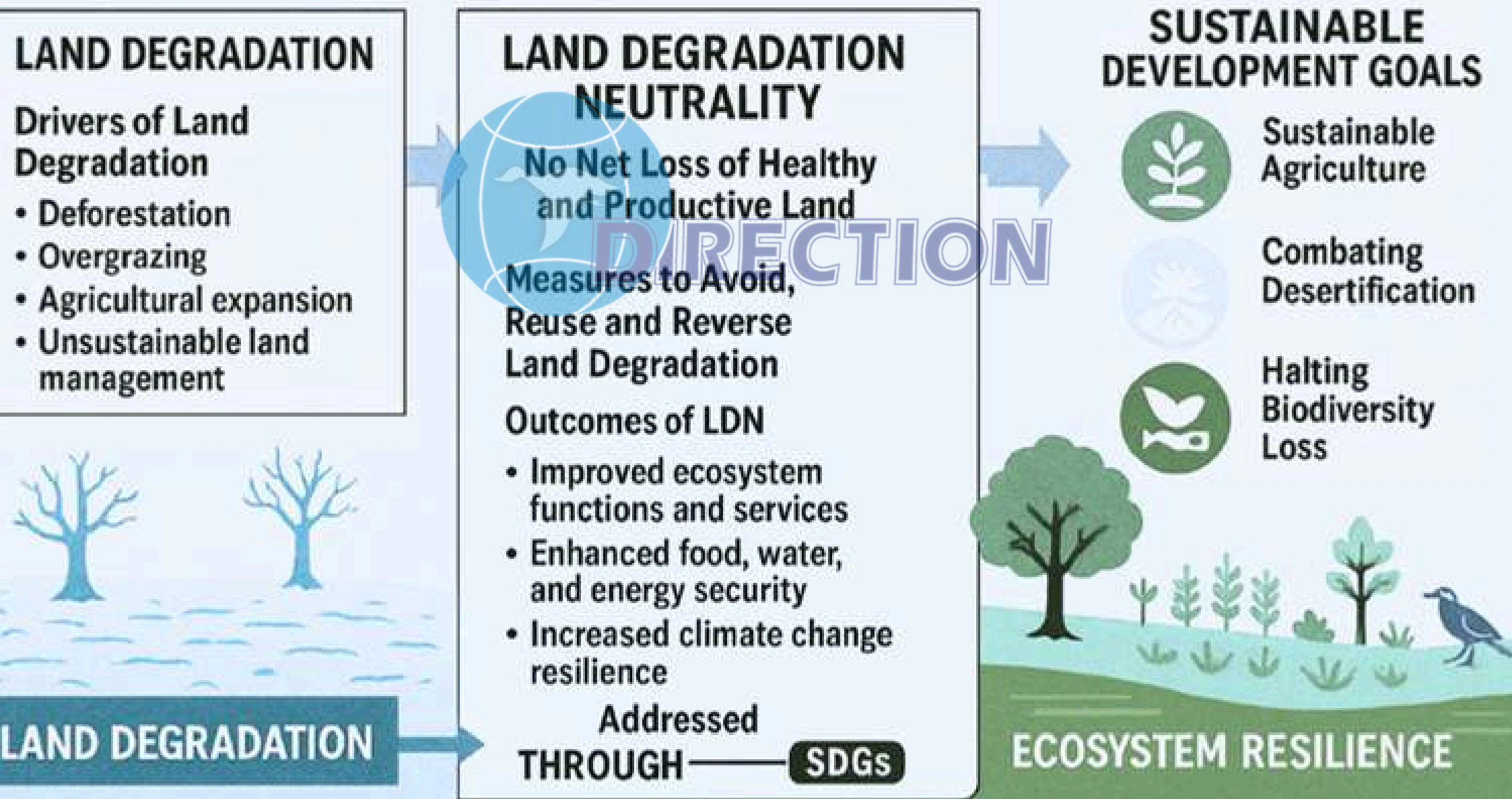
Causes of desertification and land degradation:

Over-exploitation (farm practices using excessive chemical fertilizers and pesticides), over-grazing, deforestation and poor irrigation practices (Land degradation within dry land regions is called desertification)

Solutions: Afforestation, water resource management and sustainable farm practices

LAND DEGRADATION NEUTRALITY

A PATHWAY TO ACHIEVING SUSTAINABLE DEVELOPMENT GOALS AND ECOSYSTEM RESILIENCE



GLOBAL

Goal: Restore 1 billion hectares of degraded land by 2030

Land Outlook

- Up to 40% of the planet's land is degraded
- 50% of humanity affected by land degradation
- Degradation threatens roughly half of global GDP (\$44 trillion)
- Additional degradation of an area almost the size of South America will happen if business as usual continued through 2050
- Nations' current pledge to restore 1 billion degraded hectares by 2030 requires \$1.6 trillion this decade
- Over 40% of global land area occupied by agriculture
- 52% of total agricultural land is degraded



- Agriculture is responsible for 80% of global deforestation
- Over 70% tropical forest cleared for agriculture between 2013 and 2019 in violation of national laws or regulations
- An additional 69 gigatonnes of carbon (17% of current annual GHG emissions) is emitted from 2015 to 2050 due to land use change and soil degradation

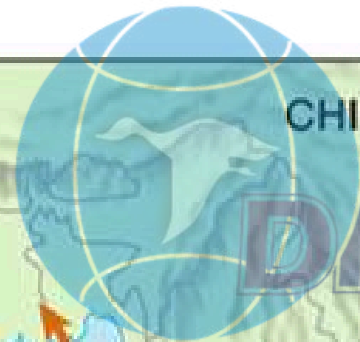
Global Assessment of Soil Degradation (GLASOD)

identified seven different causes of human interventions that have resulted in soil degradation worldwide:

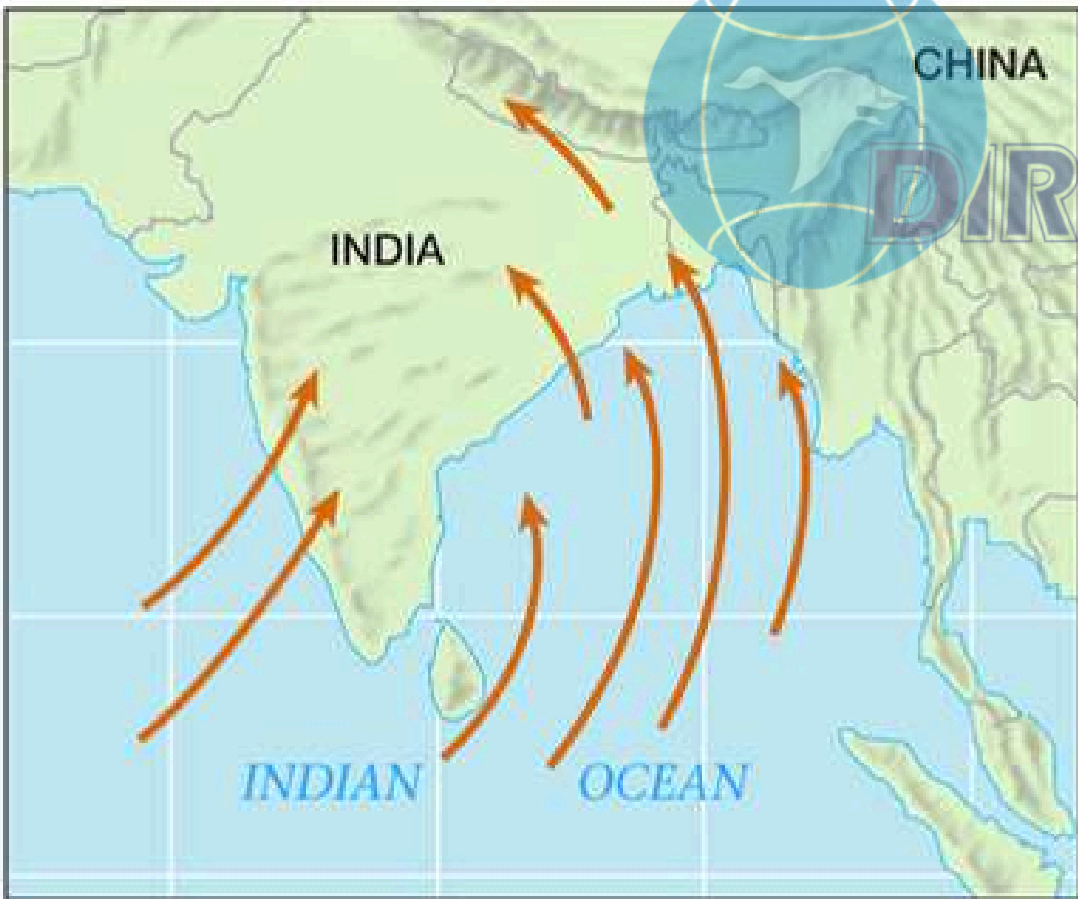
- Soil Erosion and Nutrient Depletion
- Deforestation
- Overgrazing by Livestock
- Traditional Farming Practices
- Loss of Vegetative Cover
- Population Growth
- Impact of Climate Change

The seasonal reversal of winds is the typical characteristic of

- (a) Equatorial climate
- (b) Mediterranean climate
- (c) Monsoon climate**
- (d) All of the above climates



DIRECTION



Summer



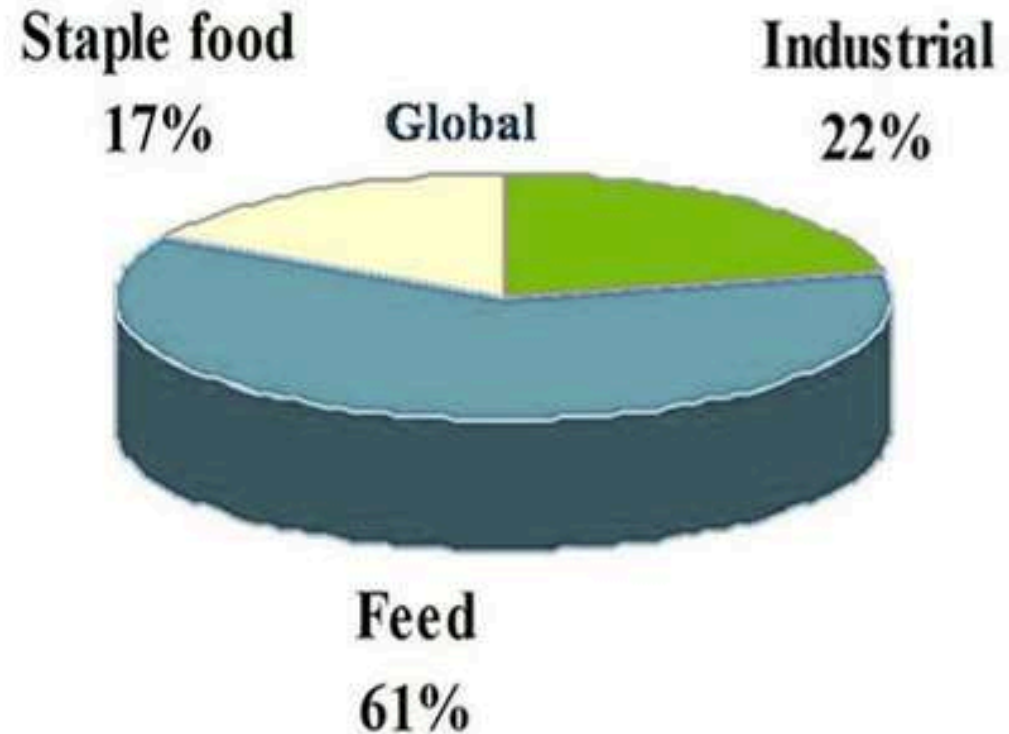
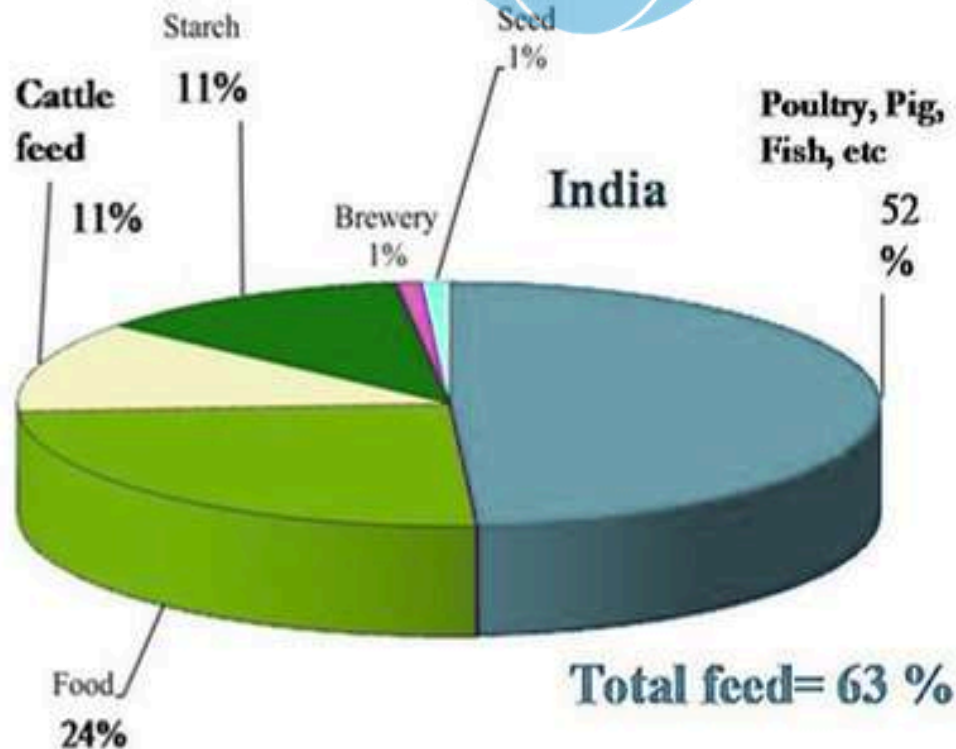
Winter

Consider the following statements:

1. Maize can be used for the production of starch.
2. Oil extracted from maize can be a feedstock for biodiesel.
3. Alcoholic beverages can be produced by using maize.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3**



What are the significances of a practical approach to sugarcane production known as 'Sustainable Sugarcane Initiative'?

- 1. Seed cost is very low in this compared to the conventional method of cultivation.**
- 2. Drip irrigation can be practiced very effectively in this.**
- 3. There is no application of chemical inorganic fertilizers at all in this.**
- 4. The scope for intercropping is more in this compared to the conventional method of cultivation.**

Select the correct answer using the code given below.

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

The Sustainable Sugarcane Initiative (SSI) is an innovative farming method that produces higher yields (over 20% increase) while using 30% less water, 75% less seed, and 25% fewer chemical inputs compared to conventional methods. Developed by WWF-ICRISAT, it uses single-bud chips, wider spacing, and efficient water management (like drip irrigation).

Consider the following pairs

Region Well-known for the production of

1. Kinnaur : Areca nut
2. Mewat : Mango
3. Coromandel : Soya bean

Which of the above pairs is/are correctly matched?

- (a) 1 and 2 only
- (b) 3 only
- (c) 1, 2 and 3
- (d) None**

- India is the world's largest producer and consumer of **arecanuts**. The ideal growing conditions are warm, humid climates with consistent rainfall, found across these diverse Indian states. Karnataka, Kerala, and Assam are India's primary areca nut (betel nut) producing states, together accounting for over 90% of the nation's output
- India is the largest **mango** producing country in the world. Mango production in India accounts for around 50% of the total global production. Uttar Pradesh followed by Andhra Pradesh, Karnataka, Bihar & Telangana.
- Madhya Pradesh is India's leading **soybean** producer, often called the "Soy State," followed by Maharashtra, Rajasthan, Gujarat, Karnataka, and Telangana, with these states contributing the vast majority of the nation's soybean output, primarily grown as a Kharif (rainfed) crop in central and western India.