

# Factly Compilation

16th to 21st October, 2023

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### 1. Railways develops anti-freeze flushes and fuel tanks for journeys in J&K

Source: The post is based on the article "Railways develops anti-freeze flushes and fuel tanks for journeys in J&K" published in "The Hindu" on 16th October 2023

### What is the News?

Indian Railways is constructing the Udhampur-Srinagar-Baramulla Rail Link (USBRL) project.

But the project is facing challenges due to sub-zero temperatures in the Jammu and Kashmir region during winter. Due to this, water and fuel in train systems can freeze, causing problems for toilets, taps and safety.

What is Udhampur- Srinagar-Baramulla Rail Link (USBRL) project?



**Source:** Indian Express

Udhampur-Srinagar-Baramula Rail Link Project(USBRL) is 272 km-long. The project connects Udhampur to Baramulla.

It aims to connect Kashmir Valley with the rest of the country by a railway line.

It includes 38 tunnels with a combined length of 119 kilometers. The longest tunnel in the project is **Tunnel T-49**, which is 12.75 kilometers long making it India's longest transportation tunnel.

There are 927 bridges in total. One of the bridges is Chenab Bridge which will be the highest railway bridge in the world.

Indian railway's first cable-stayed bridge is also being constructed on Anji Khad.

How is Indian Railways planning to overcome challenges in constructing Udhampur- Srinagar-Baramulla Rail Link (USBRL) project?

Engineers at the Rail Coach Factory (RCF) have developed indigenous innovations to address these challenges.

**Preventing Water Freezing:** It has designed double-walled composite insulated water tanks with capacities ranging from 450 to 685 liters.

- These tanks have a design similar to thermoplastic bottles, with two walls and a foam insulation layer that traps air.
- This can keep water in liquid form for 16 to 20 hours, even in sub-zero conditions, ensuring toilets and taps function properly.

**Dealing with Frozen Supply Pipelines:** To prevent water in supply pipelines from freezing, RCF adopted technology from the defense services.





- They are using heated pipes with a distributed heating system covered by insulation. This technology maintains water in a liquid state at temperatures between five to eight degrees Celsius.

**Efficient Energy Use:** Geysers are installed at the point of use in toilets, ensuring that only the necessary amount of water is heated, reducing energy wastage.

### 2. Study estimates count of UAVs required for the three Services

Source: The post is based on the article "Study estimates count of UAVs required for the three Services" published in "The Hindu" on 16th October 2023

### What is the News?

Chief of Defence Staff, has initiated two studies on major military platforms used by the three Services in India.

The studies focus on unmanned aerial vehicles(UAVs) and armoured helicopters.

The goal of these studies is to optimize the number of platforms needed, allocate resources effectively and avoid duplication in military acquisitions.

# What are the key findings of the studies?

**Study on UAVs:** There is a requirement of 31 MQ-9B high-altitude long-endurance (HALE) UAVs and 155 medium-altitude long-endurance (MALE) UAVs.

The procurement of the MQ-9B deal is in progress.But the allocation of the 155 MALE UAVs among the three Services is yet to be determined.

- **Impact on Existing Fleet:** The three Services currently operate **Israeli Heron MALE UAVs.** The study outcome may lead to a major upgrade in UAVs.

Helicopters: Indian Army and the Air Force are inducting the initial batch of 15 Light Combat Helicopters (LCH).

- The Cabinet Committee on Security has also approved the procurement of 39 AH-64 Apache attack helicopters from the U.S.

### What is AH-64 Apache?

AH-64 Apache is the world's most advanced multi-role combat helicopter.

**Country of Origin:** U.S

Manufacturer: Boeing

**Features:** It is designed and equipped with an open systems architecture to incorporate the latest communications, navigation, sensor, and weapon systems.

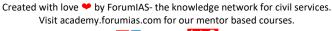
- It also has greater thrust and lift, joint digital operability, improved survivability and cognitive decision aiding.

### 3. Finland investigates suspected sabotage of Baltic-connector gas pipeline

Source: The post is based on the article "Finland investigates suspected sabotage of Baltic-connector gas pipeline" published in "BBC" on 16th October 2023

### What is the News?

Finland is investigating potential sabotage of the Baltic-connector gas pipeline.





# What is the Baltic-connector gas pipeline?



Baltic-connector gas pipeline is a natural gas pipeline between Finland and Estonia.

The gas pipeline was opened in 2020. It is used to send gas between Estonia and Finland, depending on which country is most in need at any point.

The pipeline has been Finland's only natural gas import channel since Russian imports were stopped in 2022.

### Where is the Baltic Sea?



Source: World Atlas

The Baltic Sea is a part of the Atlantic Ocean.

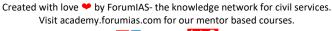
**Surrounded by:** Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, Sweden and the North and Central European Plain.

# What are Baltic States?

Baltic states is a geopolitical term typically used to refer to three countries namely: Estonia, Latvia and Lithuania.

All three countries are members of NATO, the European Union, the Eurozone, and the OECD.

These countries are also classified as high-income economies by the World Bank and maintain a very high Human Development Index.





### 4. Centre likely to raise age of retirement of scientists to 65

Source: The post is based on the article "Centre likely to raise age of retirement of scientists to 65" published in "The Hindu" on 16th October 2023

### What is the News?

The Ministry of Science and Technology is considering a plan to increase the retirement age of scientists from 60 to 65

### What is the current retirement age of scientists?

Currently, Scientists in most wings of the government retire at 60.But those working at the Indian Council of Agricultural Research (ICAR) and the Indian Council of Medical Research (ICMR) retire at 62.

### Why is the government planning to increase the retirement age of scientists?

Government is planning to increase the retirement age of scientists to prevent experienced scientists from leaving for universities and institutes where the retirement age is already 65.

### Was this proposal on increasing the retirement age of scientists considered earlier?

In 2015, the Government was planning to increase the retirement age of scientists but it was not implemented.

So far, the government has been giving scientists who are near retirement, 'extensions' that may increase their tenure by two or up to five years.

Government has also opted for short-term contracts to retain valuable senior employees.

### 5. 1st P20 Summit hosted by India has been the most successful P20 Summit ever: Lok Sabha Speaker

Source: The post is based on the article "1st P20 Summit hosted by India has been the most successful P20 Summit ever: Lok Sabha Speaker" published in "PIB" on 16th October 2023

### What is the News?

The Prime Minister inaugurated the 9th G20 Parliamentary Speakers' Summit(P20) in New Delhi.

### What is the P20 Summit?

Parliament 20(P20) Engagement Group was started during Canada's G20 Presidency in 2010.

The group is led by Speakers from Parliaments of G20 countries.

**Aim:** To bring a parliamentary dimension to global governance, raise awareness, build political support for international commitments and ensure that these are effectively translated into national realities.

# Who hosted the 9th P20 Summit?

Hosted by: Parliament of India in cooperation with Inter-Parliamentary Union (IPU)

**Theme:** 'Parliaments for One Earth, One Family, One Future'.

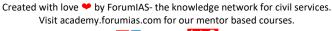
The summit hosted discussions on four subjects: 1) Accelerating SDGs 2) Sustainable Energy Transition 3) Women led Development and 4) Transformation in Peoples' Lives through Public Digital Platforms.

### What is the Inter-Parliamentary Union(IPU)?

Click Here to read

### 6. World Health Summit 2023

Source: The post is based on the article "World Health Summit 2023" published in "PIB" on 16th October 2023





### What is the News?

India's Union Minister for Health and Family Welfare attended the World Health Summit 2023.

### What is the World Health Summit?

World Health Summit is the unique international strategic forum for global health

Founded in: 2009 on the occasion of the 300th anniversary of Berlin's Charité Hospital.

**Held under:** It is held under the patronage of the German Chancellor, President of the Republic of France, President of the European Commission and Director-General of the World Health Organization(WHO).

**Held at:** annually held in Berlin, Germany

Aim: To set the agenda for a healthier future by inspiring innovative solutions for better health and wellbeing for all.

Theme for 2023: "A Defining Year for Global Health Action."

### What are the key highlights from the Health Minister's address at the World Health Summit 2023?

Union Minister highlighted the steps taken by India to reduce the prevalence and impact of Non-communicable diseases (NCDs). Some of these steps are:

National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD): It was launched under the National Health Mission (NHM) in 2010. It aims to strengthen infrastructure, human resource development, health promotion, early diagnosis, management and referral.

**75/25 initiative:** It is aimed at screening and providing standard of care for 75 million individuals with hypertension and diabetes by 2025.

**Budget 2023-24:** The Outcome Budget document of the Union Budget for 2023-2024 has included hypertension and diabetes treatment as output indicators for the first time.

**Population-Based Screening(PBS):** It is organized under the umbrella of Comprehensive Primary Health Care (CPHC) across Ayushman Bharat-Health and Wellness Centres (AB-HWC).

- The individuals in the age groups of 30 years and above are targeted for risk assessment and screening of common NCDs (hypertension, diabetes, oral cancer, breast cancer and cervical cancer).

National NCD portal: It is being used for prevention, control, screening and management of common NCDs.

- Primary-level information is captured through this portal at public health facilities for reporting and monitoring individual-wise screening and compliance of treatment for NCDs.

# 7. World Organisation for Animal Health Approves Self Declaration of Freedom from Avian Influenza in Indian Poultry Compartments

Source: The post is based on the article "World Organisation for Animal Health Approves Self Declaration of Freedom from Avian Influenza in Indian Poultry Compartments" published in "PIB" on 16th October 2023

### What is the News?

World Organisation for Animal Health(WOAH) has approved India's self-declaration of freedom from Highly Pathogenic Avian Influenza(HPAI) in specific poultry compartments.

# What is Highly Pathogenic Avian Influenza(HPAI)?

Avian influenza is also known as 'bird flu'. It is a disease primarily affecting birds. It is caused by a virus of the Orthomyxoviridae family.

It can generally be classified into two categories:

- The Low Pathogenic Avian Influenza Virus (LPAIV) can cause a mild illness, often unnoticed or without any symptoms.



- The Highly Pathogenic Avian Influenza Virus (HPAIV) causes serious illness in birds that can spread rapidly, resulting in high death rates in different species of birds.

**Note:** Most of the influenza viruses circulating in birds are not zoonotic. However, some HPAI strains have the ability to infect humans.

**Highly Pathogenic Avian Influenza(HPAI) in India:** HPAI was first detected in India in the state of Maharashtra in 2006.

- Since then, India has experienced annual outbreaks of HPAI in different regions, leading to substantial economic losses

India's approach to controlling HPAI: India follows a "detect and cull" policy as outlined in the National Action Plan for Prevention, Control, and Containment of Avian Influenza (revised – 2021).

- The policy approach includes the 1) humane destruction of infected and exposed animals, eggs, feed, litter and other contaminated materials and 2) restricting the movement of poultry and poultry products, disinfection and clean-up of infected premises.

**Note:** India does not permit vaccination against HPAI.

### What is the significance of WOAH approving India's self-declaration of freedom from HPAI?

This approval by WOAH signifies India's commitment to international biosecurity standards.

It will also contribute to enhancing the export potential of Indian poultry and poultry products, including meat and eggs.

Note: India is the third-largest producer of eggs and the fifth-largest producer of poultry meat globally.

### 8. How is GI-tagged Jaderi namakatti made in Tamil Nadu?

Source: The post is based on the article "How is GI-tagged Jaderi namakatti made in Tamil Nadu?" published in "The Hindu" on 17th October 2023

### What is the News?

Jaderi namakatti from Tamil Nadu has been recently given the Geographical Indications(GI) Tag.

### What is Jaderi Namakatti?

Jaderi Namakatti is a type of clay stick that is white in colour. They are usually available in finger-like shape with a smooth texture.

### Who makes it?

People from a small village called Jaderi in Tiruvannamalai district, Tamil Nadu make it.

### What is it made from?

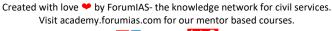
The namakatti is made from the rich deposit of hydrous silicate minerals. The clay is processed and shaped into finger-like sticks.

The production of Namakatti depends on the weather. It needs a lot of sunlight to dry properly.

Significance: Jaderi Namakatti are used to adorn the foreheads of idols, men and temple elephants.

### 9. Anti-money laundering: Sebi releases fresh set of guidelines

Source: The post is based on the article "Anti-money laundering: Sebi releases fresh set of guidelines" published in "Livemint" on 17th October 2023





### What is the News?

The Securities Exchange Board of India (SEBI) has released a set of amendments to strengthen anti-money laundering(AML) standards and combat finance terrorism(CFT).

These guidelines are based on rules established under the Prevention of Money Laundering Act of 2002.

### What are the key amendments introduced by SEBI to strengthen anti-money laundering (AML)?

**Measures needed:** If a host country doesn't follow the same rules as the home country when it comes to preventing money laundering and financing terrorism, financial groups need to take extra steps to manage these risks.

Financial groups must set up company-wide programs to combat money laundering. These rules apply to all branches and subsidiaries mostly owned by the financial group.

### The programs include:

- Creating policies and procedures to share information needed to stop money laundering and terrorist funding.
- Providing customer account and transaction information from branches and subsidiaries when necessary for antimoney laundering and counter-terrorism purposes. This includes analyzing transactions that seem unusual.

**Disclosing status**: In case of a trust, the reporting entity will ensure that trustees disclose their status at the time of commencement of an account-based relationship.

**Beneficial Ownership**: In case the client is a partnership firm, the beneficial owner would be the one who has ownership of more than 10% of capital or profits of the partnership or who exercises control through other means. Earlier, the requirement was 15%.

### 10. Magnetic-Stress as a new chauffeur of metal-insulator transition

Source: The post is based on the article "Magnetic-Stress as a new chauffeur of metal-insulator transition" published in "PIB" on 16th October 2023

### What is the News?

Scientists have found the reason behind how certain materials can change from being good conductors of electricity (metallic) to insulators (materials in which electric current does not flow freely).

### What is Metal-insulator transition(MIT)?

Normally, materials are either good at conducting electricity (metallic) or they block it (insulators).

But some special materials can switch between these two states when we change things like temperature or pressure. This switching is known as a metal-insulator transition(MIT).

This phenomenon was first discovered in magnetite in 1939.

### Why does Metal-insulator transition(MIT) happen?

Scientists have found the reason behind how certain materials can change from being good conductors of electricity (metallic) to insulators.

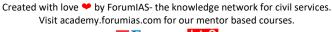
They used one of the metal-insulator transition(MIT) materials called chromium nitride (CrN) to demonstrate this.

They have found that the magnetic stress caused by the arrangement of atoms in a material can be the reason for this transition of materials from metallic to insulators.

### What is the significance of these findings?

These findings can lead to a better understanding of how different factors like magnetism, electrical charge, and atomic arrangement work together in materials.

It could also help us discover new materials that can switch between being conductors and insulators.





### 11. New toad species discovered in Dampa tiger reserve of Mizoram

Source: The post is based on the article "New toad species discovered in Dampa tiger reserve of Mizoram" published in "Hindustan Times" on 17th October 2023

### What is the News?

Scientists have discovered a new species of toads named Bufoides bhupathyi.

**Note:** Toad is a common name for certain frogs. They are characterized by dry, leathery skin, short legs, and large bumps covering the parotoid glands.

### What is Bufoides bhupathyi?



Source: Hindustan Times

Bufoides bhupathyi is a toad species. It has been discovered in the Dampa tiger reserve of Mizoram.

**Named after:** S Bhupathy, a prominent herpetologist who served as the principal scientist at the Salim Ali Centre for Ornithology and Natural History in Coimbatore.

**Features:** It differs from other similar species in terms of colouration, skin and the presence of depressed parotid glands.

- It is currently known to exist only in the Dampa tiger reserve. Hence, it is likely to meet the criteria for being assessed as critically endangered according to the International Union for Conservation of Nature (IUCN).

Significance: This marks the third species in a genus found in the north-eastern region of India.

-The previous two species, Bufoides meghalayanus and Bufoides kempi were found in Meghalaya.

# 12. Gulf of Guinea: Indian Naval Ship SUMEDHA visits Nigeria

Source: The post is based on the article "Gulf of Guinea: Indian Naval Ship SUMEDHA visits Nigeria" published in "PIB" on 17th October 2023

### What is the News?

The Indian Navy Ship (INS) SUMEDHA has made a port call to Nigeria to improve existing bilateral relations as well as security in the Gulf of Guinea.



### Where is the Gulf of Guinea?





Null Island, defined as the intersection of the Equator and Prime Meridian (zero degrees latitude and longitude) is in the gulf.

Among the many rivers that drain into the Gulf of Guinea are the Niger and the Volta.

The Gulf of Guinea is known for its rich maritime resources, including oil and natural gas. It is also an important region for international shipping and trade.

However, the Gulf of Guinea is also known as the world's hotspot for maritime piracy. Over the last 15 years container ships, fishing vessels, and oil tankers in the region have been the targets of numerous armed attacks and kidnappings.

### What is INS Sumedha?

INS Sumedha is the third vessel of the indigenously designed 'Saryu' Class Naval Offshore Patrol Vessels (NOPV).

The ship can handle various tasks both on its own and as part of the fleet. It is equipped with weapons, sensors, advanced navigation and communication systems, as well as Electronic Warfare tools.

It has been involved in different missions like supporting the fleet, patrolling the coast, monitoring the ocean, and assisting in humanitarian and disaster relief efforts.

One such mission was **Operation Kaveri**, where it helped evacuate Indian citizens from conflict-stricken Sudan.

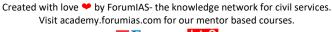
# 13. Amendment to Aircraft Rules, 1937: A Significant Step towards Strengthening Aviation Safety and Ease of Doing Business in aviation regulation

Source: The post is based on the article "Amendment to Aircraft Rules, 1937: A Significant Step towards Strengthening Aviation Safety and Ease of Doing Business in aviation regulation" published in "PIB" on 17th October 2023

### What is the News?

The Government of India has made several amendments to the Aircraft Rules, 1937.

These amendments aim to make doing business in aviation easier and ensure safety and security.





### What are the key amendments made to the Aircraft Rules, 1937?

**License Validity of Pilots extended**: The validity of Airline Transport Pilot Licenses (ATPL) and Commercial Pilot Licenses (CPL) has been increased from five years to ten years. This means pilots don't have to renew their licenses as often.

**Display of Lights near Aerodromes**: The rules have been updated to tackle the concerns regarding the display of lights near aerodromes (part of an airport that is used by aircraft)

- The term 'light' now includes lantern lights, wish kites and laser lights.
- Government's jurisdiction over those displaying such lights has been increased from a 5-kilometer radius to 5 nautical miles around an aerodrome.
- Government also has the power to take action against people who use lights that could disrupt aircraft safety or harm the crew.
- For instance, if such lights are left unattended for 24 hours, the government can enter the location and turn them off.Legal action under the Indian Penal Code (IPC) can also be taken in such cases.

Foreign License Validation Removed: The requirement to validate foreign pilot licenses has been removed.

Flexible Rules for Air Traffic Controllers(ATC): ATC license holders have more flexibility now when it comes to hours of work.

- They now need to complete a minimum of ten hours of simulated exercises including emergency scenarios. A skill assessment for their rating must be done within ten days of starting these exercises.

# 14. What is the white phosphorus that Israel is accused of using in Gaza?

Source: The post is based on the article "What is the white phosphorus that Israel is accused of using in Gaza?" published in "Al Jazeera" on 17th October 2023

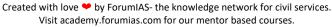
### What is the News?

WEAPONS

Human Rights Watch (HRW) have said that the Israeli military has recently used white phosphorus munitions in Lebanon and Gaza.

### What is White Phosphorus?







Source: Al Jazeera

White phosphorus is a waxy, yellowish-to-clear chemical with a pungent, garlic-like odour.

It is a highly combustible chemical that burns quickly and brightly when exposed to air.

It can be deployed through artillery shells, bombs, rockets or grenades.

It is not considered a chemical weapon because it operates primarily by heat and flame rather than toxicity.

It is used primarily to create a smokescreen at night or during the day to hide the visual movement of troops.

### What harm can white phosphorus cause to humans?

White phosphorus causes severe burns that are slow to heal and are likely to develop infections.

It can also cause dysfunction in multiple organs, including the liver, kidneys and heart.It can also be lethal if inhaled.

### Is White Phosphorus banned?

White phosphorus is not explicitly banned by international conventions.

Protocol III of the 1980 Convention on Certain Conventional Weapons prohibits incendiaries or the use of other substances to attack civilian populations.

But to be considered an "incendiary weapon", an item needs to be "primarily designed" to set fire or cause burns.

However, white phosphorus can also be used as a smokescreen, to signal or to illuminate a target. This allows militaries to argue that its use is not covered by Protocol III.

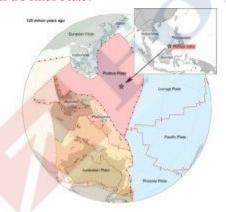
### 15. Pontus Plate: Scientists discover ghost of ancient mega-plate that disappeared 20 million years ago

Source: The post is based on the article "Pontus Plate: Scientists discover ghost of ancient mega-plate that disappeared 20 million years ago" published in "Science Alert" on 17th October 2023

### What is the News?

Scientists have rediscovered a long-lost tectonic plate named "Pontus Plate".

### What is a Pontus Plate?



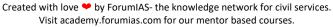
The Pontus plate is a tectonic plate that disappeared about 20 million years ago.

It has been recently discovered in the West Pacific Ocean.

It has been named as Pontus Plate as it once existed beneath an ancient ocean known as the Pontus Ocean.

**Features:** The plate was formed at least 160 million years ago.

– It was approximately a quarter the size of the Pacific Ocean.

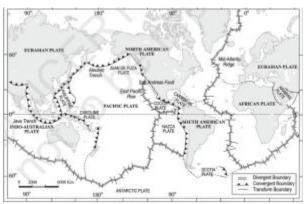




– It eventually disappeared as it was subducted beneath the Australian and Chinese plates.

Significance: This discovery provides insight into Earth's geological history and plate movements.

# What are Tectonic Plates?



re 4.5 : Major and minor plates of the world

**Source: NCERT** 

A tectonic plate (also called lithospheric plate) is a massive, irregularly shaped slab of solid rock. It is generally composed of both continental and oceanic lithosphere.

A plate may be referred to as the continental plate or oceanic plate depending on which of the two occupy a larger portion of the plate.

The Pacific plate is largely an oceanic plate whereas the Eurasian plate may be called a continental plate.

Important Major Plates: 1) Antarctica and the surrounding oceanic plate 2) Pacific plate 3) India-Australia-New Zealand plate among others.

Important Minor Plates: 1) Cocos plate: Between Central America and Pacific plate 2) Nazca plate: Between South America and Pacific plate 3) Arabian plate: Mostly the Saudi Arabian landmass 4) Philippine plate: Between the Asiatic and Pacific plate 5) Caroline plate: Between the Philippine and Indian plate (North of New Guinea) and 6) Fuji plate: North-east of Australia.

# 16. Court declines abortion plea, says it can't 'stop heartbeat' of viable foetus

Source: The post is based on the article "Court declines abortion plea, says it can't 'stop heartbeat' of viable foetus" published in "The Hindu" on 17th October 2023

### What is the News?

The Supreme Court has declined a married woman's plea to medically terminate her 26-week pregnancy.

The court gave this judgment based on the report of the AIIMS medical board that had found no substantial foetal abnormalities.

### What is the case about?

A married woman had filed a petition to medically terminate her 26-week pregnancy.

She argued that she already has two boys and that the pregnancy was unplanned.

According to her, her family income is insufficient to support another child, and that she is under medication for postpartum depression.

Earlier, a 2-judge Bench had allowed the termination of the pregnancy. The court had said that an unwanted pregnancy due to failure of contraceptive methods is the same as a forced pregnancy.



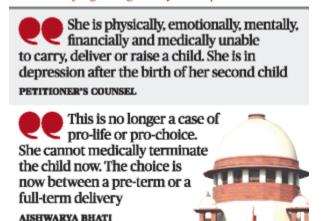


However, AIIMS wrote to the SC and said that it would need a directive on whether a foeticide can be done before termination since the foetus is "currently viable".

— **Note**: Foetus Viability is the point at which a foetus can survive outside the womb. It is generally considered to be around 23 or 24 weeks, but there's no universal consensus.

Later, the case went before a 3-judge Bench headed by the Chief Justice of India (CJI).

What is the judgment given by the Supreme Court on this?



Source: The Hindu

Additional Solicitor-General of India

The Supreme Court has declined permission to a married woman to terminate her over 26-week pregnancy.

### The court gave this judgment based on following grounds:

**Firstly,** the pregnancy had crossed 24 weeks — the upper limit for allowing Medical Termination of Pregnancy (MTP).

**Secondly**, the woman cannot claim an absolute right to abort especially when multiple reports from the AIIMS medical Board have confirmed that the pregnancy was not a cause of immediate danger to her life or the foetus.

**Thirdly,** Section 5 of the Medical Termination of Pregnancy Act prescribes medical termination if the pregnancy was immediately necessary to save the life of the pregnant woman.

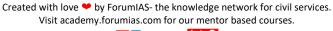
- The term 'life' used in this provision cannot be equated to the broader meaning in which 'life' is used in Article 21 of the Constitution. Article 21 upholds an individual's fundamental right to a dignified, meaningful life.
- On the other hand, Section 5 uses 'life' in the context of a life-and-death situation when medical opinion confirms that a woman's very existence is threatened if she attempts to carry her pregnancy to full term.

### 17. SC's marriage equality judgment unpacked: Two views on four key issues

Source: The post is based on the article "SC's marriage equality judgment unpacked: Two views on four key issues" published in "Indian Express" on 18th October 2023

### What is the News?

A five-judge Constitution Bench of the Supreme Court has refused to grant legal status to same-sex marriages by 3-2 majority.





What are the views of the judges on the four key questions related to same-sex marriages?



**Source:** Hindustan Times

On Fundamental Right to Marry: The petitioners argued that there exists a fundamental right to marry a person of one's own choice under the Constitution and that the court must address the denial of that right:

- Minority View: The marriage is not inherently a fundamental right as it has been shaped by state regulation.
- Majority View: It agreed with the minority view. It said that personal importance doesn't automatically make something a fundamental right.

Interpretation of Special Marriage Act: SMA was enacted in 1954 to enable marriage between inter-faith or intercaste couples without them giving up their religious identity or resorting to conversion.

The petitioners had asked the SC to interpret the word marriage as between "spouses" instead of "man and woman".

The petitioners had asked for striking down provisions of the SMA that are gender-restrictive.

- Minority View: It opposes expansive interpretation of the Special Marriage Act, fearing it could infringe on legislative powers.
- Majority View: It stated that the court could not interpret the SMA to include same-sex couples since the objective of the legislation is not to include same-sex couples within the realm of marriage.

Queer couples' right to adopt a child: The petitioners had argued that the guidelines of the Central Adoption Resource Authority (CARA), which does not allow unmarried couples to jointly adopt children is discriminatory against queer couples who cannot legally marry.

CARA guidelines allow only a couple who have been in at least two years of a stable marital relationship to be eligible to adopt. Individually, queer persons can adopt as single people.

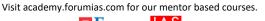
However, a single male is not eligible to adopt a girl child even though a single female is eligible to adopt a child of any gender.

- Minority View: It strikes down certain CARA regulations emphasizing that preventing unmarried couples, including queer ones, from adopting isn't in the child's best interests.
- Majority View: It largely agrees with the discrimination against queer couples but suggests only the legislature can change the adoption criteria.

Civil unions for queer couples: The judges had discussed recognising civil unions for queer couples as a halfway approach during the hearing.

In US, before full marriage rights were recognised for same-sex couples by the US Supreme Court, several states had allowed civil unions.

- Minority View: It held that the right to form civil unions falls within the fundamental right to freedom of speech and expression.





- It also noted the Solicitor General's statement that a committee chaired by the Cabinet Secretary would be constituted to set out the rights which would be available to queer couples in civil unions.
- Majority View: It disagreed with the view that the court can prescribe a "choice" of civil unions to queer couples. It recommended that the state can facilitate this option if the community desires it.

### 18. Govt offers 8 blocks for production of hydrocarbons under OLAP bid

Source: The post is based on the article "Govt offers 8 blocks for production of hydrocarbons under OLAP bid" published in "Hindu Businessline" on 18th October 2023

### What is the News?

The Ministry of Petroleum & Natural Gas (MoPNG) has offered 8 blocks for exploration and production (E&P) of hydrocarbons under the Open Acreage Licensing Policy (OALP).

### What is Open Acreage Licensing Policy(OALP)?

Open Acreage Licensing Policy(OALP) is a part of the Hydrocarbon Exploration and Licensing Policy(HELP).

It was introduced by the government in 2016 and became operational from 2017.

OALP gives an option to a company to select the exploration blocks on its own without waiting for the formal bid round from the Government.

Under OALP, a bidder intending to explore hydrocarbons may apply to the Government seeking exploration of any new block which was not already covered by exploration.

The Government will examine the interest and if it is suitable for award, then the govt will call for competitive bids after obtaining necessary environmental and other clearances.

### What is Hydrocarbon Exploration and Licensing Policy(HELP)?

Hydrocarbon Exploration and Licensing Policy(HELP) was adopted in 2016.

It replaced the New Exploration Licensing Policy (NELP).

The objective of the policy is to enhance domestic oil and gas production by intensifying exploration activity and investment.

# Components of the policy:

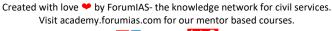
- Uniform license for exploration and production of all forms of hydrocarbon
- Open acreage policy
- **Revenue sharing model:** This encourages cost efficiency in mining operations by replacing the profit-sharing contract established by NELP. The contractor pays the government a share of its revenue (net of royalty) as per the contract.
- Marketing and pricing freedom: The contractor is free to sell crude oil in the domestic market through a transparent bidding process.

### 19. NHAI Upgrades ATMS Standards for Enhanced Road Safety and Digital Enforcement

Source: The post is based on the article "NHAI Upgrades ATMS Standards for Enhanced Road Safety and Digital Enforcement" published in "PIB" on 18th October 2023

### What is the News?

National Highways Authority of India (NHAI) has released the Advanced Traffic Management System(ATMS) Standards and Specifications 2023 to improve road safety and reduce incident response time.





### What is Advanced Traffic Management System(ATMS) Standards and Specifications 2023?

**Aim:** To improve road safety and reduce incident response time with the help of advanced AI technologies.

### **Key Technologies introduced under ATMS:**

Video Incident Detection and Enforcement System(Vides): It aims to enhance digital enforcement of traffic rules.

- The cameras can identify 14 distinct incidents, such as triple riding, helmet and seatbelt violations, wrong lane driving, presence of animals on the highway, and pedestrian crossings.
- Depending on the detected incident, it can alert route patrol vehicles, ambulances, generate e-challans, relay alerts on variable messaging boards, or notify nearby travelers through the 'rajmargyatra' mobile app.
- It will be installed every 10 kilometers along national highways. State-of-the-art command and control centers will also be set up every 100 kilometers, integrating various camera feeds.

**Traffic Monitoring Camera System (TMCS):** It is installed every 1 km on the National Highway. It will be upgraded with advanced capabilities like automated detection of accidents and stalled vehicles.

**Strengthening collaboration with local traffic agencies**: NHAI will allocate dedicated workstations in the Command & Control Centre for traffic police representatives.

### 20. PM unveils long-term blueprint for India's maritime economy

Source: The post is based on the article "PM unveils long-term blueprint for India's maritime economy" published in "The Hindu" on 18th October 2023

### What is the News?

The Prime Minister has inaugurated the Global Maritime India Summit 2023 in Mumbai.

### What is the Global Maritime India Summit?

Organized by: Ministry of Ports, Shipping and Waterways.

Aim: To boost the Indian maritime economy by promoting global and regional partnerships and facilitating investments.

The first Maritime India summit was held in 2016 in Mumbai while the Second Maritime Summit was held virtually in 2021.

# What are the key highlights from the Global Maritime India Summit 2023?

**Amrit Kaal Vision 2047:** It is a 25-year blueprint for the Indian maritime blue economy.

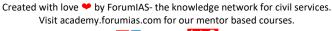
- The plan outlines strategic initiatives aimed at enhancing port facilities, promoting sustainable practices and facilitating international collaboration.

Tuna Tekra all-weather deep draft terminal: It is going to be built at Deendayal Port in Gujarat.

- The port will be developed through a public-private partnership(PPP) mode.
- The port will handle modern vessels with a capacity exceeding 18,000 twenty-foot equivalent units (TEUs).
- It will also serve as a key entry point for Indian trade along the India-Middle East-Europe Economic Corridor (IMEEC).

### 21. PM 'directs' ISRO to land man on moon by 2040, work towards interplanetary missions

Source: The post is based on the article "PM 'directs' ISRO to land man on moon by 2040, work towards interplanetary missions" published in "The Hindu" on 18th October 2023





### What is the News?

The Prime Minister chaired the meeting to assess the progress of the Gaganyaan mission and outline the future of Indian space exploration.

### What are the key highlights from the meeting?

**Gaganyaan Mission** is scheduled to be launched in 2025. It aims to demonstrate human spaceflight capability by launching a human crew to an orbit of 400 km and bringing them back safely to earth, by landing in Indian sea waters.

**Indian on Moon**: PM has said that ISRO should now plan to land an Indian on the moon by 2040. This will strengthen India's position in the space field.

- Note: The US is planning to send the first humans to explore the region near the south pole of the moon later this decade, in a mission called **Artemis II.**
- China has also planned to place astronauts on the moon by 2030.

**Indigenous space station**: PM has said that India should now aim for setting up 'Bharatiya Antariksha Station' (Indian Space Station) by 2035.

- International Space Station: It has been developed and maintained by the U.S., Russia, Canada, Japan, and European agencies.It is the largest space station.It is expected to be decommissioned by 2030.

### **Interplanetary Missions:**

- Shukrayaan-1: It is a proposed mission of ISRO.It aims to study the surface and atmosphere of Venus.
- Mangalyaan 2: It is a proposed second mission to Mars by ISRO.It will study aspects of Mars, including interplanetary dust, and the Martian atmosphere and environment.

# 22. Must visit Parvati Kund and Jageshwar temples in Kumaon: PM

Source: The post is based on the article "Must visit Parvati Kund and Jageshwar temples in Kumaon: PM" published in "Economic Times" on 18th October 2023

### What is the News?

The Prime Minister has encouraged people to visit the Parvati Kund and Jageshwar temples in the Kumaon region of Uttarakhand.

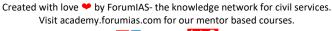
### What are Parvati Kund and Jageshwar temples?

**Jageshwar:** It is a Hindu pilgrimage town in the Almora district of Uttarakhand.

- It is known for its group of 125 ancient temples built between the 7th and 14th centuries.
- These temples were primarily constructed and restored by the Katyuri dynasty kings. These temples are dedicated to various deities with many honouring Lord Shiva.
- It is believed that Lord Shiva came to meditate in the dense forests of Jageshwar, leaving behind these temples as a testimony of his presence.
- Architecture: The Jageshwar temples are a prime example of the Nagara style of architecture.
- The temples are characterized by intricately carved stone structures and tall shikharas.
- The engravings and sculptures on the temple walls depict various deities and mythological narratives, offering a glimpse into the rich cultural heritage of the region.

Parvati Kund: It is located in Uttarakhand. It is situated at an elevation of about 5,338 feet.

– It is believed to be the location where Lord Shiva and Goddess Parvati engaged in meditation.





23. Union Health Secretary delivers keynote address at National Conclave on "Augmented Zoonotic Diseases Surveillance at Human – Wildlife Interface" & National Conclave for Endorsement of "National Action Plan for Prevention and Control of Snakebite Envenoming"

Source: The post is based on the article "Union Health Secretary delivers keynote address at National Conclave on "Augmented Zoonotic Diseases Surveillance at Human – Wildlife Interface" & National Conclave for Endorsement of "National Action Plan for Prevention and Control of Snakebite Envenoming" published in "PIB" on 18th October 2023

### What is the News?

Union Health Secretary has delivered the keynote address at the National Conclave on "Augmented Zoonotic Diseases Surveillance at Human – Wildlife Interface" and National Conclave for Endorsement of "National Action Plan for Prevention and Control of Snakebite Envenoming".

What are the key highlights from the address of the Union Health Secretary on Zoonotic Disease and Snakebite Envenoming?

Zoonotic disease is one of the areas of concern which is affecting humans as well as animals' health

- 75% of new infectious diseases that have emerged in the last 30 years are zoonotic.
- Limited knowledge and skills to identify zoonotic diseases and limited diagnostic facilities at all levels has resulted in neglect of the infectious diseases caused due to zoonotic pathogens.
- Hence, in the light of these new and emerging health threats, there is a growing importance of the 'One Health' approach.

Snake Evenoming: Snake bite is a neglected public health issue in many tropical and subtropical countries.

- Most of these occur in Africa, Asia and Latin America. In Asia up to 2 million people are envenomed by snakes each year.
- In India, snake bites continue to be a huge problem causing nearly 60,000 deaths annually.

**Measures taken by India:** Union Health Ministry is implementing various national programs under National Centre for Disease Control (NCDC) which includes:

- National One Health Programs for Prevention and Control of Zoonoses (NOHPPCZ)
- National Rabies Control Programs (NRCP)
- Program for Prevention and Control of Leptospirosis (PPCL)
- Snake Bite Prevention and Control (SBPC)
- National Programme on AMR Containment
- National programme on Climate Change and Human Health(NPCHH).

### 24. India's 2036 Olympic dream

Source: The post is based on the article "India's 2036 Olympic dream" published in "The Hindu" on 18th October 2023

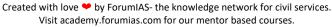
### What is the News?

The Prime Minister has announced India's bid to host the 2036 Olympic and Paralympic Games.

### What is the International Olympic Committee?

The International Olympic Committee was founded in 1894.

It is an international non-governmental not-for-profit organization.





It is the authority responsible for organizing the modern (Summer, Winter, and Youth) Olympic Games.

Headquarters: Lausanne, Switzerland.

### How are cities chosen for the Olympics?

**Exploring the idea:** A city that wants to host the Olympics first seeks support from its National Olympic Committee (NOC).

- The NOC communicates with the International Olympic Committee (IOC) for advice and support. If the NOC is serious about the project, it sends an official letter to the IOC.

**Future Host Commissions**: There are two Future Host Commissions, which overlook the election process.

- It may recommend a project to the IOC Executive Board to begin a Targeted Dialogue for an edition or year of the Summer or Winter Games when it feels that the project is ready to get into the next stage.
- From this stage, the interested bidder can be said as the preferred host.

**IOC Member Decision:** At the end of the Targeted Dialogue, the IOC Executive Board decides whether to propose one or more hosts for election.

The International Olympic Committee (IOC) members decide the host nation during an IOC Session.

**Voting Process:** Members vote by secret ballot, and a majority vote is needed for a city to host the Games.An IOC member cannot vote when their country is a candidate.

If no majority is achieved in the first round, the city with the fewest votes is eliminated, and further rounds of voting occur until one candidate gets a majority.

### 25. Kerala CM flags-in first ever ship into Vizhinjam port

Source: The post is based on the article "Kerala CM flags-in first ever ship into Vizhinjam port" published in "Indian Express" on 18th October 2023

### What is the News?

Kerala Chief Minister has inaugurated the first-ever cargo ship at the under-construction Vizhinjam international seaport project.

### Why does India need a Transshipment Port?

India has 13 major ports but lacks infrastructure for handling ultra-large container ships.

About 75% of India's transshipment cargo is managed at foreign ports like Colombo, Singapore and Klang.

For instance, in fiscal year 2021-22, India's total transshipment cargo was approximately 4.6 million TEUs.Of this, around 4.2 million TEUs were processed outside India.

### What are the benefits of Transshipment Port?

Establishing a transshipment hub in India offers several advantages such as:

- Forex savings (saving foreign exchange)
- Attracting foreign direct investment (FDI)
- Creating job opportunities
- Encourages various associated businesses such as ship repair services, crew change facilities, logistics value-added services, Warehousing among others.
- Can attract a significant portion of the container transshipment traffic currently diverted to ports in Colombo,
   Singapore, and Dubai.



- Enhancing operational and logistics efficiency

### What is Vizhinjam Port?

Vizhinjam Port is located near Thiruvananthapuram, Kerala.

It is India's first international deepwater transshipment port.

Built by: Adani Ports and SEZ Private Limited on a design, build, finance, operate and transfer (DBFOT) model.

It is the first greenfield port project to receive viability gap funding from the government of India.

### **Key Features:**

**Deep Natural Depth:** The port boasts a natural depth of over 18 meters. This will help in accommodating large vessels and mother ships.

Cargo Handling: The port is designed to handle various types of cargo such as: Container transshipment Multipurpose cargo and Break-bulk cargo.

Strategic Location: The port is located just ten nautical miles from the international shipping route.

Capacity: The port has the capability to accommodate substantial cargo volumes.

Advanced Features: The port offers large-scale automation for quick turnaround of vessels.

### 26. Lao PDR becomes second country in 2023 after Bangladesh to eliminate lymphatic filariasis

Source: The post is based on the article "Lao PDR becomes second country in 2023 after Bangladesh to eliminate lymphatic filariasis" published in "Down To Earth" on 19th October 2023

### What is the News?

Lao People's Democratic Republic has eliminated lymphatic filariasis (LF).

Note: Lao PDR is now the second country after Bangladesh to eliminate lymphatic filariasis (LF) in 2023.

# What is Lymphatic Filariasis (LF)?

Lymphatic filariasis commonly known as elephantiasis is a neglected tropical disease.

Infection occurs when filarial parasites are transmitted to humans through mosquitoes.

Causes: Lymphatic filariasis is caused by infection with parasites classified as nematodes (roundworms) of the family Filariodidea. There are 3 types of these thread-like filarial worms:

- Wuchereria bancrofti, which is responsible for 90% of the cases
- Brugia malayi, which causes most of the remainder of the cases
- Brugia timori, which also causes the disease.

Symptoms: Lymphatic filariasis infection involves asymptomatic, acute, and chronic conditions. In chronic conditions, it leads to lymphoedema (tissue swelling) or elephantiasis (skin/tissue thickening) of limbs and hydrocele (scrotal swelling).

**Treatment:** WHO recommended strategy for lymphatic filariasis elimination is mass drug administration(MDA).

- MDA involves administering an annual dose of medicines to the entire at-risk population.
- The medicines used have a limited effect on adult parasites but effectively reduce the density of microfilariae in the bloodstream and prevent the spread of parasites to mosquitoes.

Lymphatic filariasis(LF) in India: India aims to eliminate Filariasis by 2027, three years ahead of the global target.





For this, Government of India has launched a five-pronged strategy for elimination of LF.The five pillars are as follows:

- Multi-drug administration (MDA) Campaign twice a year synchronized with National Deworming Day (10th Feb and 10th August)
- Early diagnosis and treatment; engagement of medical colleges for strengthening Morbidity management and disability (MMDP) services
- Integrated Vector Control with multi sectoral coordinated efforts
- For inter sectoral convergence with allied departments and ministries
- Leveraging existing digital platforms for LF and exploring alternate diagnostics.

### 27. Could 'marine cloud brightening' reduce coral bleaching on the Great Barrier Reef?

Source: The post is based on the article "Could 'marine cloud brightening' reduce coral bleaching on the Great Barrier Reef?" published in "The Hindu" on 19th October 2023

### What is the News?

Researchers in Australia are exploring the concept of "marine cloud brightening" as a potential solution to protect the Great Barrier Reef from heat-induced coral bleaching.

### What is Marine cloud brightening?

Marine cloud brightening is a proposed technique to combat global warming.

The idea is to make clouds over the ocean brighter so they reflect more sunlight back into space, which could help cool down the Earth.

British cloud physicist John Latham originally proposed cloud brightening in 1990.

### How does Marine cloud brightening work?

Tiny particles like sea salt are sprayed into clouds over the ocean. These particles attract water vapor, forming small cloud droplets.

The increased number of droplets makes the clouds whiter, so they reflect more sunlight.

By reflecting more sunlight, less heat reaches the Earth's surface. This could potentially lower the temperature of both the atmosphere and oceans.

### How can Marine cloud brightening help corals?

Marine cloud brightening could help reflect sunlight back into space. This will help in cooling down the ocean surface.

This can in turn protect underwater life, including corals and may reduce coral bleaching.

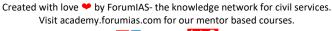
The aim behind this method is to delay coral bleaching during marine heatwaves, potentially buying more time for the reef's recovery.

### 28. 6th Assembly of International Solar Alliance to be held in New Delhi

Source: The post is based on the article "6th Assembly of International Solar Alliance to be held in New Delhi" published in "PIB" on 19th October 2023

### What is the News?

The Sixth Assembly of the International Solar Alliance is being held in New Delhi.





### What is the International Solar Alliance(ISA)?

### **Click Here to read**

**Member Countries: 109** 

**ISA** Assembly: It is the apex decision-making body of ISA in which each Member Country is represented.

This body makes decisions concerning the implementation of the ISA's Framework Agreement and coordinated actions to be taken to achieve its objectives.

The Assembly meets annually at the ministerial level at the ISA's seat.

The Republic of India holds the office of the President of the ISA Assembly with Government of the French Republic as the co-president.

# What are the key reports released during the sixth assembly of the International Solar Alliance?

World Solar Technology Report 2023: The report focuses on solar photovoltaics (solar PV) and specifically highlights advancements in crystalline silicon technology.

- Solar PV has shown remarkable growth and is projected to capture 56.4% of total renewable energy share by 2050.
- Crystalline silicon technology dominates the market with a 98% share.

World Solar Market Report 2023: This report looks at how the solar power market has changed over time. It started in Europe but now the Asia-Pacific region is leading.

- The solar market has been growing really fast (37% each year) and expanded a lot in 2022.

**World Solar Investment Report 2023:** The report shows that investment in solar power went up a lot in 2022, to more than \$300 billion (a 36% increase from 2021).

- China, Germany and the USA were the top solar investment destinations.
- The report recommends that to keep solar power growing, we need to invest in electricity grids and storage, have a variety of supply chains and focus on developing markets.

### 29. Final estimates of production of major crops released for the year 2022-23

Source: The post is based on the article "Final estimates of production of major crops released for the year 2022-23" published in "PIB" on 19th October 2023

### What is the News?

The Department of Agriculture and Farmers Welfare has released the Final Estimates of production of major crops for the year 2022-23.

### What is the data on production of major crops for the year 2022-23?

The food grain production in 2022-23 recorded an increase of over 4% when compared to 2021-22.

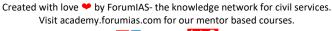
Rice output during 2022-23 was 4.6% higher than 2021-22. It was also higher than the five-year production average.

Wheat production during 2022-23 was higher by 4.7% than 2021-22.

Total Pulses production during 2022-23 was higher than the last five years' average pulses production.

Oilseeds production showed a 9% increase in 2022-23 compared to 2021-22.

Sugarcane output for 2022-23 was 11.6% higher than 2021-22.





### 30. India's first tilapia parvovirus reported in Tamil Nadu

Source: The post is based on the article "India's first tilapia parvovirus reported in Tamil Nadu" published in "The Hindu" on 19th October 2023

### What is the News?

The Tilapia parvovirus (TiPV) case has been reported for the first time in India in Tamil Nadu.

### What is Tilapia parvovirus (TiPV)?

Tilapia parvovirus (TiPV) is a small, nonenveloped, single-stranded DNA (ssDNA) virus.

The virus affects Tilapia, a freshwater fish species.

The virus was first reported in China in 2019 and Thailand in 2021. India is the third country to report the occurrence of TiPV.

It has a mortality rate ranging from 30 to 50% in the farm and 100% mortality in the laboratory.

### What is Tilapia?

Tilapia are **mainly freshwater fish.**It inhabits the shallow streams, ponds, rivers, and lakes, and less commonly found living in brackish water.

They are mainly considered as a **poor man's fish.** 

**Mozambique tilapia** was introduced to Indian fresh water bodies in the 1950s and it is called Jilabi in Tamil.It is capable of surviving in low-oxygen levels in water. The fish has turned invasive across the country.

Nile tilapia was introduced in the 1970s. It is a little bigger and is cultured on a large-scale.

Among the tilapia species, the Indian government had authorized **import of only Oreochromis niloticus** in 1970 and red hybrids because of their fast growth and market demand.

**In India, tilapia farming** is being carried out in different parts of Andhra Pradesh and Kerala. It is also sold in domestic markets as whole fish.

# 31. New evolutionary law explains how living beings, minerals & species evolve

Source: The post is based on the article "New evolutionary law explains how living beings, minerals & species evolve" published in "Down To Earth" on 19th October 2023

### What is the News?

Scientists have proposed a new evolutionary law that can explain the evolution of living and non-living entities from minerals to stars.

### What is the purpose of this law proposed by scientists?

The law aims to establish a relationship between evolution of living beings, minerals and stars.

It says that as life evolved from single-celled to multi-celled organisms, Earth's minerals also became more complex contributing to diversity.

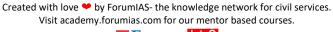
This interaction between biodiversity and mineral diversity played a crucial role in shaping life as it exists today.

### What are the three types of functions in nature according to the proposed law?

The law identifies three kinds of functions that occur in nature:

Stability: Systems with stable arrangements of atoms or molecules will continue to survive.

**Dynamic Systems:** These are systems with an energy supply.





**Novelty:** This refers to the exploration of new configurations or arrangements that can give rise to new behaviours or characteristics.

- Examples of novelty include the evolution of single-celled organisms using light to produce food and the development of new behaviors in multicellular species, such as swimming, walking, flying, and thinking.

### What is the role of Minerals and Stars in the evolution of life?

**Minerals and Their Role in Evolution:** Earth's early minerals had stable atomic arrangements, serving as the foundation for the evolution of subsequent mineral generations.

- These minerals became incorporated into living organisms, forming components like shells, teeth, and bones.

**Evolution of Stars and Chemical Elements:** Early stars in the universe primarily consisted of hydrogen and helium. These stars produced approximately 20 heavier chemical elements.

- Subsequent generations of stars contributed to the creation of nearly 100 additional elements.

### 32. Second advance estimate for the year 2022-23 released for area and production of horticultural crops

Source: The post is based on the article "Second advance estimate for the year 2022-23 released for area and production of horticultural crops" published in "PIB" on 19th October 2023

### What is the News?

The Ministry of Agriculture and Farmers Welfare has released the 2nd Advance Estimates of the area and production of various horticultural crops for the year 2022-23.

### What is the data on production of various horticultural crops for the year 2022-23?

Total horticulture production in the year 2022-23 was higher by 1.37% as compared to 2021-22.

Fruit production has increased in the year 2022-23 as compared to 2021-22.

The production of vegetables is also estimated to have increased in the year 2022-23 compared to 2021-22.

Production of plantation crops is estimated to have increased by 1.78% in 2022-23 compared to 2021-22.

# 33. India-Sri Lanka ferry service restarted after 40 yrs

Source: The post is based on the article "India-Sri Lanka ferry service restarted after 40 yrs" published in "Indian Express" on 18th October 2023

### What is the News?

India and Sri Lanka have inaugurated passenger ferry service from Tamil Nadu to Sri Lanka.

Note: A ferry is a watercraft that carries passengers, and sometimes vehicles and cargo, across a body of water.

# What is the ferry service launched between India and Sri Lanka?

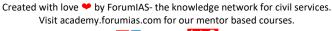
The passenger ferry service between India and Sri Lanka will run from Nagapattinam in Tamil Nadu to Kankesanthurai in Jaffna, Northern Sri Lanka.

A high-speed vessel named 'Cheriyapani' is being operated by Shipping Corporation of India to run this ferry service.

### What are the benefits of ferry service between India and Sri Lanka?

It can promote religious tourism in the coastal regions of both countries. For example, Indian travelers can access significant religious sites in Colombo and southern Sri Lanka.

The service will also boost regional commerce and trade.





### What has been the historical maritime connection between India and Sri Lanka?

There has been a historical maritime connection between India and Sri Lanka.

The Indo-Ceylon Express, known as Boat Mail, operated between Chennai and Colombo via the Thoothukudi port from the early 1900s until 1982.

However, the civil war in Sri Lanka caused these services to stop.

### 34. List Niemann-Pick as rare disease, parents of young patients urge govt

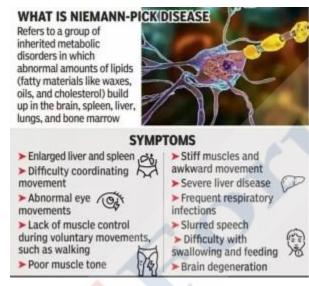
Source: The post is based on the article "List Niemann-Pick as rare disease, parents of young patients urge govt" published in "TOI" on 20th October 2023

### What is the News?

Parents of children suffering from Niemann-Pick disease have urged the Government of India to notify this disease under the National Policy for Rare Diseases.

This would enable eligible patients to receive financial support from the government and access Xenpozyme, an expensive enzyme replacement therapy used for treatment.

### What is Niemann-Pick disease?



Source: TOI

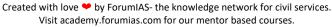
Niemann-Pick disease is a group of rare and inherited metabolic disorders that affect the body's ability to process lipids or fats properly.

This buildup of lipids can lead to a wide range of symptoms including liver and spleen enlargement, lung problems, neurological issues, and other complications.

Caused by: Niemann-Pick is caused by mutations in specific genes related to how the body metabolizes fat (cholesterol and lipids).

- The Niemann-Pick gene mutations are passed from parents to children in a pattern called autosomal recessive inheritance.
- This means that both the mother and the father must pass on the defective form of the gene for the child to be affected.

### Types of Niemann-Pick disease:





- Type A is the most severe form and typically presents itself in infancy or early childhood.
- Type B is less severe than Type A and typically presents in childhood or adolescence.
- **Type C** is a rare form that typically presents in adolescence or adulthood.

**Treatment**: There is currently no cure for Niemann-Pick disease.

### 35. Estivation: The summer's urge to nap

Source: The post is based on the article "Estivation: The summer's urge to nap" published in "The Hindu" on 20th October 2023

### What is the News?

This article talks about estivation.

### What is Estivation?

Estivation is also known as aestivation.

It is a biological phenomenon during which some animals enter a prolonged state of dormancy or inactivity during hot and dry conditions. It serves as a survival strategy to conserve energy and water.

Animals during estivation seek shelter in cool places like underground burrows, crevices, or cocoons.

During this time, animals will also reduce their metabolic activity which in turn reduces their energy consumption.

This helps them avoid extreme dryness and safe from predators.

### What are the examples of animals undergoing Estivation?

West African lungfish: It burrows into the mud of a drying water body and secretes a cocoon of mucus around itself during a drought.

**Desert tortoises:** It digs burrows to stay cool in hot summers.

**Land snails:** They seal themselves in their shells with a mucous plug and stay inactive until the conditions outside improve.

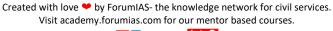
### 36. PM flags off RRTS: What is this mass transport system, how it can benefit NCR

Source: The post is based on the article "PM flags off RRTS: What is this mass transport system, how it can benefit NCR" published in "Indian Express" on 20th October 2023

### What is the News?

The Prime Minister has inaugurated the first leg of the Regional Rapid Transit System (RRTS).

Note: RRTS has now been named as Namo Bharat.





### What is the Regional Rapid Transit System (RRTS)?



RRTS is a new rail-based, semi-high-speed, high-frequency commuter transit system.

**Aim:** To ensure balanced and sustainable urban development through better connectivity and access across the National Capital Region(NCR).

**Implemented by:** National Capital Region Transport Corporation (NCRTC), which is a joint venture company of the Central government and the governments of Delhi, Haryana, Rajasthan and Uttar Pradesh, has constructed the Regional Rapid Transit System (RRTS).

**Corridors:** Eight corridors will be developed under the RRTS project which includes: 1) Delhi-Ghaziabad-Meerut 2) Delhi-Gurugram-SNB-Alwar 3) Delhi-Panipat 4) Delhi – Faridabad – Ballabgarh – Palwal; 5) Ghaziabad – Khurja 6) Delhi – Bahadurgarh – Rohtak 7) Ghaziabad-Hapur and 8) Delhi- Shahadra-Baraut.

**Speed:** RRTS trains will travel significantly faster than metro trains. These will operate at a speed of 160 km/hour but are designed to be able to run at speeds up to 180 km/hour.

# How is RRTS different from existing metro or railways systems?

RRTS is different from metro as it caters to passengers looking to travel a relatively longer distance with fewer stops and at higher speed.

RRTS is different from conventional Railway as it will provide reliable, high frequency, point to point regional travel at high speed along dedicated path way.

### What are the benefits of the RRTS Project?

**Firstly**, RRTS will be integrated with various modes of transport like Airports, Railway Stations, Inter-State Bus Terminals, Delhi Metro Stations etc providing seamless connectivity.

Secondly, with fast connectivity with satellite towns, the urbanization burden in Delhi will reduce.

Thirdly, it will reduce usage of fossil fuel powered vehicles for ferrying people from the outskirts to the city.

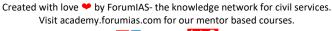
Fourthly, RRTS will increase the share of public transport resulting in a reduction in traffic.

### 37. Why a Supreme Court order on telcos' licence fee tax has the industry worried

Source: The post is based on the article "Why a Supreme Court order on telcos' licence fee tax has the industry worried" published in "Indian Express" on 20th October 2023

### What is the News?

The Supreme Court has ruled that payment of entry fee as well as variable annual license fee made by telecom companies will be considered as capital expenditure and not revenue expenditure.





### How do telecom companies currently pay entry fee and variable annual license fee?

Currently, telecom companies treat license fees as a revenue expenditure. Based on this, they claim deductions for computing their tax liability.

### How will this judgment impact telecom companies?

After the judgment, the telecom companies would have to treat license fees as a capital expenditure. This is expected to result in additional tax liabilities for telecom companies.

However, the Supreme Court's order has not clarified whether the changes to the accounting structure will have to be made on a retrospective basis.

### What are revenue and capital expenditures?

**Revenue expenditures:** These are the ongoing operating expenses, which are short-term expenses used to run the daily business operations. For example, salaries and wages of employees.

**Capital expenditures:** These are typically one-time large purchases of fixed assets that will be used for revenue generation over a longer period. For example, land or building.

### 38. CCI issues draft of 'leniency plus' norms to curb cartelisation

Source: The post is based on the article "CCI issues draft of 'leniency plus' norms to curb cartelisation" published in "Hindu Businessline" on 20th October 2023

### What is the News?

The Competition Commission of India (CCI) has released draft regulations under the 'leniency-plus' regime.

# What is a Leniency Programme?

The Leniency programme allows companies that provide sufficient information about a cartel in which they have participated to receive partial immunity from penalty.

Such a programme helps competition authorities to discover secret cartels and to obtain insider evidence of the infringement.

Leniency programme is provided under the Competition Act 2002. Under this, Competition Commission of India (CCI) may impose a lesser penalty on a person involved in a cartel if such person has made a full and true disclosure in respect of alleged violations and such disclosure is vital.

### What is Leniency plus Programme?

Leniency plus regime was introduced in the Competition (Amendment) Act, 2023.

In this regime, a cartel member cooperating with the Competition Commission of India (CCI) for leniency can reveal the existence of another unrelated cartel during the original leniency proceedings. In return, they receive an additional reduction in penalties.

This strategy is proactive in enforcing antitrust laws and aims to encourage companies already under investigation for one cartel to report other cartels unknown to the competition regulator.

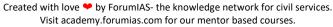
### What is Cartel?

A cartel is a collection of independent businesses or organizations that collude to manipulate the price of a product or service.

Cartels are competitors in the same industry and seek to reduce that competition by controlling pricing in agreement with one another.

Tactics used by cartels include reduction of supply, price-fixing, collusive bidding, and market carving.

The actions of cartels hurt consumers through increased prices and lack of transparency.





### 39. Major regional disparity in overcoming cancer though survival rates are up: study

Source: The post is based on the article "Major regional disparity in overcoming cancer though survival rates are up: study" published in "The Hindu" on 20th October 2023

### What is the News?

A study has examined the cervical cancer survival rates in India.

This study is based on the data from Population Based Cancer Registries (PBCRs) from 2012 to 2015.

### What is Cervical Cancer?

### Click Here to read

# What are the key findings of the study on the cervical cancer survival rates?

Nearly 52% of patients diagnosed with cervical cancer between 2012 and 2015 survived.

The highest survival rate was observed in Ahmedabad's at 61.5% followed by Thiruvananthapuram (58.8%) and Kollam (56.1%).

In contrast, Tripura reported the survival rate at 31.6%.

The survival rates were lower in India's northeastern region.

### What are the factors that contributed to the cervical cancer survival rates?

The factors that contributed to variations in survival rates of cervical cancer patients are: access to diagnostic services, effective treatment varied across the population, distance from clinical care facilities, travel costs, co-morbidities and poverty.

# 40. Microalgae are adapting to warming climate, declining nutrient levels in seas with novel strategy

Source: The post is based on the article "Microalgae are adapting to warming climate, declining nutrient levels in seas with novel strategy" published in "Down To Earth" on 20th October 2023

### What is the News?

Microalgae have adopted a unique strategy to adapt to global warming.

### What is Microalgae?

Microalgae are microscopic algae that are invisible to the naked eye. They are typically found in freshwater and marine systems.

They are unicellular species that exist individually or in chains or groups.

Unlike higher plants, microalgae do not have roots, stems, or leaves.

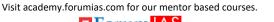
Microalgae are capable of performing photosynthesis. They produce approximately half of the atmospheric oxygen and captures the carbon dioxide from the atmosphere.

### What is the importance and applications of Microalgae?

Food Chain: They play a crucial role in the food chain as they serve as a primary source of nutrition for a wide range of aquatic organisms. They are often consumed by various aquatic creatures, including zooplankton, which, in turn, are eaten by larger organisms like fish.

Nutrition: Some species of microalgae, such as spirulina and chlorella, are highly nutritious and are used as dietary supplements. They are rich in proteins, vitamins, minerals, and other essential nutrients.

Biofuel: Microalgae can be used to produce biofuels, such as biodiesel. They have a high lipid content, which can be converted into fuel through various processes.





**Environmental Remediation**: Microalgae can help in wastewater treatment and carbon capture. They can absorb nutrients and pollutants from water and help improve water quality.

**Biotechnology:** Microalgae are used in biotechnology for the production of various compounds, including pigments, pharmaceuticals, and chemicals.

### What is the strategy adopted by Microalgae to adapt to global warming?

As climate change reduces nutrient availability in the ocean, microalgae activates a protein called **rhodopsin.**This protein is related to the one responsible for low-light vision in the human eye.

Rhodopsin enables these microalgae to thrive by using sunlight instead of traditional chlorophyll when nutrients are scarce.

**Note:** Rhodopsins are proposed to be major light capturers in the ocean. They absorb light as much as chlorophyll-based photosynthesis in the sea to generate energy and food.

### 41. SC asks States to appoint officers under POSH Act

Source: The post is based on the article "SC asks States to appoint officers under POSH Act" published in "The Hindu" on 20th October 2023

### What is the News?

The Supreme Court has directed the Centre and all the states and Union territories (UTs) to immediately appoint district officers under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act (POSH Act).

What is Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act (POSH Act)?

### Click Here to read

### What are District Officers under the POSH Act?

The Sexual Harassment of Women At Workplace (Prevention, Prohibition and Redressal) Act of 2013, or POSH Act mandates States to appoint a District Officer in every district.

# **Functions of District Officer under POSH Act:**

**Constitute Local Complaints Committees** (LCCs): District Officers would constitute Local Complaints Committees (LCCs) to receive complaints from women employed in small establishments with less than 10 workers or cases in which the accused is the employer himself.

**Appoint Nodal Officers:** A District Officer would appoint nodal officers under the Act in rural, tribal and urban areas. The nodal officers would receive complaints and forward the same to the concerned Local Complaints Committees (LCCs).

- The Local Complaints Committees (LCCs) after conducting an inquiry have to submit its report to the district officer and the employer recommending action.

**Submit Annual reports to Government:** The district officer will forward a brief statement on the annual reports submitted by every employer in their jurisdiction to the government.

- Note: An Internal Committee (IC) is to be set up under the POSH Act if the organization has 10 or more employees.

### 42. Little Ice Age (LIA) was wet (moist) and was not uniformly cold and dry

Source: The post is based on the article "Little Ice Age (LIA) was wet (moist) and was not uniformly cold and dry" published in "PIB" on 20th October 2023

### What is the News?

A study was conducted in Western Ghats to understand the variations of rainfall patterns during the Little Ice Age.

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### What is the Little Ice Age?

The Little Ice Age was a period of cooler climate conditions that occurred roughly between CE 1671-1942.

# What is the purpose of the study?

The Western Ghats region in India experiences two main monsoons: the southwest summer monsoon (SWM) from June to September and the northeast winter monsoon (NEM) from October to December.

The study aims to understand how vegetation and climate changed in Western Ghats region influenced by both monsoons during the last millennium.

### What are the key findings of the study?

The study has found the presence of moist conditions during the Little Ice Age (LIA) in the Western Ghats. This is likely due to increased northeast winter monsoon (NEM) influence.

These findings indicate that the Little Ice Age (LIA) period was also wet (moist) and was not uniformly cold and dry.

**Factors Influencing Climate Change:** The study suggested several factors that may have contributed to this climate change and increased southwest summer monsoon (SWM).

- These factors include: northward movement of the Inter Tropical Convergence Zone (ITCZ), positive temperature anomalies, increased sunspot numbers and high solar activity.

Weakest Phase of Indian Summer Monsoon Explained: The study attributed the weakest phase of the Indian Summer Monsoon (ISM) across the Indian subcontinent during the LIA to the southward shift of the ITCZ.

# 43. APAAR: All you need to know about this 'One Nation, One ID' to be rolled out for students

Source: The post is based on the article "APAAR: All you need to know about this 'One Nation, One ID' to be rolled out for students" published in "TOI" on 20th October 2023

# What is the News?

The Union Education Ministry has introduced the concept of 'One Nation, One Student ID' referred to as APAAR ID

This concept is in alignment with the National Education Policy (NEP) 2020. The policy aims to create unique ID numbers for school students across India.



### What is APAAR?

# APAAR REGISTRY OF ACADEMIC FEATS

- It will help track educational progress and achievements of students
- Students can digitally store all achievements, like exam results, learning outcomes, achievements in Olympiad, sports, skill training etc
- Students can use the credit score for their higher education or employment purpose in future
- Aadhaar number will be masked while sharing data with other government users
- Personal information, such as name, address, age, date of birth, gender and photograph, will be made



available to entities engaged in various educational activities, scholarships, educational institutions

- It will make transfer from one school to another easy
- ➤ It will help monitor students dropping out and mainstreaming them. New students entering the education system can also be tracked



Source: TOI

APAAR stands for 'Automated Permanent Academic Account Registry'.

It is a 12 digit digital identification system for school students in India.It will give each student enrolled from preprimary to higher education a unique identification number.

It will digitally store academic qualifications, credit scores, certificates, and other academic data of students.

### How can students enroll in APAAR?

The enrolment process will be carried out by the school, with the consent of the students parents.

The parents can withdraw their consent at any given point in time.

The data will be shared only with concerned government agencies if and when required.

The data collected on each student by the schools will be stored in a centrally functioning District Information for Education portal.

### What are the benefits of APAAR for students?

APAAR is like a lifelong ID that helps you keep track of your school journey and achievements.

You can store your exam results, what you've learned and even your extra accomplishments like Olympiad rankings or receiving specialized skill training

It also makes switching schools easier because all the documents for admission are in one place.

### What are the challenges with APAAR ID?

**Data Security Worries**: Because of past issues with Aadhaar data security, people are worried about the safety of their information with APAAR.

**Extra Work for Schools**: Schools are already dealing with verifying Aadhaar details for students. Adding APAAR registration can make things more complicated for teachers and staff.



### 44. Mahua Moitra and 'cash for query' row: How MPs ask questions in Lok Sabha

Source: The post is based on the article "Mahua Moitra and 'cash for query' row: How MPs ask questions in Lok Sabha" published in "Indian Express" on 21st October 2023

### What is the News?

Lok Sabha MP has been accused of asking questions in Parliament in exchange for cash and gifts from a businessman.

In this context, let us look at the procedure for asking questions in Lok Sabha.

# What is the procedure for raising the questions?

The procedure for raising questions is governed by "Rules of Procedure and Conduct of Business in Lok Sabha" and "Directions by the Speaker, Lok Sabha".

Notice Submission: MPs must give notice addressed to the Secretary-General of the Lok Sabha to ask a question.

- The notice includes the question text, the Minister's designation to whom it's directed, the desired answer date, and order of preference if multiple questions are submitted.

Typically, the notice period for a question is at least 15 days.

Limit on Notices: MPs can submit up to five notices for both oral and written answers for a single day.

- Excess notices are considered for the following day during the session.

**Examination by Speaker:** The Speaker of Lok Sabha reviews the notices according to specified rules. The Speaker decides if a question or part of it is admissible.

### What are the conditions for the admissibility of questions?

**Word Limit:** Questions usually should not exceed 150 words. They must not contain arguments, defamatory statements, or reference to an individual's character or conduct, except in their official or public capacity.

**Policy Questions:** Questions raising broad policy issues are generally not allowed because policy matters can't be fully addressed in a brief answer.

**Pending Matters**: 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.

**Threatens unity:** A question can't seek information on matters which may weaken the unity and integrity of the country.

What are the different types of questions?

### Click Here to read

### What is the importance of raising questions?

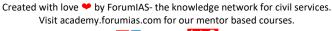
**Legislative Control:** Asking questions is an inherent parliamentary right of MPs.It allows legislative control over executive actions.

**Information and Critique**: Questions are used to obtain information about government activities and criticize policies.

- They shed light on government shortcomings and encourage action for the common good.

Public Feedback: The government uses questions to gauge public reactions to their policies.

- Sometimes, questions can lead to the formation of a parliamentary commission, a court of enquiry or even the enactment of a legislation.





### 45. No violation of Vienna Convention rules: India

Source: The post is based on the article "No violation of Vienna Convention rules: India" published in "Business Standard" on 21st October 2023

### What is the News?

Canada has accused India of violating the Vienna Convention after India had asked for a reduction in the number of Canadian diplomats posted in India.

### What is the Vienna Convention?

The Vienna Convention on Diplomatic Relations is an international treaty signed in 1961.

**Aim:** To put forth a framework for diplomatic interactions between independent nations and aims to ensure the development of friendly relations among nations.

**Signed by**: At present 193 countries are party to the convention.

The convention formalizes the longstanding practice of diplomatic immunity. It grants diplomatic missions privileges that enable diplomats to perform their functions without fear of coercion or harassment by the host country.

### Why has Canada accused India of violating the Vienna Convention?

Canada has accused the Indian government of violating the Vienna Convention by forcing it to downsize its mission in India.

### What was India's response to this violation of the Vienna Convention?

India has said that its actions are as per provisions of Article 11.1 of the Vienna Convention on Diplomatic Relations (VCDR).

Article 11.1 pertains to the size of international missions within other countries.

It provides the receiving state the right to limit the size of a diplomatic mission to what it considers reasonable and normal.

# 46. Solar Panels to have Star Label indicating Quality and Energy Efficiency, Programme to be voluntary for first two years

Source: The post is based on the article "Solar Panels to have Star Label indicating Quality and Energy Efficiency, Programme to be voluntary for first two years" published in "PIB" on 21st October 2023

### What is the News?

The Government has launched the Standards & Labelling Programme for solar panels.

### What is the Standards & Labelling Programme?

**Launched by:** Bureau of Energy Efficiency(BEE)

Aim: To provide consumers an informed choice about the energy and cost-saving potential of the star labelled appliances/equipment being sold in the Indian market.

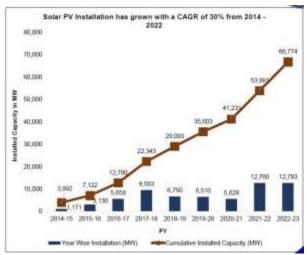
**Rating:** The scheme involves laying down energy performance norms for appliances/equipment by rating its energy performance on a scale of 1 to 5 with 5 star labelled appliance being the most energy efficient one.

**Appliances covered**: The program presently covers 34 appliances.Out of which 15 appliances are under the mandatory regime which means these appliances cannot be sold in the market without the label and 19 appliances are in voluntary regime where the market is in development stage.

**Significance:** The scheme has resulted in overall electricity saving of 70.56 billion units translating to an abatement of 57.05 million ton of CO emission in FY 2021-2022.



# What is the Standards & Labelling Programme for solar panels?



Source: PIB

**Aim:** To help the Indian customers to make an informed decision by helping citizens to know which brands of solar panels are more or less efficient.

**Duration:** The labelling will be voluntary for the first two years from January 1, 2024, to December 31, 2025. During this period, no labelling fee will be charged.

Significance: The program is expected to enhance Solar PV module efficiency by 2% over its existing levels.

- Due to this performance improvement, the electricity generation is expected to increase by 33GWh/year and this will offset ~27,000 tons of CO2 emission per annum.

# 47. Gaganyaan Mission: ISRO is set for first test flight

Source: The post is based on the article "Gaganyaan Mission: ISRO is set for first test flight" published in "The Hindu" on 21st October 2023

# What is the News?

The Indian Space Research Organisation(ISRO) has launched Gaganyaan's first Flight Test Vehicle Abort Mission-1(TV-D1).

### What is Flight Test Vehicle Abort Mission-1(TV-D1)?

Flight Test Vehicle Abort Mission 1 (TV-D1) is the first of two abort missions to test crew safety mechanisms for the Gaganyaan mission.

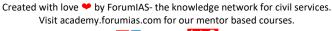
Aim: To check the effectiveness of Crew Escape System(CES) in taking the Crew Module(CM) to safety in case of an emergency during the Gaganyaan mission.

### **Objectives:**

- Flight demonstration and evaluation of Test Vehicle sub systems.
- Flight demonstration and evaluation of the Crew Escape System including various separation systems.
- Crew Module characteristics & deceleration systems demonstration at higher altitude & its recovery.

**Features:** The test vehicle is a single-stage liquid rocket.

– It carries the Crew Module (CM) and Crew Escape Systems (CES) along with other components like the CM fairing (CMF) and Interface Adapters.





- The CM is the part where astronauts will stay during the Gaganyaan mission. For this test (TV-D1), an unpressurized version of CM is used.
- The flight will simulate the abort condition.CES with CM will be separated from the Test Vehicle at an altitude of about 17 km.
- Subsequently, the abort sequence will be executed with the separation of CES, parachutes deploying and eventually, the CM landing safely in the sea.

**Significance of this test:** The success of this test flight will set the stage for the remaining qualification tests and unmanned missions, leading to the first Gaganyaan mission with Indian Astronauts.

### 48. As part of 'Meri Maati, Mera Desh', Railways plans special trains

Source: The post is based on the article "As part of 'Meri Maati, Mera Desh', Railways plans special trains" published in "The Hindu" on 21st October 2023

### What is the News?

Indian Railways will run special trains on October 29 to carry volunteers with soil (mitti) from different parts of the country to New Delhi.

This is part of the 'Meri Maati Mera Desh' (My soil, my country) campaign.

What is the 'Meri Maati Mera Desh' (My soil, my country) campaign?

Launched by: Ministry of Culture

Aim: To pay tribute to the Veers and Veeranganas [bravehearts] who have made the supreme sacrifice for the country.

**Under the campaig**n, about 20,000 volunteers, each carrying soil in an urn (kalash), will gather in Delhi for events related to the year-long Azadi Ka Amrit Mahotsav.

- Volunteers will collect soil from households as a mark of respect for those who sacrificed their lives for the country. If soil isn't available, a grain of rice can be contributed.
- The collected soil will be used in the creation of the 'Amrit Vatika,' a special garden in Delhi, and an 'Azadi Ka Amrit Mahotsay' memorial.

### What is the contribution of the Ministry of Railways in this?

The Ministry of Railways would operate special 'Amrit Kalash Yatri' trains to facilitate the movement of the volunteers.

These trains would have halts at major stations for meet and greet with local Members of Parliament, celebrities and officials.

### 49. SC: The way Centre approves collegium picks 'troublesome'

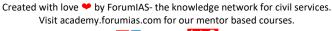
Source: The post is based on the article "SC: The way Centre approves collegium picks troublesome" published in "TOI" on 21st October 2023

### What is the News?

The Supreme Court has cautioned the Union government against a "pick and choose" approach in matters of judicial appointments.

### **Background:**

In 2021, the Supreme Court had expressed concerns over the growing number of vacancies in High courts and urged the central government to promptly notify the appointments of candidates endorsed by the Supreme Court collegium.





To streamline the process, the court established a timeline: The Intelligence Bureau (1B) should submit its reports to the central government within four to six weeks from the date of the high court collegium's recommendation.

In turn, the central government should forward the recommendations to the Supreme Court within eight to 12 weeks of receiving the intelligence agency inputs and the state government's views.

After the Supreme Court collegium sends its recommendations, the Centre should immediately notify the appointments of the candidates so endorsed or return the recommendations within the same period specifying the reasons for its reservations.

Finally, if any or all of the names are reiterated, the appointments would have to be processed and notified within three to four weeks from the receipt of the names.

# What has happened after the Supreme Court streamlined the appointment process of judges?

A contempt petition was filed by the Advocates Association Bengaluru accusing the Centre of violating the court's directions by not approving 11 names reiterated by the Supreme Court collegium.

# What are the observations made by the Supreme Court on this contempt petition?

The Supreme Court said that the delay in appointments of judges 'frustrated the whole system'.

It also expressed grave concerns over the Centre's practice of pick and choose approach in matters of judicial appointments. It said that such practice disrupts the seniority of the persons nominated for judgeship.

### 50. Mid-Planning Conference For Multilateral Naval Exercise (MILAN) – 24

Source: The post is based on the article "Mid-Planning Conference For Multilateral Naval Exercise (MILAN) – 24" published in "PIB" on 21st October 2023

### What is the News?

The Mid Planning Conference (MPC) of MILAN 24 (Multilateral Naval Exercise – 2024) was hosted by the Indian Navy at Visakhapatnam.

### What is Exercise MILAN?

**Type:** Biennial multilateral naval exercise

**Started by:** Indian Navy in 1995

Aim: To enhance professional interaction between friendly foreign navies and learn from each other's strengths and best practices in the maritime domain.

Countries participation: The exercise began with the participation of just four countries: Indonesia, Singapore, Sri Lanka, and Thailand.

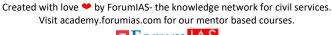
- Over the years, it has grown in terms of both the number of participants and the complexity of exercises. In 2022, 39 countries participated in Milan exercise.

Significance: The exercise originally aligned with India's 'Look East Policy'. It later expanded to include more countries as part of India's 'Act East Policy' and the Security and Growth for All in the Region (SAGAR) initiative.

This expansion involved nations from both the western Indian Ocean Region (IOR) and the countries along the IOR

Exercise MILAN 2024: It is likely to witness the largest-ever participation with invites being extended to over 50 countries.

- The exercise aligns with India's G20 Presidency and the theme "Vasudhaiva Kutumbakam" emphasizing global unity.





### 51. Scientists reveal source of most powerful marsquake in history

Source: The post is based on the article "Scientists reveal source of most powerful marsquake in history" published in "Indian Express" on 20th October 2023

### What is the News?

Scientists have found out the source of the most powerful Marsquake on Mars.

### What are Marsquakes?

Marsquakes are seismic events or earthquakes that occur on the planet Mars.

# Who detected Marsquakes on Mars?

NASA's InSight mission had detected and recorded numerous marsquakes in 2022. This is the largest ever marsquake recorded in history.

# What caused Marsquakes on Mars according to the study?

The study has found that the marsquake was caused by the release of tectonic forces from within the planet's interior.

These stresses are the result of billions of years of evolution including the cooling and shrinking of different parts of the planet at different rates.

