



DAILY CURRENT AFFAIRS

Time: 45 min

Date: 21-10-2023

Procedure for raising the questions in Lok Sabha

Syllabus: GS2/Indian Polity

In News

- Trinamool Congress MP announced that she welcomes answering questions from the Central Bureau of Investigation (CBI) and the Lok Sabha Ethics Committee pertaining to 'cash for query' allegations against her.

About the Procedure

- The procedure for raising questions is governed by **Rules 32 to 54 of the "Rules of Procedure and Conduct of Business in Lok Sabha"** and **Directions 10 to 18 of the "Directions by the Speaker, Lok Sabha"**.
- A Member **gives notice in writing** addressed to the Secretary-General, Lok Sabha, intimating one's intention to ask a question.
 - A Member is allowed to give **not more than five notices of questions, both for oral and written answers**, in all, for any day.
- The normal period of notice of a question is not less than **fifteen clear days**.
- **Exception:** However, the **Speaker can relax the required minimum notice period** of fifteen clear days to protect the interest of the Members.
 - A Short Notice Question can be asked with a notice **shorter than ten days** but the Member has to state briefly the **reasons** for asking the question at such short notice.

Questions that can't be Raised

- Questions **shall not** ordinarily contain **more than 150 words**.
- They shouldn't contain **arguments, defamatory statements**, refer to the character or conduct of any person except in their official or public capacity.
- Queries raising **larger issues of policy are not allowed**, for it is not possible to enunciate policies within the limited compass of an answer to a question.

- A question isn't admissible if its **subject matter is pending judgment** before any court of law or any other tribunal or body set up under law or is under consideration before a Parliamentary Committee.
- A query also can't seek information on matters **which may weaken the unity and integrity of the country**.

What is Question Hour?

- Generally, the **first hour of a sitting** of the Lok Sabha is devoted to Questions and that hour is called the Question Hour.
- It is during the Question Hour that Members can ask questions on every aspect **of administration and governmental activity**
- MPs raise questions during **Question Hour** to hold the **government accountable for its policies and actions**.

Types of Questions

- **Questions are of four types:** Starred, Unstarred, Short Notice Questions and Questions addressed to Private Members.
 - **A Starred Question** is one to which a Member **desires an oral answer** in the House and which is distinguished by an asterisk mark (*), **supplementary questions can be asked thereon**.
 - **An Unstarred Question** is one which is **not called for oral answer** in the House and on which **no supplementary questions** can consequently be asked.
 - **A Short Notice Question** is one which relates to a **matter of urgent public importance** and can be asked with a shorter notice than the period of notice prescribed for an ordinary question.
 - **The Question to a Private Member** is addressed to the Member herself/himself and it is asked when the subject-matter of it **pertains to any Bill, Resolution or any matter relating to the Business of the House** for which that Member is responsible.

Source: [IE](#)

Use of AI in Defence Sector

Syllabus: GS3/Science and Technology/Internal Security

In News

- Artificial Intelligence is **shaping India's defense landscape** providing a potential advantage in operations while also enhancing border security.

What is Artificial Intelligence?

- It is a stream of study that involves **creation of advanced algorithms** that can mimic the human brain.
- AI is often termed as a technology but instead **it is an enabler to a constellation of technologies.**
- **Applicability:** AI is applicable in almost every sector from the service sector to healthcare, agriculture, climate change, and the financial sector.

How is the Indian Army using AI?

- AI-based **real-time monitoring software** has been deployed for generating intelligence in counter terrorist operations.
- The army has also begun leveraging **hi-tech military simulator technologies to train** its first batch of recruits, a trend that is likely to mark its prevalence across military training in the near future.
- The Defense Minister launched **75 newly-developed AI technologies during the first-ever “AI in Defense”** symposium where products like robotics, automation tools and intelligence surveillance were on display.
- The United States and India have also **agreed to launch an inaugural Defense Artificial Intelligence Dialogue** and expand their joint cyber training.
- At Aero India, one of the largest air shows in Asia, an **AI-based surveillance software called AGNI-D** was unveiled for surveillance and thwarting transgression.
 - It is deployed in the eastern Ladakh sector, a region of strategic importance due to its closeness to China.

Use of AI Around the Globe

- Currently, **more than 50 countries** have published their National AI strategies to harness the benefits of this technology while addressing the challenges and risks associated with its fair use and governance.
- **Canada and Finland** were among the first few countries to come out with their National AI strategies in 2017.
- **Major Powers like the United States and China** are investing big time in AI-enabled systems to enable them to maintain military lead.

Advantages of Use of AI in Defence

- Using AI-powered drones and robots to patrol borders provides **increased coverage** and **reduces the need for human intervention** in dangerous situations.
- The use of AI in the cyber domain has led to the **automation of various tasks** that are available for both offensive and defensive purposes.
- The effective use of AI in applications in rockets, missiles, aircraft carriers, and naval assets has made AI an **essential factor in national security architecture.**

- The dual use of AI has given **weak states and non-state actors more visibility** and need to ramp up their capabilities.

Concerns with use of AI in Defence

- Due to the dual use of AI (both military and civil applications), there is **higher and easy accessibility of AI-based tools to non-state actors**, which has further made it challenging to control the flow of technology.
- AI's extensive influence and success have the capability to **alter the current power dynamics between nations**.
 - Furthermore, **underfunded countries in AI may risk weakening their future military and economic dominance**.
- Technology giants have control over the resources, which can easily **lead to the weaponization of AI**.
 - Authoritative nations like China are investing very heavily in such technologies and are deploying it against their own populations and even exporting such mass surveillance technologies to other countries.
- There is a **lack of international regulation** on developing and deploying AI-enabled weapon systems.
- The question of **accountability and liability** is a discerning factor in cases where AI-enabled systems malfunction, where human lives are at stake.

Way Ahead

- There is an increasing debate on global platforms for **devising regulatory frameworks and common standards**, which is the right direction to make optimum use of advances in emerging technologies like AI.
- Creating a supportive AI ecosystem in India will depend on **investments in critical infrastructure**, tapping the **private sector innovation ecosystem** and capitalising on the developments made by the leading nations in AI.
- **Indigenous development** will be a key in adding value to Indian defence systems, and so will the multilateral and bilateral partnerships towards adopting AI.

Source: [IE](#)

Politics of a caste census, its impact on secularism

Syllabus: GS2/Features of Indian Constitution

In News:

Recent caste census data presented by the Bihar government has triggered a debate on the need for caste census at national level and its impact on secularism in India.

About the caste census

- Caste census means inclusion of caste-wise tabulation of India's population in the Census exercise.
- Data on Scheduled Castes and Scheduled Tribes have been published in every Census conducted in independent India between 1951 and 2011, but not for other castes. Prior to that, caste information was included in every Census until 1931.

Arguments in favour of caste census in India

- **Promoting Social Justice:** Scholars argue that a caste-based census is necessary to determine the socio-economic status and representation of different caste groups accurately.
- **Fair Political Representation:** Some groups argue that a caste-based census would help in the delimitation of constituencies for political representation more effectively. They claim that it would ensure better representation for historically marginalized communities.
- **Judicious Resource Distribution:** A caste-based census could also aid in targeted resource allocation for education, healthcare, and other development programs based upon evidence-based policy framework.
- **Promoting Social Mobility:** Through social upliftment of the historically marginalized castes in society.

Arguments Against it

- **Opening Pandora's box:** Several scholars have raised concerns that it will raise more claims and counterclaims relating to positions and power – about who got what, when and how.
- **Enduring source for divisive politics:** It has the potential to start a never-ending process of social engineering, upsetting societal unity, which scholars say has been stitched together by the ruling dispensation after decades of hard work through intense grass-root campaigns.
- **Fear of Perpetuating Caste Divisions:** Critics argue that focusing on caste-based data can reinforce and perpetuate caste divisions in society. They believe that emphasizing caste identities in official records can hinder social integration and promote discrimination

- **Polarization vs Secularism debate:** Using religious polarization politics, some forces are on the verge of realizing their political dream of majoritarian unity, which appeared almost utopian in the mid-1970s. Secular political groups, on the other hand, see it as the most potent weapon among others for containing the growing electoral influence of majoritarian forces.
- **Secularism and Equality:** India's constitution emphasizes secularism and the principle of equality for all citizens. Some experts argue that collecting caste-based data could be seen as contrary to these principles, as it might be interpreted as the state endorsing or recognizing caste distinctions.
- **Data Accuracy:** There are concerns about the accuracy of collecting caste-based data, as some people may be reluctant to disclose their caste or may belong to groups that are not officially recognized. This could lead to incomplete or unreliable data.

Way Forward

- The issue of conducting a caste census in India is a complex and sensitive one, with diverse opinions and concerns. Moving forward with a caste census would require careful consideration and planning like:
 - Engage in extensive consultation with diverse stakeholders.
 - Ensuring data accuracy, privacy safeguards, and transparency.
 - Educating the public about the census's purpose and benefits.
 - Striving for political consensus and reviewing the process & policy impact periodically.
 - Integrating socio-economic data for a comprehensive policy framework.

Source: [The Hindu](#)

Issues associated with the appointments and transfers in judiciary

Context:

The Supreme Court said it was both “troublesome” and “very disturbing” that the government delayed some judicial appointments and transfers in High Courts while certain “picked and chosen” names were cleared in hours.

About the procedure

- The process of appointing judges to the higher judiciary in India is governed by the [collegium system](#)

- It's worth noting that the term "collegium" is not explicitly specified in the Indian Constitution; instead, it has been established and defined through legal precedents and court rulings.
- The [collegium](#) is responsible for making decisions regarding the selection, promotion, and relocation of judges.
- **Constitutional Provisions:** Judges of the Supreme Court and High Courts are appointed by the President under **Articles 124(2) and 217** of the Constitution.
 - **Article 124** says: "Every Judge of the Supreme Court shall be appointed by the **President** by warrant under his hand and seal after consultation with such Judges of the Supreme Court and of the High Courts in the States as he may deem necessary.
 - **Article 217:** "Every Judge of a High Court shall be appointed by the **President** by warrant under his hand and seal after consultation with the Chief Justice of India, the Governor of the State, and, in the case of appointment of a Judge other than the Chief Justice, the Chief Justice of the High Court."

Issues and Concerns

- The transfers of some High Court judges were stalled for months together by the government.
 - The Supreme Court has expressed concerns about a significant backlog of 70 recommendations from High Court Collegiums awaiting government approval for over a period of 10 months.
 - This prolonged delay in the approval process has resulted in a loss of legal talent within the Judiciary. Potential candidates are retracting their candidacies due to the government's inaction.
- The government's practice of segregating names from lists recommended by the Collegium is a matter of serious concern.
 - Despite the Collegium's explicit disapproval of this practice, the government has continued to segregate names, leading to embarrassment and opposition against the Collegium's decisions.
- **Appointment Backlog:** The substantial backlog of recommendations from High Court Collegiums has resulted in numerous judicial positions remaining vacant throughout the country.

Suggestions and Way Ahead

- To address the pressing issues surrounding judicial appointments and alleviate the substantial backlog of vacant positions, it is imperative for the government to take decisive action.
- First and foremost, expediting the processing of pending High Court Collegium recommendations is paramount, enabling the prompt filling of judicial vacancies and ensuring a more efficient judiciary.

Standards & Labelling Programme for solar panels

Syllabus: GS3/Developments in Science and Technology/Conservation

News:

The Union Minister for Power and New & Renewable Energy has recently launched a **Standards & Labelling Programme for solar panels** in New Delhi.

About the Programme

- It is **prepared by the Bureau of Energy Efficiency (BEE) for PV modules from January 1, 2024 till December 31, 2025**. For this period, there shall be **no labelling fee** as well.
- The programme is **voluntary in the initial two years** and it will be made compulsory after that.
- It will **make it easier for citizens to make an informed and judicious decision** while purchasing and deploying solar photovoltaic modules, known commonly as solar panels.

Star and Labelling Scheme:

- **Launched:** May 2006.
- **Objective:** To help consumers make an informed choice about various energy-consuming appliances, in terms of energy savings, that would result based on each appliance's energy efficiency performance.
- **Star Labelled Appliances:** The program was launched in 2006 and is presently invoked for **34 equipment/appliances**.
 - The first 11 appliances have been notified under **mandatory labeling** while the others are presently under the **voluntary labeling** phase.

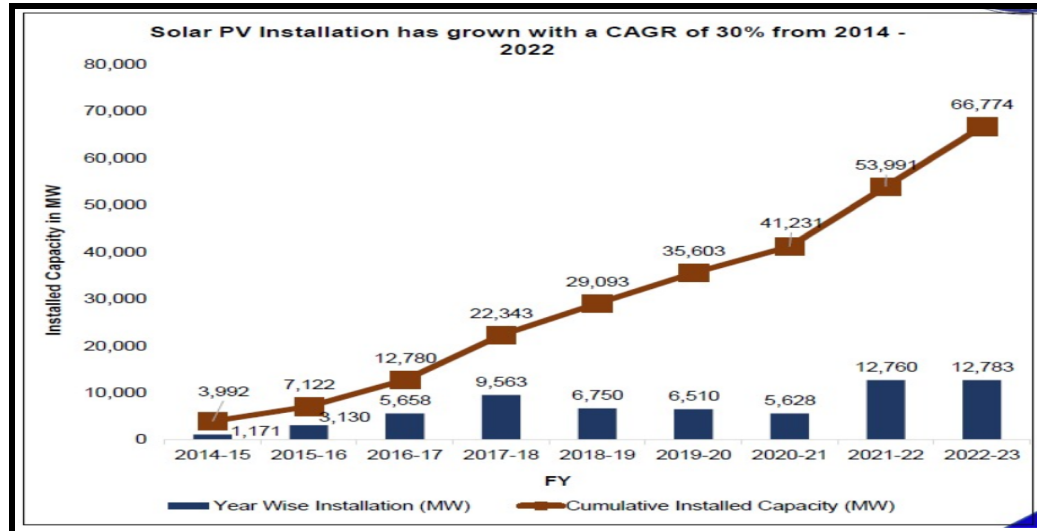
Mandatory Appliances -		Voluntary Appliances -	
Sr.No.	Equipments Name	Sr. No.	Equipments Name
1	Frost Free Refrigerator	1	Computer
2	Stationary Storage Type Electric Water Heater	2	Domestic Gas Stove
3	Colour Television	3	General Purpose Industrial Motor
4	Room Air Conditioner (Variable Speed)	4	Submersible Pump Set
5	TFL	5	Washing Machine (Semi/Top Load/Front Load)
6	LED LAMPS	6	Ballast
7	Room Air Conditioner (Fixed Speed)	7	Solid State Inverter
8	RAC (Cassette, Floor Standing Tower, Ceiling, Corner AC)	8	Office Automation Products
9	Distribution Transformer	9	Diesel Engine Driven MonosetPumps for Agricultural Purposes
10	Direct Cool Refrigerator	10	Diesel Generator Set
11	Ceiling Fan	11	Chillers
		12	Microwave Oven
		13	Solar Water Heater
		14	Deep Freezers
		15	Light Commercial AC Fixed Speed
		16	Ultra-High Definition (UHD) Televisions
		17	Air Compressors
		18	Tyres/Tires
		19	High Energy Li-Battery
		20	Table Fan / Wall Mounted Fan
		21	Pedestal Fan
		22	Induction Hob
		23	Side by Side Refrigerator

Significance:

- The formulation of performance standards will **enable customers to be better aware of the cost and energy savings** from using solar panels.
- It will **enable the retail consumer to make the right choice**, by enabling him or her to better differentiate among different models of solar panels which at present look alike.
- The programme will also **bring in product differentiation**, to a market where the products are fully commoditized as of now.
- This also contributes to the **government's larger goal of enhancing the share of renewable energy and reducing emission intensity of GDP by 45% by 2030.**
- Star enabling of solar panels **will reduce carbon dioxide emissions by 30 million tonnes per annum by 2030.**

Growth of Solar Panels, its efficiency and impact:

- The growth of Solar Panels has been exponential, another **200 GW of solar panels to be added between 2023 and 2030**, both from ground-mounted and solar rooftops.



- **Efficiency** :It is expected that the **Solar PV module efficiency will enhance by 2%** over its existing levels.
 - Owing to performance improvement, the **electricity generation** is expected to increase by **33GWh/year** and this will offset **~27,000 tons of CO2 emission per annum**.
- **Impact**: On a typical 10 square-metre roof area, a **progression from 1-Star to 2-Star solar panel will result in additional electricity generation of around 12%**, while the increase as compared to 1-Star solar panel can be as high as **29% - 35%** for 4-Star and 5-Star panels.

Source:[PIB](#)

Microalgae are adapting to climate

Syllabus: GS3/Conservation of Environment

News:

According to a new study, Microalgae appear to rely on a **unique strategy to cope with global warming**.

About Microalgae

- Microalgae are unicellular aquatic microorganisms with over 50,000 classified species.
- Some notable examples include Nostoc commune, Arthrospira platensis, Aphanizomenon flosaquae, Chlorella vulgaris and Chlorella pyrenoidosa.
- It forms the **base of the food chain in the ocean and captures carbon dioxide** from the atmosphere.

Key Findings of recent study

- **Global warming** is increasing drought on land and the same thing happens in the ocean: **The warmer the surface water gets, the lower are the nutrients in these surface water layers.**
 - There is **less mixing between the surface waters and nutrient-rich deeper waters as the oceans warm.** So nutrients become scarce at the surface, **impacting the primary producers such as microalgae** that are present in the top layer.
 - **Algae starve and, therefore, produce less food and capture less carbon dioxide.**
- **Role of rhodopsins:** Researchers cloned rhodopsins in the lab and confirmed that they capture light to generate energy.
 - They also **tested the abundances of rhodopsin transcripts** (a molecule of RNA that contains genetic information copied from deoxyribonucleic acid or DNA).
 - Rhodopsins were found to be **more concentrated in low latitudes**, where there is less mixing of ocean waters and lower concentrations of nutrients, **including dissolved iron.**
- **Role of iron:** For algae to produce food and to remove carbon dioxide from the atmosphere, they need sunlight. **To harness sunlight, the microalgae require a lot of iron.**
 - However, **35 percent of the surface of the ocean does not have enough iron** to support the growth of algae. In the deficiency of iron, rhodopsin plays an important role.

Significance of the study:

- These findings, according to the authors, **have the potential to reduce the negative effects of changing environmental conditions**, such as ocean warming and even the reduction in the productivity of crops.
- The same mechanism could be deployed **to enhance the activity of microbes that cannot use light, such as yeast.**
- They can modify them so that they can use light for growth, which is **desirable in biotechnology, such as the production of insulin, antibiotics, enzymes, antivirals and even biofuel.**

Do you know ?

- As climate change reduces the availability of nutrients in the sea, marine microalgae or eukaryotic phytoplankton fire up a protein called **rhodopsin.**
- It is related to the protein in the human eye responsible for vision in dim light.

- This light-responsive protein is helping the microalgae flourish with the help of sunlight in place of traditional chlorophyll.
- Microbial rhodopsins are major light capturers in the ocean.
 - They may absorb as much light as chlorophyll-based photosynthesis in the sea, which also captures light to generate energy and food

Source:[DTE](#)

Facts in News

Best Tourism Villages 2023.

Syllabus :Current Events of national and international importance

In News

Dhordo village in Kutch district of Gujarat has gained global recognition as one of the Best Tourism Villages .

About Best Tourism Village

- It was launched in 2021 by the United Nations World Tourism Organization(**UNWTO**) as part of the **UNWTO Tourism for Rural Development Programme**.
 - The Programme works to foster development and inclusion in rural areas, combat depopulation, advance innovation and value chain integration through tourism and encourage sustainable practices.
- The accolade recognizes villages that are leading the way in nurturing rural areas and preserving landscapes, cultural diversity, local values, and culinary traditions.

Criteria

- **The villages are evaluated under nine key areas:** Cultural and Natural Resources
 - Promotion and Conservation of Cultural Resources,Economic Sustainability,Social Sustainability,Environmental Sustainability,Tourism Development and Value Chain Integration,Governance and Prioritization of Tourism,Infrastructure and Connectivity,Health, Safety, and Security

Source:[News on air](#)

Mehrauli Archaeological Park

Syllabus :GS 1/Indian Architecture

In News

A revamped Mehrauli Archaeological Park was unveiled to the public recently .

About Mehrauli Archaeological Park

- It is spread over 200 acres and is adjacent to Qutub Minar, a [UNESCO World Heritage Site](#).
- It is home to 55 historic structures built by various empires – including the Khaljis, Tughlaqs, Lodhis, Mughals, and the British – and many have now been revamped.
- These include the Jamali Kamali Mosque, Metcalfe House, Rajon ki Baoli, as well as the tombs of Mamluk king Ghiyas-ud-din Balban and Mughal governor Shah Quli Khan.

Source:[TH](#)

Meri Maati, Mera Desh campaign

Syllabus :GS 2/Polity and Governance

In News

The Indian Railways will operate special trains to transport volunteers of Meri Maati, Mera Desh campaign carrying mitti (soil) from State capitals and other major stations across the country to reach New Delhi.

About Meri Maati, Mera Desh campaign

- "Meri Maati Mera Desh" [My soil, my country] campaign is envisaged from 9th August 2023 as a culminating event of 'Azadi Ka Amrit Mahotsav'.
- It is a tribute to the **Veers and Veeranganas** who have made the supreme sacrifice for the country.
- It is being organised by **the Ministry of Culture**.
- It comprises many activities and ceremonies conducted across the country at Panchayat/Village, Block, Urban Local Body, State and National levels

Major Activities

- Soil from the villages of India will be collected at block level and then finally brought to the Capital along with volunteers from each block who would assemble at Kartavya Path.
 - The soil that gets collected would be used in the 'Amrit Vatika', a special garden being created in Delhi along with an 'Azadi Ka Amrit Mahotsav' memorial.

- The Hon'ble Prime Minister would administer the **Panch Pran pledge to volunteers.**



Source:[TH](#)

Operation Chakra II

Syllabus: GS3/ Security Challenges and their Management

News:

The Central Bureau of Investigation (CBI) has recently launched **Operation Chakra-II**.

About: Operation Chakra II

- The operation was launched **to fight against transnational organised cyber-enabled financial crimes in India.**
- For this, CBI has **partnered with Microsoft and Amazon** as well as with **national and international agencies** to combat and dismantle infrastructure of illegal call centres.
- The CBI is working closely with the Federal Bureau of Investigation (FBI) of the United States, the Cyber Crime Directorate and IFCACC of the INTERPOL, the National Crime Agency (NCA) in the United Kingdom, the Singapore Police Force and the BKA of Germany to notify further leads.

Why Microsoft and Amazon are part of Operation Chakra-II?

- In these scams, commonly known as **tech support fraud**, criminals establish and operate **illegal call centres**, by **impersonating Microsoft and Amazon customer support**.
- According to the companies, the cybercriminals have **targeted over 2,000 customers based in the US, Canada, Germany, Australia, Spain, and the UK which are the important customer bases of these companies**.
- They believe actionable partnerships like these are **critical in helping protect consumers from impersonation scams**.

How to safeguard?

- While Amazon and Microsoft will be working closely on the tech part to mitigate threats online, **users should be aware of such 'tech support' calls**.
- **Always treat all unsolicited messages with scepticism and do not provide any personal information**.

Do you know ?

- Chakra-1 was conducted nearly a year ago by the CBI in coordination with the Interpol, the FBI and police forces of multiple countries. The agency had conducted searches at 115 locations with police forces in various states, the officials said.

Source: [TOI](#)

Yard 12706 IMPHAL

Syllabus: GS3/Defence

In News

- Mazagon Dock Shipbuilders Limited (MDL) has delivered the **Third Stealth Destroyer of Project 15B Class Guided Missile Destroyer** i.e. Yard 12706 (IMPHAL) to the Indian Navy.

Specifications of Imphal

- The ship is constructed using **Indigenous steel** and is **amongst the largest Destroyers constructed in India**, with an overall length of 164 meters.
- It is armed with supersonic Surface-to-Surface '**Brahmos**' missile and '**Barak-8**' Medium Range Surface to Air Missiles.
- Towards undersea warfare capability the Destroyer is fitted with **indigenously developed anti-submarine weapons and sensors**.

Project 15B

- The Project 15B class of ships are the **next-generation stealth guided-missile destroyers** of the Indian Navy, being built at the MDL, which are follow-on classes of the weapon intensive **P15A (Kolkata Class) Destroyers**.
- The **four ships** of the Project are christened after **major cities from all four corners of the country, viz. Visakhapatnam, Mormugao, Imphal and Surat**.

Source: [PIB](#)

Bharat Stage emission standards

Syllabus:GS3/ Environmental Pollution and degradation

News

The Commission for Air Quality Management (CAQM) announced that From November 1, only electric, CNG, and BS-VI-compliant diesel buses will be allowed to operate between Delhi and parts of the National Capital Region that fall in Haryana, Uttar Pradesh, and Rajasthan.

About Bharat Stage(BS) emission standards

- They are **regulatory guidelines** established by the Indian government to regulate the emissions produced by motor vehicles, ensuring they meet specific environmental standards.
- These standards are **mandatory for vehicles** to be legally sold and driven in India. As of the present, all newly sold and registered vehicles in India must conform to the BS-VI version of these emission standards.
- The formulation and enforcement of these standards, along with the associated timelines, fall under the jurisdiction of the **Central Pollution Control Board (CPCB)**, which operates under the Ministry of Environment, Forests, and Climate Change.
- These BS norms are **closely aligned with the European Emission Standards**, commonly referred to as Euro norms.
 - The inception of these standards dates back to the year 2000, although it's important to note that the first iteration was named 'India 2000' and not BS-I, despite being equivalent to the Euro-1 standard. Subsequent iterations were denoted as BS-II, BS-III, and BS-IV.

- A significant decision was made by the government to leap directly from BS-IV to BS-VI, bypassing BS-V. This move was prompted by the lengthy transition period observed during the shift from BS-III to BS-IV.

Significance

- **Air Quality Improvement:** Motor vehicles, including cars, are responsible for about one-third of air pollution. BS standards reduce harmful emissions, enhancing air quality. Example: Decrease concentration of Particulate Matter(PM) emissions.
- **Health Protection:** Cleaner air helps safeguard public health from respiratory and cardiovascular issues.
- **Global Alignment:** Harmonizes Indian regulations with international automotive standards.
- **Technology Innovation:** Encourages the development of cleaner, fuel-efficient technologies.
- **Fuel Efficiency:** Stricter standards promote reduced fuel consumption and cost savings.
- **Economic Growth:** Fosters manufacturing and export opportunities for eco-friendly vehicles.
- **Legal Framework:** Holds automakers accountable and ensures compliance.
- **Sustainability:** Supports long-term environmental and sustainability goals.

Source: [The Hindu](#)

Proxy advisory firms

Syllabus: GS3/ Economy

News

Proxy advisory firms oppose Anant Ambani's appointment on Reliance Industries Limited board.

About Proxy advisory firms

- They are **independent organizations** that provide research, analysis, and recommendations to institutional investors (such as mutual funds, pension funds, and asset managers) regarding corporate governance matters and voting

decisions related to company shareholder meetings, particularly annual general meetings (AGMs) and special meetings.

- They aim to provide impartial and expert advice to help institutional investors exercise their voting rights effectively and align their investments with their goals, values, and fiduciary duties.

Importance of Proxy advisory firms

- These firms play a crucial role in assisting institutional investors in making informed decisions on issues such as:
 - They evaluate the qualifications and independence of board members, assess potential conflicts of interest, and make recommendations on whether shareholders should vote for or against their election.
 - **Executive Compensation:** They analyze executive pay packages and provide recommendations on whether shareholders should approve them, considering factors like performance and alignment with shareholder interests.
 - **Shareholder Proposals:** They assess shareholder proposals on various topics, including environmental, social, and governance (ESG) issues, and advise investors on how to vote.
 - **Mergers and Acquisitions:** They evaluate proposed mergers, acquisitions, and other corporate transactions, providing recommendations on whether shareholders should approve or reject these deals.
 - **Environmental and Social Issues:** These firms often weigh in on issues related to environmental sustainability, social responsibility, and other ESG concerns.
 - **Proxy Contests:** They offer guidance on contested board elections, where multiple parties compete for control of a company's board.

Criticism

- They have faced some criticism and regulatory scrutiny over potential conflicts of interest and the influence they wield over corporate governance decisions.

Source:[IE](#)

India's first Nammo Bharat train

Syllabus: GS3/Infrastructure

In News:

Recently, PM Modi flags off country's first Namo Bharat train-Delhi-Ghaziabad-Meerut RRTS Corridor

About Namo Bharat Train & RRTS Corridor

- It is the country's first Regional Rapid Transit System (RRTS) named Namo Bharat train.
- It will establish a Delhi-Ghaziabad-Meerut corridor that will have a travel time of less than an hour through urban centers of Ghaziabad, Muradnagar and Modinagar.
- It is a National Capital Region Transport Corporation (NCRTC) shuttle train that will run from Meerut to Delhi.
- It has a top speed of 180 km/h.
- It is managed and operated by Deutsche Bahn, a German rail company.
- It will offer high-speed intercity commuter trains every 15 minutes, with the option to reduce the frequency to as little as every 5 minutes if necessary.

Benefits

- **Reduced Travel Time:** RRTS trains are designed for high-speed travel, which can significantly reduce travel time for commuters. This can lead to increased productivity and less time spent in traffic congestion.
- **Decongestion of Roads:** By providing an efficient alternative to private car travel, RRTS can help reduce congestion in the NCR region, leading to smoother traffic flow and reduced air pollution.
- **Environmental Benefits:** RRTS systems are designed to be more environmentally friendly since they run on electricity, reducing greenhouse gas emissions and subsequent air pollution.
- **Improved Accessibility:** RRTS stations are typically well-connected to other modes of public transportation on the principles of Transit Oriented Development (TOD)
- **Enhanced Safety:** RRTS systems are generally designed with a strong focus on safety. They have modern signaling systems, barriers, and safety protocols to minimize accidents.

Source: [Indian Express](#)

Kunming-Montreal Global Biodiversity Framework

Syllabus: GS3/ Environment

News

- The 25th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-25) in Nairobi, agreed on recommendations that support the implementation of the **Kunming-Montreal Global Biodiversity Framework**.

Kunming-Montreal Global Biodiversity Framework (KMGBF)

- The Framework was adopted in **2022** at the **15th meeting** of the Conference of the Parties to the **Convention on Biological Diversity (CBD)**.
- **It aims** to halt and reverse biodiversity loss by **2030**. It features **23 targets** to be met by **2030** and **four global goals** to preserve biodiversity for current and future generations.
- The agreement is **not binding** on members.

Convention on Biological Diversity

- **The Convention on Biological Diversity (CBD)** is the international legal instrument for "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources".
- It was opened for signature in **1992** at the **Earth Summit in Rio de Janeiro**, and entered into force in **1993**. It has been ratified by **196 nations**.
- **Secretariat:** Montreal, Canada.
- The Cartagena Protocol on Biosafety and the Nagoya Protocol on Access and Benefit-Sharing are supplementary agreements to the CBD.

Source:[DTE](#)

Rafah border

Syllabus:GS1/ Places in news, Geography

News

- The Rafah border crossing between Egypt and Gaza has opened to provide aid flow to Palestinians in the territory, under an Israeli siege.

Why is Rafah important to Gaza?

- **Location:** Rafah border is located on the Gaza-Egypt border, which was recognized by the 1979 Egypt-Israel peace treaty. It is controlled by Egypt.
- **Significance:** The Rafah Border Crossing or Rafah Crossing Point is the sole crossing point between Egypt and the Gaza Strip.

The Rafah crossing between the Gaza Strip and Egypt

Egypt is the only country apart from Israel to share a border with the Gaza Strip, which is home to 2.3 million people. The Rafah crossing between Egypt and Gaza is the sole route for aid to enter Gaza from outside Israel and the only non-Israeli exit.



Source:[IE](#)

Gaganyaan Mission

Syllabus:GS3/Science and Technology

News

- The Indian Space Research Organisation (ISRO) will conduct the Gaganyaan's first Flight Test Vehicle Abort Mission-1 (TV-D1), which will demonstrate the performance of the Crew Escape System.

About

- The test vehicle developed for this abort mission is a single-stage liquid rocket. The payloads consist of the **Crew Module (CM)** and **Crew Escape Systems (CES)**.
- The objectives of this mission are flight demonstration and evaluation of test vehicle sub-systems, evaluation of CES including various separation systems and CM characteristics and deceleration systems demonstration at higher altitude and its recovery.

Gaganyaan mission

- **The mission aims** to demonstrate the capability to **launch human beings** (three crew members) to **low earth orbit** and bring them back safely to earth by landing.
- **Launch vehicle:** The Launch Vehicle Mark-3 (LVM3) is the launch vehicle for the Gaganyaan mission. All systems in the LVM3 launch vehicle are reconfigured to meet human rating requirements and named Human Rated LVM3 (HLVM3).
- **Crew Escape System (CES):** HLVM3 consists of CES powered by a set of quick acting, high burn rate solid motors which ensures that Crew Module along with the crew is taken to a safe distance in case of any emergency either at launch pad or during ascent phase.
- **Orbital Module:** The Orbiter Module will orbit the Earth, and it consists of Crew Module (CM) and Service Module (SM). It is designed to keep the crew safe during ascent, orbital phase, and re-entry.
 - **The Crew Module (CM)** is the habitable space with the Earth-like environment in space for the crew.
 - **Service Module (SM):** It will be used to provide the necessary support to CM while in orbit. It is an unpressurized structure containing thermal system, propulsion system, power systems, avionics systems and deployment mechanisms.
- This manned mission will be the **first of ISRO's human spaceflight missions**. The **US, Russia and China** are the only three countries to have conducted human spaceflights yet.

Source:[TH](#)

Most distant 'fast radio burst' recorded in history

Syllabus :GS 3/Space

Context: A new study that documented the most distant "fast radio burst" in history says that FRBs can be used to measure the mass of the universe.

About FRBs:

- They are astrophysical phenomena characterized by brief and intense bursts of radio waves. These bursts last for just milliseconds, making them challenging to detect and study.

Some key points about FRBs:

- **Discovery:** The first FRB was discovered in 2007 in archived data from the Parkes Radio Telescope in Australia. Since then, many more FRBs have been observed.
- **Characteristics:** FRBs are known for their extremely short duration, typically lasting only a few milliseconds. During this brief period, they emit a burst of

radio waves that is far more powerful than what is emitted by any known astrophysical source.

- **Frequency Range:** FRBs are observed in a wide range of radio frequencies, and they can occur across the radio spectrum.
- **Unknown Origins:** The exact source of FRBs remains a mystery. Several theories have been proposed, including neutron star mergers, magnetars, and even artificial sources (like extraterrestrial signals). However, none of these theories have been conclusively proven.
- **Distribution:** FRBs have been detected in various locations in the universe, including both within our own Milky Way galaxy and in distant galaxies. This wide distribution makes it even more challenging to pinpoint their origins.
- **CHIME Project:** The Canadian Hydrogen Intensity Mapping Experiment (CHIME) project significantly contributed to the study of FRBs. It detected a large number of FRBs, increasing our understanding of these phenomena.
- **Scientific Significance:** FRBs are of great scientific interest because they provide unique opportunities to study extreme astrophysical environments and phenomena. Understanding the sources of FRBs could shed light on various aspects of astrophysics and cosmology.