

DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 29-01-2024

Table of Content

Appointment of Chief Minister (CM)
Execution By Nitrogen Hypoxia
P-75I Procurement Program
Pandemic Treaty

FACTS IN SHORTS

ECOWAS
Rajon Ki Baoli
Purple Revolution
End to end Encryption
INSAT-3DS Satellite

APPOINTMENT OF CHIEF MINISTER (CM)

Syllabus: GS2/ Indian Polity

Context

- JD(U) leader Nitish Kumar took oath as Bihar Chief Minister for the 9th time.

Constitutional Provisions

- The Constitution does not contain any specific procedure for the selection and appointment of the Chief Minister.
- **Article 163(1)** of the Constitution says “there shall be a Council of Ministers with the Chief Minister (CM) at the head to aid and advise the Governor in the exercise of his functions”.
- **Article 164(1)** says “the Chief Minister (CM) shall be appointed by the Governor and the other Ministers shall be appointed by the Governor on the advice of the CM”.

Appointment of the CM

- In accordance with the conventions of the Parliamentary system of government, the Governor has to appoint the **leader of the majority party** in the state legislative assembly as the Chief Minister.
- When no party has a clear majority in the assembly, then the Governor may **exercise his personal discretion** in the selection and appointment of the Chief Minister.
- According to the Constitution, the Chief Minister may be a member of **any of the two Houses** of a state legislature.
- A person who is not a member of the state legislature can be appointed as Chief Minister for six months, within which time, he/she should be elected to the state legislature, failing which he ceases to be the Chief Minister.

Oath ceremony of CM

- The third Schedule of the Indian Constitution prescribes the “Forms of Oaths or Affirmations”.
- The Oath, usually administered by the Governor, is a formal pledge to uphold the constitution and discharge the duties of the office faithfully.

Powers and functions of the Chief Minister

- The Chief Minister advises the governor with regard to the **summoning and proroguing of the sessions** of the state legislature.

- CM is the **main link between the Governor and the Ministers** and is the head of the State Legislative Assembly.
- CM can **recommend the dissolution of the legislative assembly** to the governor at any time.
- CM acts as a **vice-chairman of the concerned zonal council** by rotation, holding office for a period of one year at a time.

Source: [IE](#)

EXECUTION BY NITROGEN HYPOXIA

Syllabus: GS2/Polity

In Context

- The **US state of Alabama** carried out the **execution** of a convicted murderer using **nitrogen gas**.

About

- This marks the **first time** a different method has been employed in the United States **since the adoption of lethal injection** as the primary execution method.
 - ♦ Lethal injection involves **injecting drugs** that sedate and kill the inmate, and has been the preferred method.
- About half of the US states still have the death penalty, and they use different methods, such as **hanging, firing squad, or electric chair**.

Nitrogen Hypoxia

- In a nitrogen gas execution, the individual is confined within a sealed chamber.
- Nitrogen gas is introduced into the chamber, gradually replacing the oxygen.
- An inmate is deprived of oxygen until he/she **breathes only nitrogen, causing asphyxiation**.
 - ♦ It induces **unconsciousness and, ultimately, causes death**.
- Nitrogen, constituting **78%** of the air we breathe, is typically harmless. However, **when not mixed with proper levels of oxygen, it can be lethal**.

Nitrogen Gas Execution is Controversial due to Several Reasons:

- Critics compare nitrogen hypoxia to **human experimentation**, raising ethical concerns about its untested nature.
- Concerns were raised about the execution mask not being airtight, potentially allowing oxygen to seep in.

- ♦ This could lead to a prolonged trauma or leave the person in a **vegetative state**.
- Lack of oxygen may cause the person to vomit inside the mask, posing a risk of choking and **complicating the execution**.
- There were worries about the **well-being of those administering the execution**.
 - ♦ The odourless and colourless nature of nitrogen gas, coupled with potential mask dislodgement, raises challenges in detecting its effects on individuals in the execution room.
- The **limited testing of nitrogen gas as an execution method** raises concerns about its reliability and the potential for complications or errors during the process.

Capital Punishment

- Capital punishment, also known as the death penalty, is the **state-sanctioned execution of a person** as a punishment for a crime.
- It is the **highest degree of punishment** that can be awarded to an individual under a specified penal law in force.
- In many places, the use of the death penalty has been a subject of ethical, moral, and legal debates.

Capital Punishment in India

- Capital punishment **is legal** in India, and it is retained for certain types of heinous crimes.
- It is prescribed under the **Indian Penal Code** and other special laws.
- The legal process for imposing the death penalty in India involves a trial court issuing a death sentence, which can then be appealed in higher courts, including the High Court and the Supreme Court of India.
- **The President of India** has the power to grant pardons or commute sentences.

Arguments in Favour of Capital Punishment

- **Crime Deterrence:** Proponents argue that the death penalty serves as a deterrent to potential offenders, dissuading them from committing serious crimes due to the fear of facing the ultimate punishment.
- **Justice:** Supporters believe that certain crimes deserve the ultimate punishment, providing a sense of justice and retribution for the victims and their families.

- **Permanent Incapacitation:** Advocates suggest that the death penalty ensures that individuals who have committed heinous crimes will never be able to harm society again.
- **Equivalent to the Crime:** Some argue that certain crimes are so severe that the punishment should be commensurate with the gravity of the offense, and in extreme cases, only the death penalty is seen as fitting.
- **Emotional Closure:** The death penalty can provide closure and a sense of justice to the families of victims, allowing them to move forward knowing that the perpetrator has faced the most severe punishment.
- **Moral Condemnation:** The death penalty reflects society's moral condemnation of certain acts and reinforces the sanctity of human life by holding individuals accountable for their actions.

Arguments Against Capital Punishment

- **Risk of Wrongful Execution:** Critics argue that no justice system is infallible, and the risk of executing an innocent person exists.
 - ♦ Cases of wrongful convictions, sometimes based on flawed evidence or legal errors, can lead to irreversible consequences.
- **Inherent Value of Human Life:** The death penalty violates the inherent value of human life, suggesting that the state should not participate in the intentional taking of a person's life, regardless of the crime committed.
- **Questionable Deterrence Effect:** Opponents challenge the notion that the death penalty effectively deters crime, pointing to studies that show no conclusive evidence that capital punishment is a more effective deterrent than other forms of punishment.
- **Cruel and Inhuman Punishment:** The death penalty violates the prohibition against cruel, inhuman, or degrading treatment or punishment, as recognized by international human rights standards.
- **Life Imprisonment as an Alternative:** Some argue that life imprisonment without the possibility of parole is a viable alternative to the death penalty, ensuring public safety without the irreversible consequences of execution.
- **Psychological Effects:** Critics raise concerns about the psychological impact on those involved in the execution process, including prison staff and witnesses, as well as the mental health of the condemned individual.

- **Global Abolition Trend:** There is a global trend toward the abolition of the death penalty, with an increasing number of countries choosing to eliminate or suspend capital punishment.

Conclusion

- These arguments collectively contribute to ongoing debates about the ethical, legal, and social implications of capital punishment.
- Public opinion on this issue varies, and discussions continue at national and international levels.
- Perspectives on capital punishment may evolve over time, and legal frameworks can change based on societal values and international standards.

Source: [HT](#)

P-75I PROCUREMENT PROGRAM

Syllabus: GS3/Defence

In Context

- Germany has presented a **government to government proposal** for the sale of **six advanced conventional submarines** to India for the Navy's **P-75I procurement program**.

About

- India and Germany discussed the deal at the highest level during the visit of the **German Defence Minister in 2023**.
- **Only Germany and Spain technically** meet the criteria to submit bids under the P-75I deadline.
- The deal is being progressed under the **'strategic partnership' of the defence procurement procedure**.
- **Mazagon Dock Shipbuilders Limited (MDL), along with Larsen & Toubro (L&T) Limited,** have been shortlisted to partner with foreign submarine manufacturers to make six advanced conventional submarines in India under a **technology transfer**.

What is Project-75I?

- Project-75 (India), also known as **P-75(I)**, is a military acquisition initiative by the Ministry of Defence (MoD).
- The initiative aims to procure diesel-electric attack submarines with fuel cells and **Air-Independent Propulsion System (AIP)** for the Indian Navy to build India's naval strength and develop indigenous submarine-building capabilities.

Difference between Project 75 and Project 75I

- Project 75I is a **follow-up to Project 75** and improves upon the design and technology of its predecessor.
- The conventional diesel-electric submarines such as the Scorpene, under Project 75, come with improved stealth features however, as **electrical batteries power** them, they need to **surface every 48 hours** to be recharged.
- The **AIP technology** will improve on this in Project 75I building six submarines that can stay **submerged for up to two weeks**.
 - ◆ These submarines may even be larger in size compared to the ones under Project 75.
- While Project 75 came to just Rs 23,000 crore, Project 75I is beginning at almost **double the budget** at Rs 43,000 crore.

India's Need to Increase its Submarine Fleet

- **National Security and Maritime Dominance:** India, with its long coastline and extensive maritime interests, seeks to enhance its maritime dominance in the Indian Ocean region.
 - ◆ An increased submarine fleet can help address emerging threats and ensure the country's ability to respond effectively to changing circumstances.
- **Ageing Fleet:** Submarines are a key need for India due to its **ageing fleet**.
 - ◆ Aside from six recently built vessels, the **rest are over 30 years old** and likely to be decommissioned in years to come.
- **Patrolling IOR:** To effectively patrol the Indian Ocean, the Indian navy needs a **minimum of 24** conventional submarines but **currently has only 16**.
- **Modernization and Technological Advancements:** The global submarine technology landscape is advancing rapidly. To maintain a competitive edge and ensure the effectiveness of its naval forces, India may seek to acquire or develop modern and technologically advanced submarines.

Conclusion

- India, which is part of the Quad grouping that includes Japan, US and Australia, has been pushing for these countries and European allies to **share technology** to build submarines.
- However there's been a **general reluctance** to pass on technology given India's proximity to

Russia and India's "Make in India" policy to boost local manufacturing and create jobs.

Source: TH

PANDEMIC TREATY

Syllabus: GS2/Health

Context

- The World Health Organisation (WHO), has urged countries to sign on to its pandemic treaty in order to fight the globe's 'Disease X'.

What is Disease X'?

- Disease X is a label that the WHO is using to refer to currently unknown infectious conditions that may be capable of causing an epidemic or a pandemic.
- The term, was first coined in 2017, can be used to mean a newly discovered pathogen or any known pathogen with newly acquired pandemic potential.
- Covid-19 was the first Disease X but the organization is warning there could be another at some point in the future.
- It is most likely to be a zoonotic disease with a **ribonucleic acid (RNA) virus**, having a far worse effect on mortality rates than the COVID-19 pandemic.
 - RNA viruses have a high mutation rate. They are therefore highly infectious.

Pandemic Treaty

- It is a global pandemic treaty to better prepare for and respond to a future pandemic.
- After the COVID-19 pandemic, the WHO's member states began planning a global accord to better prepare the world for future pandemics.
- In 2023, the WHO published a "zero draft" of the accord, a framework for member states to begin negotiations.

World Health Organisation (WHO)

- It is a specialized agency of the United Nations with a mandate to act as a coordinating authority on international health issues.
- It was founded in **1948** and has headquarters at **Geneva, Switzerland**.
- It has **194 Member States**, 150 country offices, six regional offices.
- It works in collaboration with its member states usually through the Ministries of Health.

- The objective of the draft is to prevent pandemics, save lives, reduce disease burden and protect livelihoods, through strengthening the world's capacities for preventing, preparing for and responding to, and recovery of health systems from pandemics.

Source: DTE

ECOWAS

Syllabus:GS2/ International Relations

Context

- The military regimes in Burkina Faso, Mali and Niger announced their immediate withdrawal from the West African bloc ECOWAS.

What is ECOWAS?

- ECOWAS stands for the Economic Community of West African States.
- History:** It was established in **1975** through the **Lagos Treaty** to promote economic integration among its members.
- Headquartered:** Abuja, Nigeria
- Members:** Earlier it had 15 members i.e. Benin, Burkina Faso, Cabo Verde, Côte d' Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Sierra Leone, Senegal and Togo. Now there are only 12 members.
- ther roles:** Beyond the goals of economic cooperation, ECOWAS has attempted to **quell military conflicts** in the region.
 - ECOWAS also operated a regional **peacekeeping operation** in Liberia and Sierra Leone in the past.

Source: TH

RAJON KI BAOLI

Syllabus: GS1/Indian Architecture

Context:

- Rajon ki Baoli (*a stepwell and a reservoir in which water can be stored*) in the **Mehrauli Archaeological Park** of Delhi, India, was recently in the news.

About the Rajon ki Baoli:

- It was **built by the Daulat Khan** in 1516 (at the reign of the **Ibrahim Lodi**), meant to serve the needs of masons (Raj Mistri)



- ◆ The name 'Rajon Ki Baoli' comes from the masons who were living at the Baoli and using its water.
- The structure is described as a 'U-shaped Baoli with its natural springs as source water' and is an example of **Indo-Islamic design**.
- The stepwell consists of four levels.
 - ◆ As of 1875, there were 66 steps, but now, due to the step well being partly filled, there are three storeys and 41 steps.
- It includes a mosque with a chhatri (dome-shaped pavilion) and a grave, although **it is unknown who is buried in the tomb**.

Source: IE

PURPLE REVOLUTION

Syllabus: GS3/Agriculture

Context:

- Recently, the Purple Revolution was highlighted through Lavender Cultivation in Jammu & Kashmir in the Tableau of Republic Day (2024).
 - ◆ It highlights the Lab-to-Market success story of CSIR under the Viksit Bharat theme.



The Purple Revolution (or Lavender Revolution)

- It refers to the **significant growth of lavender cultivation in Jammu & Kashmir**, India.
- This initiative is part of the **Aroma Mission** launched by the **Union Ministry of Science & Technology**.
 - ◆ It aims to promote the indigenous aromatic crop-based agro economy.
- It aims to increase the income of the farmers and promote lavender cultivation on a commercial scale.
- It offers attractive **startup avenues** and contributes to **overall growth** in the region.

Role of Council of Scientific & Industrial Research (CSIR)

- The Purple Revolution has been made possible through scientific interventions by the CSIR.
 - ◆ It provides free saplings and end-to-end agro-technologies to farmers.

Source: PIB

END TO END ENCRYPTION

Syllabus: GS3/Science and Technology

In Context

- End-to-end (E2E) encryption has transformed human rights organisations', law-enforcement agencies', and technology companies' outlook on their ability to access and use information about individuals.

What is Encryption?

- Fundamentally, encryption is the **act of changing some consumable information** into an **inconsumable form** based on some rules. There are different kinds of such rules.
- The key is some data using which a computer can '**unlock**' (**decrypt**) some '**locked**' (**encrypted**) **text**, knowing the set of rules used to 'lock' it.

What is E2E encryption?

- E2E is encryption that refers to **particular locations** between which information moves.
- When one send a message, it first goes to a server maintained by the company that built the app; based on its instructions, the server routes the message to the receiver.
 - ◆ **Encryption-in-transit** means before a message is relayed from the server to you (or vice versa), **it is encrypted**.

- This scheme is used to prevent an actor from being able to read the contents of the message by intercepting the relay.
- Messaging apps with E2E encryption promise that **even their parent companies won't be able to read messages** sent and received by its users.
 - ♦ However, the informational content of the messages can still be accessed in other ways.

Source: [TH](#)

INSAT-3DS SATELLITE

Syllabus: GS3/Developments in Science and Technology

Context:

- The **INSAT-3DS** satellite has been flagged off to the launch port at the **Satish Dhawan Space Centre in Sriharikota**.

About the INSAT-3DS

- The INSAT-3DS satellite is an **exclusive meteorological satellite** realised by ISRO.
- **Likely launch:** February 14, 2024.
- **Objective:** To provide continuity of services to the existing in-orbit INSAT-3D and 3DR satellites

and significantly enhance the capabilities of the INSAT system.

- **Payloads:**

- ♦ **State-of-the-art payloads:** 6 channel Imager and 19 channel Sounder meteorology payloads
- ♦ **Communication payloads:** The Data Relay Transponder (DRT) and Satellite aided Search and Rescue (SAS&R) transponder.
 - **The DRT instrument** receives meteorological, hydrological and oceanographic data from automatic Data Collection Platforms / Automatic Weather Stations (AWS) and augments the weather forecasting capabilities.
 - **The SAS&R transponder** is to relay a distress signal / alert detection from the beacon transmitters for search and rescue services with global receive coverage.
- **Launch Vehicle:** GSLV-Geosynchronous Satellite Launch Vehicle.
- **Expected Role:** The satellite is designed for enhanced meteorological observations and monitoring of land and ocean surfaces for weather forecasting and disaster warning,

Source: [TH](#)

