

CLIMATE CHANGE

❖ **How El Nino could impact the world's weather in 2023-24**

➤ **Context:** Countries are racing to prepare for extreme weather later this year as the world tips into an El Nino — a natural climate phenomenon that fuels tropical cyclones in the Pacific and boosts rainfall and flood risk in parts of the Americas and elsewhere.

- The U.S. National Oceanic and Atmospheric Administration (NOAA) declared that an El Nino is now underway. The past three years have been dominated by the cooler La Nina pattern.
- Scientists say this year looks particularly worrying. The last time a strong El Nino was in full swing, in 2016, the world saw its hottest year on record. Meteorologists expect that this El Nino, coupled with excess warming from climate change, will see the world grapple with record-high temperatures.
- Experts are also concerned about what is going on in the ocean. An El Nino means that waters in the Eastern Pacific are warmer than usual. But even before this El Nino began, in May, the average global sea surface temperature was about 0.1C (0.2F) higher than any other on record. That could supercharge extreme weather.
- This year's El Nino could lead to global economic losses of \$3 trillion, according to a study published last month in the journal Science, shrinking GDP as extreme weather decimates agricultural production, manufacturing, and helps spread disease.
- Governments in vulnerable countries are taking note. Peru has set aside \$1.06 billion to deal with El Nino's impacts and climate change, while the Philippines — at risk from cyclones — has formed a special government team to handle the predicted fallout.

➤ **What causes an El Nino?**

- El Nino is a natural climate pattern borne out of unusually warm waters in the eastern Pacific.
- It forms when the trade winds blowing east-to-west along the equatorial Pacific slow down or reverse as air pressure changes, although scientists are not entirely sure what kicks off the cycle.
- Because the trade winds affect the sun-warmed surface waters, a weakening causes these warm western Pacific waters to slosh back into the colder central and eastern Pacific basins.
- During the 2015-16 El Nino — the strongest such event on record — anchovy stocks off the coast of Peru crashed amid this warm water incursion. And nearly a third of the corals on Australia's Great Barrier Reef died. In too-warm waters corals will expel living algae, causing them to calcify and turn white.
- This build-up of warm water in the eastern Pacific also transfers heat high into the atmosphere through convection, generating thunderstorms.
- "When El Nino moves that warm water, it moves where thunderstorms happen," said NOAA meteorologist. "That's the first atmospheric domino to fall."

➤ **How does El Nino affect the world's weather?**

- This shift in storm activity affects the current of fast-flowing air that moves weather around the world — called the subtropical jet stream — pushing its path southward and straightening it out into a flatter stream that delivers similar weather along the same latitudes.
- During an El Nino, the southern United States experiences cooler and wetter weather, while parts of the U.S. West and Canada are warmer and drier.
- Hurricane activity falters as the storms fail to form in the Atlantic due to changes in the wind, sparing the United States. But tropical cyclones in the Pacific get a boost, with storms often spinning toward vulnerable islands.
- Some parts of Central and South America experience heavy rainfall, although the Amazon rainforest tends to suffer from drier conditions.
- And Australia endures extreme heat, drought and bushfires.
- El Nino could offer a reprieve to the Horn of Africa, which recently suffered five consecutive failed rainy seasons. El Nino brings more rain to the Horn, unlike the triple-dip La Nina which desiccated the region.
- Historically, both El Nino and La Nina have occurred about every two to seven years on average, with El Nino lasting 9 to 12 months. La Nina, which takes hold when waters are cooler in the Eastern Pacific, can last one to three years.

➤ **Is climate change affecting El Nino?**

- How climate change might be affecting El Nino is a very big research question. While climate change is doubling down on the impacts from El Nino — layering heat on top of heat, or excess

rainfall on top of excess rainfall — it's less clear if climate change is influencing the phenomenon itself.

- Scientists are not sure whether climate change will shift the balance between El Ninos and La Nina, making one pattern more or less frequent. If ocean temperatures are rising across the board, it is unlikely the cycle would change, scientists said, as the basic mechanics behind the phenomenon stay the same.
- However, if some parts of the ocean are warming faster than others, that could influence how El Nino plays out by amplifying temperature differences.

➤ **About El Nino:**

- El Nino was first recognized by Peruvian fishermen off the coast of Peru as the appearance of unusually warm water. The Spanish immigrants called it El Nino, meaning “the little boy” in Spanish.
- El Nino soon came to describe irregular and intense climate changes rather than just the warming of coastal surface waters.
- The El Nino event is not a regular cycle, they are not predictable and occur irregularly at two- to seven-year intervals.
- The climatologists determined that El Nino occurs simultaneously with the Southern Oscillation. The Southern Oscillation is a change in air pressure over the tropical Pacific Ocean.
- When coastal waters become warmer in the eastern tropical Pacific (El Nino), the atmospheric pressure above the ocean decreases.
- Climatologists define these linked phenomena as El Nino-Southern Oscillation (ENSO).

➤ **Impact of El Nino:**

- Impact on Ocean: El Nino also impacts ocean temperatures, the speed and strength of ocean currents, the health of coastal fisheries, and local weather from Australia to South America and beyond.
- Increased Rainfall: Convection above warmer surface waters brings increased precipitation. Rainfall increases drastically in South America, contributing to coastal flooding and erosion.
- Diseases caused by Floods and Droughts: Diseases thrive in communities devastated by natural hazards such as flood or drought. El Nino-related flooding is associated with increases in cholera, dengue, and malaria in some parts of the world, while drought can lead to wildfires that create respiratory problems.
- Positive impact: It can sometimes have a positive impact too, for example, El Nino reduces the instances of hurricanes in the Atlantic.
- In South America: As El Nino brings rain to South America, it brings droughts to Indonesia and Australia. These droughts threaten the region’s water supplies, as reservoirs dry and rivers carry less water. Agriculture, which depends on water for irrigation, is also threatened.
- In Western Pacific: These winds push warm surface water towards the western Pacific, where it borders Asia and Australia. Due to the warm trade winds, the sea surface is normally about 0.5 meter higher and 4-5° F warmer in Indonesia than Ecuador.
- The westward movement of warmer waters causes cooler waters to rise up towards the surface on the coasts of Ecuador, Peru, and Chile. This process is known as upwelling. Upwelling elevates cold, nutrient-rich water to the euphotic zone, the upper layer of the ocean.

CLIMATE

❖ **How does a cyclone affect the monsoon’s onset?**

➤ **Context:** The impact of global warming on the monsoons are manifest in the onset, withdrawal, its seasonal total rainfall, and its extremes. Global warming also affects the cyclones over the Indian Ocean and the typhoons over the northwestern Pacific Ocean.

➤ **How does a Cyclone’s position affect Monsoon’s onset?**

- Some cyclones in the North Indian Ocean have had both positive and negative impacts on the onset of the monsoon. Since the circulation of winds around the cyclones is in the anticlockwise direction, the location of the cyclone is critical as far as the cyclone’s impact on the transition of the monsoon trough is concerned. (The monsoon trough is a low-pressure region that is a characteristic feature of the monsoons.)
 - ✓ For example, if a cyclone lies further north in the Bay of Bengal, the back-winds blowing from the southwest to the northeast can pull the monsoon trough forward, and assist in the monsoon’s onset.

- Earlier this year, the Bay of Bengal had **Cyclone Mocha** develop in the first half of May and intensify briefly into a ‘super cyclonic storm’, before weakening rapidly upon landfall. Mocha’s northwest to east trajectory over the Bay was the result of unusual anticyclones (which rotate clockwise) that have been parked over the Arabian Sea and the Bay of Bengal since March. Mocha dissipated on May 15 and the back-winds helped the monsoon set in on time over the Andaman and Nicobar Islands.
- One severe consequence of the anomalous anticyclones since March is that both the Arabian Sea and the Bay of Bengal have warmed by more than 1° C in the pre-monsoon season. The late-season **cyclone Biparjoy** is still chugging along in the warm Arabian Sea and may well rapidly intensify – i.e., have its wind speeds increase by 55 kmph within 24 hours – before making landfall.

➤ **Recent Cyclones/Typhoons and their Impact**

• **Cyclone Biparjoy**

- ✓ Cyclone Biparjoy is not interacting much with the monsoon trough currently.
- ✓ However, its late birth as well as the late onset of the monsoon are both closely related to typhoons in the northwestern Pacific Ocean.

• **Guchol**

- ✓ Tropical storm Guchol is now active just to the east of the Philippines and is likely to continue northwest before turning to the northeast.
- ✓ These powerful typhoons are extremely dry and demand moisture from far and wide.

• **Typhoon Mawar**

- ✓ On May 19, Typhoon Mawar was born and dissipated by June 3. Mawar qualified as a ‘super typhoon’ and is thus far the strongest typhoon to have taken shape in May.
- ✓ It is also the strongest cyclone of 2023 so far. Mawar pulled winds across the equator into the North Indian Ocean and set up Southwesterly winds (blowing from the southwest) over Arabian sea and Bay of Bengal.

➤ **About Monsoon:**

- A monsoon is a seasonal reversing wind accompanied by corresponding changes in precipitation and associated with annual latitudinal oscillation of the Inter Tropical Convergence Zone (ITCZ).
- ITCZ is the region that circles the Earth and where the trade winds of the Northern and Southern Hemispheres converge - creating a broad trough of low pressure.
- Seasonal shifts (between equator and tropic of cancer) in the location of the ITCZ with the apparent movement of the sun results in the wet and dry seasons of the tropics.
- Usually, the term monsoon is used to refer to the rainy phase of a seasonally changing pattern.
- On the Indian subcontinent, as the rain bearing winds come from the southwest direction, it is known as the southwest (SW) monsoon.

➤ **What is meant by the “Onset of the Monsoon”?**

- The onset of the monsoon over Kerala signals the beginning of the four-month (June-September) southwest monsoon season, during which India gets more than 70% of its annual rainfall.
- Contrary to what is sometimes assumed, the onset does not mean the first rain of the season.
- The IMD does not officially declare onset until certain prescribed conditions are met, like,
- ✓ Rainfall: The onset is declared if at least 60% of 14 designated meteorological stations in Kerala and Lakshadweep record at least 2.5 mm of rain for two consecutive days at any time after May 10.
- ✓ Wind field: The depth of westerlies in the area that is bound by the equator to 10°N latitude (passes through Kochi), and from longitude 55°E to 80°E.
- ✓ Heat: The measure of the energy emitted to space by the Earth’s surface, oceans, and atmosphere in the area between the 5°N and 10°N latitudes, and 70°E and 75°E longitudes.

➤ **The Impact of Global Warming on Indian Monsoon**

- Alarming increase in floods and droughts provides direct evidence of how global warming has been impacting the Indian monsoon.
- While summer monsoon rainfall each year is unique, there was a large regional and temporal variability in rainfall last year.
- There is evidence that global warming increases the fluctuations in the monsoon, resulting in both long dry periods and short spells of heavy rains.
- The monsoon is also affected by the three tropical oceans— Indian, Atlantic, and Pacific; the ‘atmospheric bridge’ from the Arctic; and the oceanic tunnel as well as the atmospheric bridge

from the Southern Ocean (a.k.a. the Antarctic Ocean). A 'bridge' refers to two faraway regions interacting in the atmosphere while a 'tunnel' refers to two remote oceanic regions connecting within the ocean.

➤ **Impact of Southwesterly Winds on Indian Monsoon**

- Southwesterly winds over the Arabian Sea are welcome news because they bring large quantities of moisture onto the Indian subcontinent.
- On the other hand, southwesterly winds over the Bay of Bengal are bad news for the monsoon. The monsoon winds over the southern Bay of Bengal sweep in from the southwest and west, but they turn around and head northwest towards India from the southeast.
- The strong southwesterly winds over the Bay of Bengal can be imagined to be a very large highway with heavy traffic heading - From the southwest, over southern peninsular India and Sri Lanka, Towards the South China Sea and the northwestern Pacific Ocean, feeding the monstrous typhoons there.
- The monsoon trough is like a little car trying to cross this busy and wide highway from the Andaman Nicobar Islands to India across the Bay of Bengal.

PRELIMS FACTS

1. Turkmenistan–Afghanistan–Pakistan–India (TAPI) Pipeline

➤ **In News:** To speed up work on Turkmenistan, Afghanistan, Pakistan, and India (TAPI) gas pipeline project and finish the feasibility study as soon as possible, Pakistan and Turkmenistan recently signed a Joint Implementation Plan (JIP).

➤ **About TAPI Pipeline:**

- It is an 1,814-kilometre pipeline that aims to transport 33 billion cubic metres of gas from Turkmenistan to Afghanistan, Pakistan and finally, India. It is also called the 'Peace Pipeline'.
- It will start from the Galkynysh gas field in Turkmenistan. It will then pass through Afghanistan and Pakistan to finally reach the Indian town of Fazilka (near the Indo-Pak border).
- At full capacity, the pipeline will transport 33 billion cubic meters (bcm) of natural gas annually from TKM to respective buyers in AFG (5%), PAK (47.5%) and IND (47.5%) during the 30-year commercial operations period.
- The Project comprises the procurement, installation and operation of the pipeline and related facilities within Afghanistan and Pakistan.
- The project was originally conceived in the 1990s, and an inter-governmental agreement was signed in 2010 by the heads of four member nations.
- A Gas Pipeline Framework Agreement was signed in December 2010, and a bilateral gas sale agreement was signed in May 2013.
- In February 2018, a ground-breaking ceremony for Afghanistan's section of the TAPI gas pipeline was held in the western Afghan city of Herat.
- The TAPI project is being funded by the Asian Development Bank (ADB), which is also acting as transaction adviser for the development. Turkmenistan took a loan of \$700m from the Islamic Development Bank for financing the project in December 2016. The remaining three countries made an initial investment of \$200m in the TAPI project.

2. Sagar Samridhhi

➤ **In News:** Deploying the key technology to monitor dredging across eastern and western coasts, the Centre will now also keep a track around deep water exploration with the new Sagar Samridhhi online dredging monitoring system.

- While launching the new digital Sagar Samridhhi dredging monitoring system, Union minister of ports, shipping and waterways (MoPSW), Sarbananda Sonowal said that the new system will accelerate the '**Waste to Wealth**' initiative.
- The adoption of new age technology was crucial to monitor systems to minimize human errors. All future monitoring at the Major Ports will be done through the Online Dredging Monitoring System. This will bring in significant improvements in project implementation and cost reduction through the utilization of dredged materials.
- The new system jointly developed by the National Technology Centre for Ports, Waterways, and Coasts (NTCPWC), the technological branch of the Ministry of Ports, Shipping, and Waterways (MoPSW), is said to presents a significant advancements over the previous Draft & Loading Monitor (DLM) system.

- The 'Sagar Samruddhi' project is a key infrastructure initiative that focuses on enhancing port connectivity and promoting coastal economic development. The programme also looks to transform India's maritime sector and leverage its extensive coastline to drive economic growth.
- Under the Sagar Samruddhi' project the Centre looks to develop a string of coastal economic zones, industrial clusters, and port-led development along the country's coastline. It seeks to improve port infrastructure, connectivity, and logistics to facilitate seamless movement of goods and enhance trade.
- The 'Sagar Samruddhi' monitoring system not only enables the visualization of daily and monthly progress but also allows for monitoring dredger performance and downtime. It provides easily accessible location tracking data, including snapshots of loading, unloading, and idle time. The project is also seen as a part of PM Modi's self-reliance mantra that reinforces the goal of Atmanirbhar Bharat.

3. **RuPay Prepaid Forex card**

➤ **In News:** Recently, the Reserve Bank of India (RBI), in a bid to broaden the scope of RuPay cards has decided to permit banks to issue RuPay Prepaid forex cards to customers and to issue such cards abroad.

➤ **About RuPay card:**

- It is an Indian domestic card scheme conceived and launched by the National Payments Corporation of India (NPCI).
- Its mission is to fulfil the Reserve Bank of India's vision of having a domestic, open-loop and multilateral system of payments in India.
- It works to enable electronic payment at all Indian banks and financial institutions.

➤ **Benefits of RuPay Card**

- Lower cost and affordability: Since the transaction processing will happen domestically, it would lead to a lower cost of clearing and settlement for each transaction. This will make the transaction cost affordable and will drive the usage of cards in the industry.
- Customized product offering: RuPay, being a domestic scheme is committed towards the development of customized product and service offerings for Indian consumers.
- Protection of information related to Indian consumers: Transaction and customer data related to RuPay card transactions will reside in India.

➤ **Key facts about NPCI:**

- It is an umbrella organisation launched in 2008 by the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007.
- It is owned by a consortium of banks, is aimed at creating robust payments and settlement systems.

4. **Agni Prime Missile**

➤ **In News:** Recently, New Generation Ballistic Missile 'Agni Prime' was successfully flight-tested by Defence Research and Development Organisation (DRDO) from Dr APJ Abdul Kalam Island.

➤ **About Agni Prime Missile:**

- It is a short-range ballistic missile that will have a range of 1000 km to 1500 km.
- It is a surface to a surface missile that can carry a payload of around 1,000 Kg or a nuclear warhead.
- It incorporates new propulsion systems and composite rocket motor casings as well as advanced navigation and guidance systems.

➤ **What is a ballistic missile?**

- Ballistic Missiles are launched directly into the upper layers of the earth's atmosphere.
- They travel outside the atmosphere, where the warhead detaches from the missile and falls towards a predetermined target.
- They are rocket-propelled self-guided weapons systems which can carry conventional or nuclear munitions. They can be launched from aircraft, ships and submarines, and land.

5. **Exploration of Coal and Lignite scheme**

➤ **In News:** Recently, the union government of India approved the continuation of the central sector plan 'Exploration of Coal and Lignite scheme' with an estimated expenditure of ₹2,980 crore.

➤ **About Exploration of Coal and Lignite Scheme:**

- Under this scheme, exploration for coal and lignite is conducted in two broad stages: (i) Promotional (Regional) Exploration and (ii) Detailed Exploration in non-Coal India Limited blocks.

- The period for the extension is from 2021-22 to 2025-26.
- Benefits of the scheme
 - ✓ This scheme is required to prove and estimate coal resources available in the country, which helps in preparing detailed project reports to start coal mining.
 - ✓ The geological reports prepared through these explorations are used for auctioning new coal blocks, and the cost is thereafter recovered from successful allocatee.

➤ **What are the types of Coal?**

- Anthracite: It contains the highest amount of carbon out of all coal ranks (86%-97%) and it is used mostly in industrial settings and the metals industry due to its high heat value.
- Lignite: it is lighter in colour than the higher ranks of coal. It has the lowest carbon content out of all the coal ranks (25%-35%) and it has a high moisture content and crumbly texture.
- Bituminous: It has slightly lower carbon content than anthracite (45%-86%)¹. The wide range of carbon content in bituminous coal warrants uses for both electricity and steel production.
- Peat: It is the starting stage of a coal formation which has low calorific value and low carbon content.

6. Antardrishti dashboard

➤ **In News:** Recently, the Reserve Bank of India Governor launched a financial inclusion dashboard named 'Antardrishti'.

➤ **About Antardrishti dashboard:**

- It provides the necessary knowledge to evaluate and track the development of financial inclusion by recording relevant data.
- It will also make it possible to assess the degree of financial exclusion at a local level across the nation so that such places may be addressed.

➤ **What is Financial Inclusion?**

- It aimed to provide access to affordable and appropriate financial products and services, such as savings accounts, credit, insurance, and payment systems.
- The Reserve Bank has been promoting financial inclusion through various policy initiatives.
- To measure the extent of financial inclusion the central bank had constructed the Financial Inclusion (FI) Index in 2021.
- It is based on three dimensions of financial inclusion -- 'Access', 'Usage' and 'Quality'.
- The FI-Index has been conceptualised as a comprehensive index incorporating details of banking, investments, insurance, postal as well as the pension sector in consultation with the government and respective sectoral regulators.
- The index captures information on various aspects of financial inclusion in a single value ranging between 0 and 100, where 0 represents complete financial exclusion and 100 indicates full financial inclusion.

ANSWER WRITING

Q. Explaining the RBI's framework on green deposits, discuss its significance for the investors and environment.

Reserve Bank of India (RBI) came up with a regulatory framework for banks to accept green deposits from customers. Under the new framework, banks that accept green deposits will have to disclose more information on how they invest in these deposits. The framework defines green deposits as interest-bearing deposits received by the regulated entities for a fixed period and the proceeds of which are earmarked for being allocated towards green finance.

Salient features of RBI's framework on green deposits:

- Banks will have to come up with a set of rules or policies approved by their respective Boards that need to be followed while investing in green deposits from customers.
- These rules need to be made public on the banks' websites and banks will have to disclose regular information about the amount of green deposits received, how these deposits were allocated towards various green projects and the impact of such investments on the environment.
- A third party will have to verify the claims made by banks regarding the projects in which the banks invest their green deposits as well as the sustainability credentials of these business projects.
- The RBI has come up with a list of sectors that can be classified as sustainable and thus eligible to receive green deposits. These include renewable energy, waste management, clean transportation, energy efficiency, and afforestation.

- Banks will be barred from investing green deposits in business projects involving fossil fuels, nuclear power, tobacco, etc.

Significance of green deposits for investors:

- Environment-friendly investment option: Depositors who care about the environment may get some satisfaction from investing their money in environmentally sustainable investment products.
- Motivates investors to demonstrate commitment towards climate resilience: Green deposits are essentially deposits only with an additional “green” criteria attached to the use of proceeds raised from the same. Such labelled funds may help them demonstrate their commitment towards climate resilience.
- Helpful in environmental, social and governance (ESG) reporting: ESG disclosure is a form of public reporting by an organization’s management about its performance across a variety of environmental, social, and governance (ESG) issues. Investments in green deposits can help companies and businesses in ESG reporting.

Significance of green deposits for the environment:

- Fighting climate change: Climate change is clearly one of the most pertinent regulatory themes in recent times, as the move to sustainable business practices and energy-efficient technologies needs massive funding. The availability of finance for a move to sustainability has an important role to play in mitigating climate change.
- Can help in achieving Sustainable Development Goals (SDGs): The deposit proceeds are typically used to finance or refinance assets that come under the United Nations Sustainable Development Goals (SDGs), which include energy efficiency, renewable energy, clean transportation, waste management, etc.
- Protects scarce resources: Promoting green finance assists in protecting the country from scarcity of resources. This can be achieved by investing in renewable energy sources such as solar, wind and hydroelectric projects. Green deposits can also be used for projects which encourage energy efficiency in resource utilisation and reduces carbon emissions and greenhouse gases.
- Addresses greenwashing concerns: Greenwashing is when the management within an organization makes false, unsubstantiated, or outright misleading statements or claims about the sustainability of a product or a service, or even about business operations. The new framework addresses this concern and promotes projects which are in a real sense environment friendly.

Green finance is progressively gaining traction in India and the recent framework on green deposits provides a unique opportunity for investors and financial institutions to contribute towards a greener future. This can also help in achieving India’s long-term climate commitment of net zero by 2070.

MCQs

1. With reference to the Pradhan Mantri Krishi Sinchayee Yojana, consider the following statements:
 1. It was launched to improve farm productivity and ensure better utilization of the resources in the country.
 2. The Accelerated Irrigation Benefit Programme is one of the components of the yojana.
 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
2. Consider the following statements regarding the Turkmenistan–Afghanistan–Pakistan–India (TAPI) Pipeline:
 1. It will start from the Galkynysh gas field in Turkmenistan.
 2. The project is being funded by the Asian Development Bank (ADB), which is also acting as transaction adviser for the development.
 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
3. The Reserve Bank of India (RBI) has recently granted its approval for First Loss Default Guarantee (FLDG) framework. Consider the following statements regarding First Loss Default Guarantee (FLDG):
 1. FLDG is a lending model between fintech firms and their partner banks and non-banking finance companies
 2. The bank/NBFC partners lend through the fintech firms but from their books.
 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

4. Consider the following statements regarding Convention on the Conservation of Migratory Species of Wild Animals (CMS):
1. It is an environmental treaty under the aegis of the International Union for Conservation of Nature (IUCN).
 2. It is the only global intergovernmental organisation established exclusively for the conservation and management of terrestrial, aquatic and avian migratory species.
- 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
5. With reference to the Financial Services Institution Bureau, consider the following statements:
1. It is set up under the Department of Financial Services (DFI).
 2. It is entrusted with making recommendations for the appointment of full-time directors of state-run financial services institutions.
- 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
6. With reference to the State Food Safety Index, consider the following statements:
1. It is released by the Food Safety and Standards Authority of India.
 2. It considers food testing infrastructure and Surveillance as one of the parameters for this index.
- 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
7. Antardrishti dashboard, which was recently seen in the news, is launched by which one of the following organisations?
- a) NITI Aayog
b) Reserve Bank of India
c) Department of Financial Services
d) None of the above
8. Kakhovka Dam, which was recently seen in the news, is built on which one of the following rivers?
- a) Dnieper**
b) Rhine
c) Mekong
d) None of the above
9. Consider the following statements regarding Pension Fund Regulatory and Development Authority (PFRDA):
1. It is a statutory regulatory body set up under PFRDA Act.
 2. It comes under the jurisdiction of the Ministry of Finance.
- 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
10. The Reserve Bank recently expanded the trade receivables discounting system (TReDS) by permitting insurance companies to function as participants. Consider the following statements regarding the Trade Receivables Discounting System (TReDS) platform:
1. Only MSMEs can participate as sellers in TReDS.
 2. Only Government Departments and PSUs can participate as buyers in TReDS.
- 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