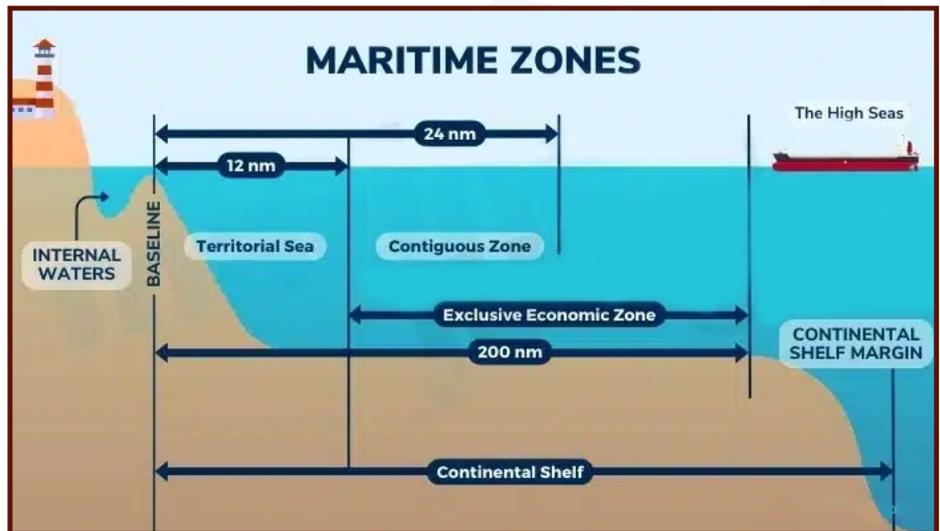


Ministry of Mines Publishes Draft Rules for Offshore Mineral Blocks Auction for Public Consultation

- To enforce the **Offshore Areas Mineral (Development & Regulation) Act, 2002 (amended in 2023)** or OAMDR Act, the ministry has released two draft rules.
 - ⊕ **Offshore Areas Mineral Auction Rules:** Outlines provisions related to auctioning production leases.
 - ⊕ **Offshore Areas Existence of Mineral Resources Rules:** Establishes norms for exploring minerals and deposits.
- **OAMDR Act:** Provides for **development and regulation of mineral resources** in territorial waters, continental shelf, exclusive economic zones and other maritime zones of India. The **2023 Amendment Act:**
 - ⊕ **Introduces** transparent and non-discretionary **auction process** as for allocation of operating rights in offshore areas.
 - ⊕ **Establishes an Offshore Areas Mineral Trust** to support mining-affected individuals, promote increased exploration, and provide relief in the event of disasters.
 - ⊕ Provides for a **uniform lease period of 50 years** and eliminates discretionary renewals.
- **India's maritime zone mineral resources:**
 - ⊕ **Lime mud** within the EEZ off **Gujarat and Maharashtra** coasts.
 - ⊕ Construction-grade **sand** off the **Kerala** coast.
 - ⊕ **Heavy mineral placers** in the inner-shelf and mid-shelf off **Odisha, Andhra Pradesh, Kerala, Tamil Nadu and Maharashtra**.
 - ⊕ **Phosphorite** in **Eastern and Western continental margins**.
 - ⊕ **Polymetallic Ferromanganese (Fe-Mn) nodules and crusts** in **Andaman Sea and Lakshadweep Sea**.



Russia and USA agree to continue joint International Space Station (ISS) flights until 2025

- **International Space Station (ISS)** is a large spacecraft around Earth. It serves as a home where crews of astronauts and cosmonauts live.
- **European countries** (represented by ESA), **United States** (NASA), **Japan** (JAXA), **Canada** (CSA) and **Russia** (Roscosmos) are key partners for ISS.
- In 1998, ISS's first module named **Zarya** (translates to "sunrise") was launched.
- **Key Features:**
 - ⊕ ISS weighs almost **400 tonnes** and covers an area as big as a football pitch.
 - ◆ It would have been impossible to build the Space Station on Earth and then launch it into space in one go.
 - ◆ So, ISS was taken into **space piece-by-piece and gradually built-in orbit**. This assembly required more than 40 missions.
 - ⊕ It has a **unique science laboratory**.
 - ⊕ It **orbits Earth** at an average altitude of approximately **250 miles** in every **90 minutes**.
- **Significance of ISS**
 - ⊕ It provides **microgravity environment**.
 - ◆ It helps in **critical research in fluids, combustion, life support systems and radiation environment** that could not be done anywhere else.
 - ⊕ It also plays a critical role in **human space exploration**.

NGT issued notices to 24 states and four Union Territories over Arsenic and fluoride in groundwater

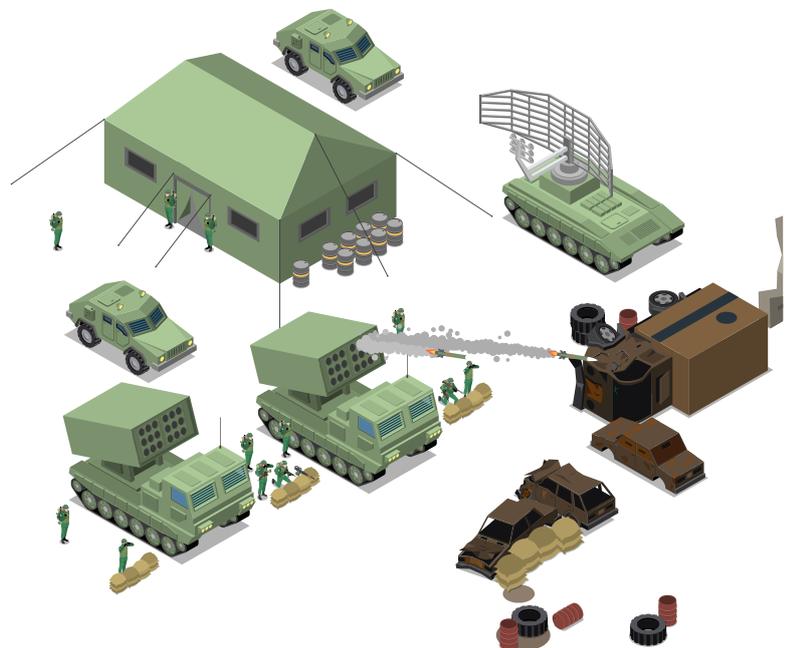
- Major factors for mineral-contaminated groundwater could be categorised as:
 - ⊕ **Anthropogenic:** Activities like **industries, sewage, waste landfills, mining**, etc
 - ⊕ **Geogenic:** Natural causes mainly through rock-water interaction.
- **Concern:** Presence of mineral in drinking water beyond permissible limit may cause health hazard like:
 - ⊕ **Nitrate** can cause **methaemoglobinaemia** or **blue baby syndrome**, decreased ability of blood to carry oxygen.
 - ⊕ **Arsenic** can cause **cancers of the bladder, kidney and lung**, and **diseases** of blood vessels of legs and feet.
 - ⊕ **Fluoride** can cause dental **fluorosis, skeletal fluorosis, arthritis, bone damage, osteoporosis, etc.**
 - ⊕ **High iron** can cause **diabetes, hemochromatosis**, or can also **damage the liver, pancreas, and heart.**
- **Initiatives taken**
 - ⊕ **Ground water quality monitoring program** by **Central Ground Water Board (CGWB)** for occurrence of contaminants such as **Iron, Salinity and Nitrate** beyond permissible limits.
 - ⊕ **Jal Jeevan Mission (JJM)** to provide potable tap water supply of prescribed quality to every rural household in the country by 2024.
 - ⊕ **Water (Prevention & Control) Act, 1974** and the **Environment (Protection) Act, 1986.**

Regional distribution of mineral groundwater contaminants

- **Nitrate:** High Nitrate concentration has been found in almost all hydrogeological formations.
- **Arsenic:** Bihar, Haryana, Uttar Pradesh, Jharkhand, Assam etc.
- **Fluoride:** Andhra Pradesh, Gujarat, Assam, Chhattisgarh, Rajasthan, Tamil Nadu, Karnataka
- **Iron:** Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, J&K, Jharkhand, etc.

India and Russia sign Protocol on Consultations for the next four years (2024-2028)

- Protocol will foster progress in **military and economic cooperation, energy trade, connectivity, people-to-people exchanges, etc.**
- **India- Russia relations**
 - ⊕ **Political:** Strategic Partnership was elevated to level of **"Special and Privileged Strategic Partnership"** in 2010.
 - ⊕ **Defence:** Russia is **India's top military supplier** accounting for **45% of total defense imports.**
 - ◆ Cooperation is guided by **Agreement on the Programme for Military Technical Cooperation** for 2021-2031.
 - ◆ Inaugural **2+2 Dialogue** (chaired by Defence Ministers and Foreign Ministers) was held in December 2021.
 - ◆ licensed production of **T-90 tanks and Su-30-MKI aircraft**, and supply of **MiG-29-K aircraft and Kamov-31, etc.** are major ongoing bilateral projects.
 - ◆ **Military collaboration** has shifted from a buyer-seller dynamic to **joint research, design, and production.**
 - » For example, production of **Brahmos cruise missile**, establishment of the **Indo- Russia Rifles Private Limited (IRRPL)**, production of **AK-203 rifles** (under "Make in India" initiative).
 - ◆ **INDRA** is a tri-service bilateral **military exercise.**
 - **Economic:** Bilateral investments surpassed previous target of \$30 billion in 2018, leading to revised target of **\$50 billion by 2025.**
 - **Technological:** Cooperation in Kudankulam Nuclear Power Plant (KKNPP), **GAGANYAAN mission, etc.**
 - ⊕ **Other areas**
 - ◆ Cooperation in **multilateral forum** like **BRICS, SCO, RIC, UNSC.**
 - ◆ Exploring ways for **Rupee-Rouble trade.**



Reserve Bank of India (RBI) releases 2023 list of Domestic Systemically Important Banks (D-SIBs)

- **D-SIBs** are systemically important due to their **size, cross-jurisdictional activities, complexity** and lack of substitute and interconnection.
 - ⊖ It also means that **the bank is too big to fail**.
 - ◆ If DSBs fail, there would be significant disruption to the essential services to the banking system and the overall economy.
- **Declaration/Regulation of D-SIBs:**
 - ⊖ It is based on the **D-SIBs Framework of RBI** which was released in **2014**.
 - ◆ This Framework is based on **Basel Committee on Banking Supervision's (BCBS's)** framework for dealing with **D-SIBs**.
 - ⊖ Banks are placed in **5 buckets**.
 - ◆ As per latest list, India's **D-SIB's** are **State Bank of India** (bucket 4) and **HDFC Bank** (bucket 2), **ICICI Bank** (bucket 1).
 - ⊖ **D-SIBs** have to maintain **Additional Common Equity Tier 1 (CET1)** requirement as a percentage of **Risk Weighted Assets (RWAs)**.
 - ⊖ Bucket 1 banks have to maintain lowest **CET1 i.e. 0.20%** and **Bucket 5** have to maintain highest **CET i.e. 1%**
- In case a **foreign bank** having branch presence in India is a **Global Systemically Important Bank (G-SIB)**, it has to maintain additional CET1 capital surcharge.
 - ⊖ **Financial Stability Board (FSB)** releases the list of **G-SIBs**.

RBI releases Financial Stability Report (FSR) 2023

- FSR (biannual report) is based on the assessment of the Sub-Committee of the **Financial Stability and Development Council (FSDC)**.
- FSR highlighted that **resilience of the non-banking financial companies (NBFCs)** sector has improved.
 - ⊖ **Capital-to-risk weighted assets ratio (CRAR)** has improved.
 - ⊖ **Gross Non-Performing Asset (GNPA)** ratio is on downward trajectory.
 - ⊖ **Credit growth** in the post-pandemic period has accelerated.
- **About NBFC:**
 - ⊖ It is a company registered under the **Companies Act, 1956**.
 - ◆ These are engaged in the business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities etc.
 - ⊖ It **does not include institutions** with principal business as agriculture activity, industrial activity, trading and purchase or sale of immovable properties.
- **Regulation:** Primarily, NBFCs are regulated and governed by RBI. However, some NBFCs are regulated by SEBI, IRDAI etc.
- **NBFCs activities are akin to that of banks;** however there are a **few differences** like NBFCs:
 - ⊖ **Cannot accept demand deposits.**
 - ⊖ **Do not form part of payment and settlement system** and cannot issue cheques drawn on itself.
 - ⊖ **Deposit insurance facility is not available** to depositors of NBFCs.
- **Significance:** It play key role in bridging the gap between traditional banks and customers, especially in areas where the reach of traditional banks is limited.

About FSDC

- It aims to strengthen and institutionalizes the **mechanism for maintaining financial stability**, enhancing inter-regulatory coordination and promoting financial sector development.
- **Finance Minister is ex-officio chairman** of FSDC.
- It was set up in 2010.

Also in News



Neora Valley National Park

- Recently, **Royal Bengal Tiger** has been seen in the **Neora Valley National Park (West Bengal)**.
 - ⊖ This has confirmed the presence of the big cats at an altitude of 10,509 feet above sea level.
- **About National Park**
 - ⊖ Lies in the catchment of the Neora River and is part of a **global biodiversity hotspot** located in the **Eastern Himalayas**.
 - ⊖ Declared as an **Important Bird Area**.
 - ⊖ Links the **Pangolakha Wildlife Sanctuary (Sikkim)** and the **Toorsa Strict Reserve (Bhutan)**.
 - ⊖ **Forest Type:** Subtropical Mixed Broadleaf Forest, Lower Temperate Evergreen Forest, Upper Temperate Mixed Broadleaf Forest and Rhododendron Forest.
 - ⊖ **Key Fauna:** Red Panda, Himalayan Tahr, Himalayan Black Bear, etc.



Near Infrared Light

- Researchers have found that **Near-infrared light ruptures cancerous cells** with high effectiveness.
 - ⊖ **Near-infrared** has shown high effectiveness than **visible rays** because of its higher penetrative power.
 - ⊖ However, researcher raised concern that its high penetrative power may cause damage to vital tissues.
- **About Near Infrared Rays:**
 - ⊖ A portion of radiation that is just beyond the **visible Electromagnetic (EM) Spectrum** is referred to as **near-infrared**.
 - ◆ It is part of the **Infrared Light (IR)**.
 - ⊖ **Other Applications:** Used in by satellites to observe vegetation and soil composition.
- **EM spectrum** also consists of **Radio waves, Microwaves, Visible, Ultraviolet light, X-rays and gamma-rays** (arranged in low to high energy or frequency).



Kilonova Explosion

- A team of researchers have developed a method to model the **kilonova explosion**.
- **About Kilonova Explosion:**
 - ⊕ A **kilonova** is a bright blast of **electromagnetic radiation** that happens when **two neutron stars or a neutron star and a stellar-mass black hole** collide and merge.
 - ⊕ A **neutron star** is formed **when a star having a mass more than 1.44 times that of the Sun** (as per **Chandrasekhar limit**) blows off its gaseous envelope in a **supernova explosion**
 - ◆ They are among the **densest objects in the cosmos**.



Regulation of OTTs

- Recently Union Minister for communications and IT clarified that **OTT platform will not be regulated** under the **Telecommunications Act 2023**.
 - ⊕ Telecommunications act, 2023 amends and consolidate **law relating to development, expansion and operation of telecommunication services and network**.
- Minister also clarified that the **Act does not empower either government or service providers to break encryption** of messages exchanged via OTT platforms.
 - ⊕ OTT platforms are regulated by **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021** under the **Ministry of Information and Broadcasting**.



RoDTEP Scheme

- **Ministry of Commerce & Industry** has decided to extend benefits under the **Remissions of Duties and Taxes on Export Products (RoDTEP) scheme**.
 - ⊕ Now, it will also cover sectors like **gems and jewellery, pharma, leather, textiles and handicrafts**, Commerce and Industry Minister.
- **About Scheme:**
 - ⊕ Introduced under **Foreign Trade Policy 2015-20** (effective since 2021).
 - ⊕ **Objective:** Neutralize the **taxes and duties** suffered on exported goods which are otherwise **not credited or remitted or refunded**.
 - ◆ It provides a **mechanism for reimbursement** of taxes, duties, and levies.
 - ⊕ It helps in **promoting exports**.



TDS on e-commerce

- **Central Board of Direct Taxes** clarified that provisions for tax deducted at source (TDS) by e-commerce operators **will be applicable** to multiple e-commerce operator model framework, such as **ONDC**.
 - ⊕ **Income-tax Act, 1961** mandates **e-commerce operators** to deduct **1% TDS** from total sale amount of goods or services **facilitated through their digital platform**.
- ONDC is aimed at **promoting open networks** for all aspects of **exchange of goods and services over digital networks**.
 - ⊕ It was incorporated under **Section 8 of the Companies Act in 2021**.
 - ⊕ **Quality Council of India** and **Protean eGov Technologies Limited** are its **founding members**.



Kuril islands

- **Earthquake** of magnitude 6.3 on the Richter scale occurred in Kuril Islands.
- **Kuril Islands** is an archipelago that extends from **Kamchatka Peninsula (Russia) to Hokkaido Island (Japan)**.
 - ⊕ It separates the **Sea of Okhotsk from Pacific Ocean**.
 - ⊕ Many of its islands are **geologically active**.
 - ⊕ **Russia and Japan both assert sovereignty over four islands** (referred to as the **Northern Territories** in Japan and **South Kurils** in Russia).



Reservation for PoWDS

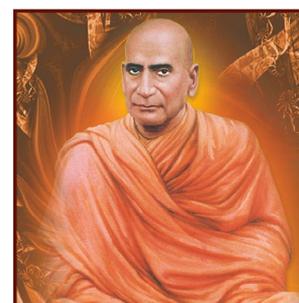
- Government ordered that **Persons with Disabilities (PoWDS)** should be **eligible for reservation in promotions up to the lowest level of Group A posts in the Central government**.
- Effective from **June 30, 2016**, this decision follows a **Supreme Court ruling** in the **Rajeev Kumar Gupta Vs Union of India** case.
 - ⊕ **Section 34** of the **Rights of PoWDS 2016** mandates a **minimum of 4% reservation** for persons with benchmark disabilities in **Government establishments**.
 - ⊕ **Section 32** of the Act ensures **not less than 5% reservation** for such individuals in **all Government and aided higher education institutions**.

Personality in News



Swami Shraddhanand (1856 - 1926)

- **Early life**
 - ⊕ Born in Punjab's **Jalandhar**, **Munshi Ram**, popularly known as **Swami Shraddhanand**, was a **prominent social reformer**.
 - ⊕ In 1882, he embraced **Arya Samaj** and took **sanyasa** in 1917.
- **Contribution**
 - ⊕ Following a **schism in Arya Samaj**, a group led by him established a **Gurukula at Haridwar in 1902**.
 - ⊕ Participated in **anti-Rowlatt Act**.
 - ⊕ Organised the **Delhi Suddhar Sabha** for upliftment of the oppressed class.
 - ⊕ Participated in **Non-cooperation movement** but resigned due to **disagreement with Gandhi ji**.
 - ⊕ Founded 2 dailies named **Urdu Tej and the Hindi Arjun**.
- **Values:** Patriotism, empathy, tolerance, etc.



Swami Shraddhanand
(1856 - 1926)

