

EVERYDAY CURRENT AFFAIRS – JUNE 25, 2023

STATES

- The city of Kolkata – is all set to witness a series of Blue Moons in quick succession in the sky during the months of July, August, and September.

KEY DATES AT A GLANCE

➤ **July 3:** Full Moon phase will be completed at 5.09pm. It can be identified against a star background in Sagittarius Constellation (Dhanus Rasi)

➤ **Aug 2:** Full Moon phase will end after midnight at 12.02am against a star background in Capricornus Constellation (Makara Rasi)

➤ **Aug 31:** Super Blue Moon phase when the full moon phase will end at 7.06am



against a star background in Aquarius Constellation

➤ **Sept 29:** Last Super-Moon of the lunar disc of the Full Moon phase ends at 3.27pm

- ✓ The 'Blue Moon' in astronomical terms refers to the occurrence of a second full moon within a calendar month.
- ✓ The moon itself does not actually turn blue, and the colour of the moon has no relation to the term 'Blue Moon'.
- ✓ A Blue Moon is related to the moon's orbit around the Earth and is relatively rare.
- ✓ The moon follows an elliptical path, resulting in variations in its distance from Earth.
- ✓ When the moon is at its closest to Earth, known as the perigee position, it is referred to as a Super-Moon.
- ✓ This is when the moon appears larger and brighter than usual.
- ✓ The first Super-Moon will be on July 3, followed by another on August 2.
- ✓ The third Super-Moon, also a Blue Moon, will occur on August 31, while the last SuperMoon will take place on September 29.

- On June 23, Union Home Minister Amit Shah - laid the foundation of the 'Balidan Stambh' (Martyr's Memorial) in Srinagar's Pratap Park near the Lal Chowk city centre in Srinagar



- ✓ Shah was accompanied by Jammu and Kashmir Lieutenant Governor Manoj Sinha including top dignitaries.
 - ✓ The Union Minister also visited the Karan Mahal – the residence of the last Yuvraj of Jammu and Kashmir, Karan Singh.
 - ✓ The Balidan Stambh stands in respect of their supreme sacrifice who laid their lives in service of this country.
 - ✓ Further, Shah had also inaugurated the three-day Vitasta Festival at the Sher-i-Kashmir International Convention Centre (SKICC) located on the bank of the Dal Lake, celebrating the diverse culture of Kashmir established around the river Jhelum.
- **The Odisha Cabinet - has approved the revised cost of the ABADHA scheme for an amount of Rs.4224.22 crore**
- ✓ The State Cabinet has approved additional cost outlay of Rs 1,016 crore to the project recently on June 21
 - ✓ Further, the Cabinet also approved the revision of scheme implementation period from 2017-18 to 2024-25
 - ✓ The Augmentation of Basic Amenities and Development of Heritage and Architecture (ABADHA) Scheme, launched during 2017-18, seeks to develop Puri as a "World-Class Heritage City"
 - ✓ The project at the abode of Lord Jagannath aims the completion of a number of projects at the heritage city of Puri.
 - ✓ The important projects taken up for execution are Shree Mandira Parikrama Project (SMPP), Shree Setu, Jagannath Ballav Pilgrim Centre, Revival of Musa River and Heritage ponds, development of beach front.
- **The Union government - had allocated Rs. 145 crore to Nagaland for the construction of a Unity Mall in Dimapur**

- ✓ The allocation is part of the Union Budget 2023-24, which has set aside Rs.5,000 crore for the establishment of Unity Malls across the country.
- ✓ The Unity malls are aimed at promoting and showcasing the state's One District One Product (ODOP) offerings

NATIONAL

- **On June 24, Union minister Jitendra Singh - launched Gemcovac-OM, the Omicron-specific mRNA-based booster vaccine for Covid-19.**



- ✓ It was recently accorded emergency use authorisation by the Drug Controller General of India.
 - ✓ Gemcovac-OM has been developed by Pune-based Gennova Biopharmaceuticals and will be priced at Rs. 2,292 per dose.
 - ✓ Gemcovac-OM has been developed in a Public-Private Partnership (PPP) in which the funding support came from Department of Biotechnology (DBT) and Biotechnology Industry Research Assistance Council (BIRAC).
 - ✓ Gemcovac-OM lyophilised (powdered) vaccine doesn't need sub-optimal temperature for storage and can be stored at 2-to-8°C.
- **The Indian Institute of Technology-Kanpur - successfully conducted a test for artificial rain via cloud-seeding over a limited area on its campus.**



- ✓ A Cessna aircraft was flown to a height of 5000 feet from IIT's airstrip for the artificial rain project.
- ✓ Using cloud seeding technology, the aircraft released chemical powder into the clouds, stimulating the formation of raindrops in and around the IIT Kanpur campus.
- ✓ An expenditure of roughly Rs.2 to Rs.5 lakh is spent for an hour of the exercise
- ✓ The project, initiated by IIT Kanpur in 2017, is headed by the Computer Science and Engineering Department of IIT Kanpur.
- ✓ China, having developed this technology earlier, had withheld sharing it with India
- ✓ The experiment was conducted after receiving a nod from the civil aviation regulator DGCA.
- ✓ The UP government had requested the premier institute to help UP's parched Bundelkhand region with artificial rains using the technology
- ✓ Cloud seeding is the process of combining different kinds of chemical agents, including silver iodide, dry ice and even table salt, in clouds to thicken them and increase the chances of rainfall.
- ✓ Israel, South Africa and United States have successfully implemented the cloud seeding project.

INTERNATIONAL

- Yevgeny Prigozhin, the leader of the Wagner Group - staged a revolt against Russia after claiming the Russian army deliberately attacked his forces.

CAPTURED ROSTOV, CAME WITHIN 200KM OF MOSCOW



Prigozhin was often seen floating about Putin's table, sometimes even clearing plates himself

➤ **Yevgeny Prigozhin's Wagner Group**, a shadowy private military company with close ties to Russian President Vladimir Putin, had taken on the Russian state with the capture of Rostov-on-Don

➤ Prigozhin, a former hot-dog seller termed 'Putin's chef', commands a murderous flock of 'wild geese' in the thousands. About 20,000 prisoners convicted of brutal crimes were recruited for the Ukraine war

➤ Prigozhin said while his men were just 200km from Moscow, he decided to make them turn back to avoid 'shedding Russian blood'. He didn't say if Moscow responded to his demand to oust defence minister Sergei Shoigu

➤ **Belarusian President Alexander Lukashenko** said he had negotiated a deal with Prigozhin after discussing the issue with Putin



➤ **Defensive positions** had earlier been set up around Moscow as the city braced for battle. Red Square was closed

➤ Ukrainian leader **Volodymyr Zelensky** had called the brief uprising divine justice

- ✓ The fighters of the Wagner private army have captured the city of Rostov, and started 1,100km race to capture Moscow.
 - ✓ Rostov is the headquarters of the Russian Southern Military District, a key hub for Russian forces and close to the Ukrainian border.
- ✓ The city of Moscow has declared a counterterrorism state of emergency against the backdrop of the armed uprising by Wagner mercenary chief and a close confidant of Russian president Vladimir Putin, Yevgeny Prigozhin.
 - ✓ Earlier, Moscow deployed soldiers in preparation for their arrival and told residents to stay indoors.
- ✓ Earlier on June 24, Russian President Vladimir Putin addressed the nation, where he spoke of an armed “mutiny” and announced that he would punish those who rebel.
- ✓ The Wagner Group has taken on semi-official military responsibilities since Russia invaded Ukraine in February 2022
- ✓ In military terms, Russia’s deployment of the Wagner Group helped stabilize its operations in Ukraine.
- ✓ However, the bonds between the Wagner Group and the Russian army broke down immediately after the start of the war in Ukraine
- ✓ The Wagner chief accused Russia’s military leadership of killing a “huge amount” of his mercenary forces in a strike on a camp and vowed to retaliate.
- ✓ Russia used the Wagner Group to assist in its annexation of Crimea in 2014
- ✓ Wagner personnel were also deployed to Syria, Libya, Central African Republic and Mali to fight the civil war and also to secure lucrative mining contracts
- ✓ A native of St Petersburg, Prigozhin was in prison for nearly 10 years during the Soviet era, convicted of fraud and theft
- ✓ Once he was free, Prigozhin opened a luxury resort in St Petersburg, with Putin being one of his esteemed customers.
- ✓ Prigozhin used that connection to develop a catering business and won lucrative Russian government contracts that earned him the nickname “Putin’s chef.”

INDIA AND OTHER COUNTRIES

- **Prime Minister Narendra Modi and US President Biden - participated in the India-US hi-tech handshake event at the White House in Washington on June 24**
 - ✓ The event was moderated by US Secretary of Commerce H.E. Ms. Gina Raimondo and saw participation from leading Indian and US CEOs of tech companies and startups.
 - ✓ The thematic focus of the Forum was on ‘AI for All’ and ‘Manufacturing for Mankind’.
 - ✓ During the event, both the leaders met top US and Indian business leaders as the official state visit of PM Modi to the US marked its final day.

- ✓ Top businessmen including Microsoft CEO Satya Nadella, Google CEO Sundar Pichai, NASA astronaut Sunita Williams, Sam Altman from OpenAI, Mahindra Group Chairman Anand Mahindra, Reliance Industries Chairman and MD Mukesh Ambani, Zerodha and True Beacon Co-Founder Nikhil Kamath attended the event.



- ✓ During the event, PM Modi received a special gift from President Biden— a red T-shirt imprinted with “The Future is AI — America and India”, emphasizing the collaboration between America and India in shaping the future of artificial intelligence.
 - ✓ The AI quote was generated by PM Modi, and Biden accepted it.
- ✓ During the meeting, Amazon announced plans to invest an additional \$15 billion over the next seven years, bringing its total investment across all business sectors in India to \$26 billion.
 - ✓ The company is aiming to digitize 10 million small businesses, which enables \$20 billion in exports, and generate 2 million jobs in India by 2025.
 - ✓ With this, Amazon joined Micron and Allied Minerals in announcing investments into the country.
- ✓ Google, on the other hand, has announced the establishment of its global fintech operation center at GIFT City in Gujarat and announced that the company is investing \$10 billion in India's digitization fund
- ✓ Meanwhile, National Aeronautics and Space Administration (Nasa) welcomed India as the 27th signatory of the Artemis Accords
 - ✓ During a ceremony held in Washington on June 21, India signed the Artemis Accords in presence of the Nasa administrator and India's ambassador to the US Taranjit Singh Sandhu.
- ✓ **The PM wrapped up his four-day visit to the US by announcing a separate Tamil Studies Chair at the University of Houston with the Indian government's help**
- ✓ The PM said this will help propagate the influence of Tamil culture and the world's oldest language
- ✓ In his nearly 35-minute address to members of the Indian community, PM Modi said Tamil language is a national glory, and the fact that India is home to the

world's oldest language should be celebrated by every Indian, a remark seen as part of continued outreach to the community.

- **On June 24, Prime Minister Narendra Modi - arrived in Egypt's capital Cairo for the first state visit on the second leg of his two-nation tour.**



- ✓ The visit is at the invitation of Abdel Fattah El-Sisi, President of Egypt, which he extended to PM Modi in January when he attended the Republic Day celebrations in New Delhi as chief guest.
- ✓ This is PM Modi's first visit to Egypt as Prime Minister and the first bilateral visit by an Indian Prime Minister since 1997.
- ✓ During his two-day State visit, the PM will hold a roundtable meeting with the Egyptian PM and also meet President El-Sisi.
- ✓ Egyptian President Abdel Fattah El-Sisi will also confer the PM with 'Order of the Nile' award, the country's highest state honour.
 - ✓ Instituted in 1915, the 'Order of the Nile' is conferred upon heads of states, crown princes, and vice presidents who offer Egypt or humanity invaluable services.
 - ✓ This will be the 13th highest state honour conferred upon Prime Minister Modi.
- ✓ The Prime Minister is also expected to sign an agreement aimed at elevating bilateral partnership to a "Strategic Partnership"
- ✓ In addition, three Memorandum of Understanding (MoU) in the fields of agriculture, archaeology and antiquities and competition law will also be signed between India and Egypt.
- ✓ PM Modi is scheduled to meet the Grand Mufti of Egypt, Dr Shawki Ibrahim Abdel-Karim Allam, and will also interact with Egyptian thought leaders.
- ✓ On June 25, PM Modi will visit Al-Hakim Mosque - a historic and prominent mosque in Cairo named after Al-Hakim bi-Amr Allah (985-1021), the 16th Fatimid caliph.
 - ✓ The historic 11th-century Al-Hakim Mosque in Cairo was restored with the help of India's Dawoodi Bohra community and reopened earlier this year by the Egyptian government.

- ✓ Prime Minister Narendra Modi is expected to tour the great pyramids of Giza on the outskirts of the Egyptian capital.
 - ✓ Built in the early 26th century B.C., over a period of about 27 years, the pyramid is the oldest of the Seven Wonders of the Ancient World, and the only wonder that has remained largely intact.
- ✓ During his Egypt tour, PM Modi will also visit the Heliopolis War Grave cemetery to pay tribute to the Indian soldiers who made the supreme sacrifice fighting for Egypt during the First World War.
- ✓ India is presently in talks with Egypt about the latter's proposal for allocating a special land area for Indian industries in the Suez Canal Economic Zone.
- ✓ The visit is of significance as Egypt has traditionally been one of India's most important trading partners in the African continent.
- ✓ India-Egypt Bilateral Trade Agreement has been in operation since March 1978 and is based on the Most Favored Nation clause
- ✓ Egypt is among the special invitees for G20 this year and Sisi will travel to India for the summit in September

PERSONALITIES

- **Four Indian scientists, including two from Gujarat, Rutu Parekh and Kumar Venkataramani - have been bestowed with a rare honour of asteroids being named after them.**



- ✓ Aswin Sekhar and Ashok Verma are the two other Indians, honoured for their mammoth contributions to the field of astrophysics.
- ✓ Parekh, who completed her B. Sc from St Xavier's College, worked with Cept University and later PRL in Ahmedabad before going abroad to pursue higher studies.
 - ✓ She currently works as a post-doctoral researcher at Jet Propulsion Laboratory of NASA in the US.
 - ✓ The asteroid 2000HD73 has been renamed 'Rutuparekh'.
- ✓ Kumar Venkataramani, who completed his Phd from IIT-Gandhinagar and worked in the Physical Research Laboratory (PRL), has also got asteroid 2000SM362 rechristened as 'Kumar' after him.

- ✓ On June 22, the Working Group Small Bodies Nomenclature of International Astronomical Union named 198 asteroids after scientists who have made significant contributions to the field of astrophysics.


SCIENCE, TECHNOLOGY & ENVIRONMENT

- A 38-year-old Australian woman who had been battling depression for the past 26 years - became the first person to undergo a psychiatric operation recently in Mumbai

CONSENT MUST FOR PSYCHOSURGERY

DEPRESSION

- It is a mood disorder characterised by sadness and loss of interest
- It affects how a person feels, thinks and behaves, and can hamper a person's day-to-day activities



INCIDENCE


- Globally, its prevalence is **14.6%** and **11.1%** in the high- and low-income countries respectively
- In India, the incidence is estimated to be **15%**
- According to a National Institute of Mental Health and Neurosciences (NIMHANS) study, 1 in 40 and 1 in 20 people are suffering from the past and current episodes of depression in India, respectively


TREATMENT-RESISTANT DEPRESSION

- About a third of all the patients with depression have treatment-resistant depression
- It doesn't respond to medication, psychotherapy and other forms of treatment such as electroconvulsive therapy (ECT) and repetitive transcranial magnetic stimulation (rTMS)

DEEP BRAIN STIMULATION SURGERY

- DBS is a branch of neurosurgery in which doctors implant electrodes within certain areas of the brain
- Idea is that electrical impulses produced by these electrodes will offset or nullify abnormal impulses
- Stimulation is controlled by a pacemaker-like device planted under the chest skin. A wire travelling under the skin connects this device to the electrodes in the brain
- It is recognised as a treatment for Parkinson's disease, dystonia, epilepsy and obsessive-compulsive disorder. It's considered experimental





INDIA'S MENTAL HEALTHCARE ACT, 2017

- On March 27, 2017, Lok Sabha, in unanimous decision, passed Mental Healthcare Act 2017
- It defines "mental illness" as a substantial disorder of thinking, mood, perception, orientation, or memory that grossly impairs judgment or ability to meet the ordinary demands of life, mental conditions associated with the abuse of alcohol and drugs"
- It rescinds/revoked existing Mental Healthcare Act 1987, which was widely criticized for not recognizing rights of a mentally ill person and paved way for isolating such dangerous patients
- It protects rights of a person with mental illness, facilitating their access to treatment and by advance directive how they want to be treated

- ✓ This is the first operation for depression in India since the new Mental Healthcare Act was passed in 2017.

- ✓ According to the provisions of the new Act, a psychosurgery can be carried out only after the patient gives informed consent and a specially constituted state mental health board gives its approval.
- ✓ Depression is the most common mental health problem, with some studies fixing it at 15% of the population.
 - ✓ About a third of these patients have depression that is resistant to various forms of treatment, be the pills or shock therapy.
 - ✓ As a last resort, some patients are offered deep brain stimulation (DBS) surgery in which electrodes are placed in the brain to change the neuro pathways.
- ✓ The patient, who didn't want to be named, has been battling depression for 26 years and had tried various combinations of antidepressants and therapies.

DEFENCE

- **India - will kick off the formal acquisition process for the 31 top-notch weaponised MQ-9B drones from the US early next month**



- ✓ In this regard, the actual contract will be signed within this fiscal and complete induction of all the remotely piloted aircraft systems in phases over the next six to seven years.
- ✓ The “hunter-killer” MQ-9B Reaper or Predator-B drones are designed to fly for around 40 hours at altitudes over 40,000 feet for surveillance missions
 - ✓ They are armed with Hellfire air-to-ground missiles and smart bombs for precision strikes
- ✓ These drones are far superior to China's existing armed drones.
- ✓ Rajnath Singh-led Defence Acquisitions Council accorded the AoN (acceptance of necessity) for the deal on June 15
- ✓ The inter-governmental deal for the 31 drones is estimated to be worth around \$3.5 billion (almost Rs 29,000 crore).
 - ✓ This includes 15 Sea Guardians for Navy and eight Sky Guardians each for Army and Air Force with their associated mobile ground control systems, weapons and other equipment

- ✓ Under the deal, the high altitude, long-endurance (HALE) drones will be assembled in India.
 - ✓ Manufacturer Global Atomics will also set up a “cost-effective and comprehensive global maintenance, repair and overhaul facility” in India
 - ✓ This facility can also cater to other countries like Australia and Japan as well.
 - ✓ The US government will respond with a LoA (letter of acceptance) with the final costing and the requisite notification to the US Congress under its foreign military sales programme.
 - ✓ India hopes to induct the first 10 MQ-9B drones within one to two years of the contract being signed, while the rest will come in batches every six months.
 - ✓ The drones will bolster India’s long-range over-the-horizon ISR (intelligence, surveillance and reconnaissance) and strike capabilities, both in the Indian Ocean Region as well as the land frontiers with China and Pakistan.
 - ✓ The plan is to deploy the drones at three tri-service ISR command and control centres in the northwest, northeast and south India.
 - ✓ The MQ-9B deal is also expected to help DRDO eventually develop indigenous armed HALE drones
 - ✓ The HALE drones will be capable of firing missiles and precision-guided munitions on enemy targets before returning to their home bases to rearm for their next mission like manned fighter jets.
- **Defence Minister Rajnath Singh - inaugurated the Integrated Simulator Complex "Dhruv" at the Southern Naval Command in Kochi recently on June 21**



- ✓ The Integrated Simulator Complex hosts state-of-the-art indigenously-built simulators which will significantly enhance practical training in the Indian Navy.

- ✓ These simulators are designed to give real-time experience on navigation, fleet operations and Naval tactics and will also be utilised for training personnel from friendly nations.

