

**DAILY  
CURRENT  
AFFAIRS  
ANALYSIS**



LAKSHYA ACADEMY®

**03 SEPTEMBER 2023**

# 1 – About Super Blue Moon:

## GS III

### Science and Technology

- **Context:**

- There was a rare celestial trifecta recently called as the Super Blue Moon that included a "blue moon" and a "super moon."

- **About:**

- Instead of being round, the moon's orbit around the earth is elliptical, or an expanded or stretched-out circle.
- It takes the moon 27.3 days to orbit the earth.
- There are 29.5 days between new moons.
- This is because the sun is revolving around the earth at the same time as the moon is orbiting the planet. Because of this, it takes more time for the sun to shine on the moon than it does at the beginning of each earth-round.
- The new moon is the opposite of the full moon in that it is the darkest time of the moon's invisible phase when the illuminated side of the moon is pointed away from the earth.
- The words perihelion and apohelion are used to denote the points in the moon's elliptical orbit that are respectively closest to and farthest from Earth.
- Whenever the moon is full and at, or very close to, perigee, it is referred to as a "super moon."
- The new moon also has this happen, although it is not visible.
- A full moon occurs when the moon is straight across from the sun and completely lighted on its dayside.
- The full moon rises and sets as a brilliant circle in the sky around sunset and sunrise.
- Astronomical events like the blue moon don't happen all that frequently.
- Two full moons occurring in the same month is what is referred to as it.
- There is a time when the new moon to new moon cycle lasts 29.5 days, the full moon emerges at the beginning of the month, and there are still days left to complete another full cycle.
- According to NASA, this happens every two to three years.
- Red light wavelengths can occasionally be scattered by smoke or airborne dust, giving the moon an unusually blue appearance.
- But this has nothing to do with the concept of a "blue" moon.

- *Source* → *The Hindu*

## **2 – How the sale of SIM cards happens in India:**

### **GS II**

#### **Government Policies and Interventions**

- **Context:**

- The guidelines for licensees (or providers) acquiring SIM cards in bulk and registering the final point of sale (PoS) have been changed. The improvements are meant to strengthen the citizen-focused Sanchar Saathi portal.
- Users can look up:
  - on the citizen-focused portal,
  - the connections indicated by the names next to them,
  - Preventing mobile devices that have been lost or stolen
  - Inform us of any fake or unwanted links.
- Use the IMEI (International Mobile Equipment Identity) to verify a device's legitimacy before making a purchase.

- **The PoS change:**

- **Registration and confirmation:**

- All PoS, including franchisees, agents, and SIM card resellers, will need to register with the telecom network provider or the licensees.
- It would be necessary for operators to perform a "indisputable" PoS verification.
- It is essential to check with the police to confirm the dealer.

- **The contract may be terminated:**

- If it turned out that the PoS had engaged in any illegal behaviour, the agreement would be terminated and the company would be placed on a three-year blacklist.
- Additionally, a 10 lakh fine would be assessed.

- **Bulk sim cards:**

- The practise of "bulk procurement" of SIM cards would be replaced with a system requiring business connections, which would need a significant purchase by a registered corporate body or enterprise.
- According to the new guidelines, companies can interact with any number of parties, but doing so requires that all end users adhere to KYC requirements.
- The end user who owns the connection would have to finish the KYC procedure.

- **Preventing the misuse of Aadhaar:**

- In order to prevent the misuse of printed Aadhaar, the standards specify that demographic information would be sought by scanning the QR code of the printed Aadhaar.

- **SIM substitution:**

- Subscribers would also need to go through the entire KYC process in order to replace their SIM.

- **Conclusion:**

- It is necessary to look at whether the requirements can be properly enforced all the way to the end.
- The smaller neighbourhood stores will also hand out SIM cards.
- It is imperative to discover whether they have the necessary infrastructure to complete the procedure, but much more so, whether they have the safeguards in place to protect such sensitive data.

- *Source → The Hindu*

### **3 – Details of the Electrified Flex fuel vehicle:**

#### **GS III**

#### **Science and Technology**

- **Context:**

- The first BS-6 Stage-II, electrified, flexible fuel vehicle prototype was unveiled by Toyota Kirloskar Motor.
- **Important details:**
  - Due to the possibility of using higher ethanol mixtures than 20%, these vehicle technologies present the opportunity to replace petrol with ethanol to a greater level.
  - In order to increase ethanol consumption and enhance fuel economy, it introduces the first BS 6 (Stage II) Electrified Flex Fuel vehicle prototype ever made.
  - It is the world's first BS 6 (Stage II) electrified flex fuel vehicle prototype.
- **What are the BS-VI Norms?**
  - To regulate the emission of air pollutants from machinery with internal combustion engines and spark-ignition engines, including motor vehicles, the government created Bharat stage (BS) emission guidelines.
  - Only BS-VI (BS6) automobiles are allowed to be manufactured, sold, and registered, according to a directive by the federal government.
  - The country of India established its first emission limits for petrol and diesel vehicles in 1991 and 1992, respectively.
  - The catalytic converter was made a necessary component of gasoline-powered vehicles, and unleaded petrol was made available.
- **What is an Electrified Flex Fuel vehicle?**
  - An Electrified Flex Fuel Vehicle is made up of both an electric powertrain and a Flexi Fuel engine.
  - As a result, it can provide the same SHEV-like dual benefits of increased ethanol use and much higher fuel efficiency.
  - A SHEV can provide 30–50% better fuel efficiency because it can function 40–60% in EV mode when the engine is off.
  - Electrified flex fuel vehicles are protected from any geopolitical risks to shortages of raw materials by the sparse amount of advanced chemistry batteries they consume.
- *Source → The Hindu*

#### **4 – About the Y - 12654 Mahendragiri:**

## International Issues

- **Context:**

- Mahendragiri, the last Project 17A Frigate, will shortly be launched.

- **About:**

- The name Mahendragiri, which refers to a tall peak in the Eastern Ghats in the state of Orissa, is given to the seventh ship of the Project 17A Frigates.
- These warships, which included platform management systems, superior stealth features, and cutting-edge weaponry and sensors, were the successors to the Project 17 Class Frigates (Shivalik Class).
- Technologically, the warship Mahendragiri is very advanced.

- **In relation to Project 17A:**

- The Project 17A ships were developed domestically by the Warship Design Bureau of the Indian Navy, the pioneering organisation for all warship design initiatives.
- According to the nation's unshakeable commitment to "Aatma Nirbharata," a major 75% of the orders for the equipment and systems of Project 17A ships have been placed with indigenous enterprises.
- Mazagon Dock Ltd. (MDL) and Garden Reach Shipbuilders and Engineers (GRSE) are currently constructing four and three of the seven stealth frigates that the Navy had ordered.
- The "Nilgiri," the first vessel of Project 17A, was launched on September 28, 2019.
- In 2020, "Himgiri," the second ship in the series, made its appearance.
- The "Udaygiri," the third ship in the project, is expected to start sea trials in the second half of 2024.
- The fourth P17A frigate, "Dunagiri," which bears the name of a mountain range in Uttarakhand, has just been launched.
- The fifth of the Project 17A frigates, Taragiri, is so called in honour of a Garhwal-area group of Himalayan peaks.
- The Vindhya giri is the name of the sixth ship.
- The seventh ship in the P17A frigate class will be referred to as "Mahendragiri," the Navy has announced.

- **Significance:**

- The cutting-edge ship will be furnished with the most recent technology and put through rigorous testing before being presented to the Indian Navy for commissioning into service.
- These can be used to neutralise threats in the three dimensions of the air, surface, and subsurface.

- *Source → The Hindu*

## **5 – Details of the Gruha Lakshmi scheme:**

### **GS II**

#### **Government Policies and Interventions**

- **Context:**
- The Karnataka government introduced its well-known Gruha Lakshmi scheme, which is why it made headlines.
- **Important details:**
- It stipulates that women in the State who run households should get \$2,000 per month.
- The Karnataka government has allocated Rs 17,500 crore for the 'Gruha Lakshmi' initiative in the current fiscal year.
- In order to establish gender equality, this effort promotes financial support for women who are capable of handling domestic duties.
- Women who are listed as family heads on Antyodaya, Below Poverty Line (BPL), and Above Poverty Line (APL) ration cards are eligible for the Gruha Lakshmi Scheme.
- Only one lady per household may benefit from this initiative.
- Women who work for the government, pay taxes, or reside in homes where their husbands file GST or income taxes are not eligible for the initiative.
- *Source → The Hindu*