

Daily Current Affairs

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ECLSS System

- ISRO Chairman **S. Somanath** has announced that the space agency will independently develop the **Environmental Control and Life Support System (ECLSS)** for the upcoming **Gaganyaan mission**, after several countries refused to share their technology and research.



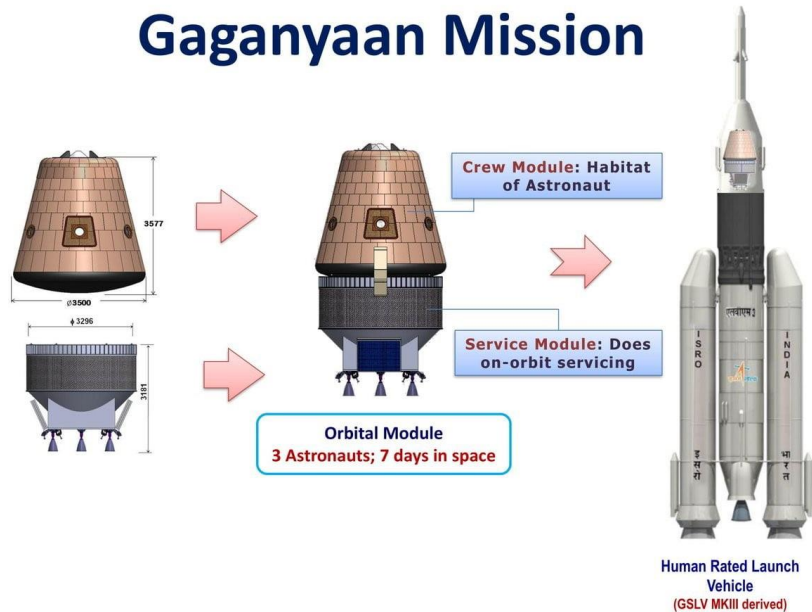
- Despite **multiple successful launches** this year and in 2022 in which ISRO helped **several other countries** launch their satellites, India's space organisation has been **denied the tech to engineer** and make the Life Support System for its Gaganyaan mission.



- ISRO Chairman S. Somanath has announced that the **space agency will independently develop** the **Environmental Control and Life Support System (ECLSS)** for the upcoming Gaganyaan mission.
- The Gaganyaan project **aims to demonstrate India's capabilities** in **human spaceflight**, intending to propel a crew to a 400 km orbit by 2025.
- Somanath emphasized ISRO's commitment to indigenous development, leveraging existing knowledge and local industries.
- Addressing the challenges of the Gaganyaan program, Somanath stressed the nation's **dedication to skill-building and design enhancement**. He highlighted

the need for increased skill and confidence for successful human space travel, acknowledging the inherent risks in rocket launches.

Gaganyaan Mission



- “When we send humans to space through our Gaganyaan programme, I think the amount of skill and confidence that we need to have has to be higher than what we currently have,” he said.
- Somanath underscored **ISRO’s efforts in embedding intelligence within rockets, using sensor data**, artificial intelligence, and swift decision-making to prevent potential failures.
- He emphasized the importance of split-second decisions during contingencies, advocating for the development of technologies to preemptively handle rocket failures.



- In the pursuit of **human spaceflight capabilities**, ISRO remains committed to pioneering new technologies essential for astronaut safety and mission success.
- ISRO is **actively working on technologies** that involve synthesizing data, predicting failures, and making split-second decisions to safeguard astronauts during space missions.

UK - Social Media Limits For Under-16s

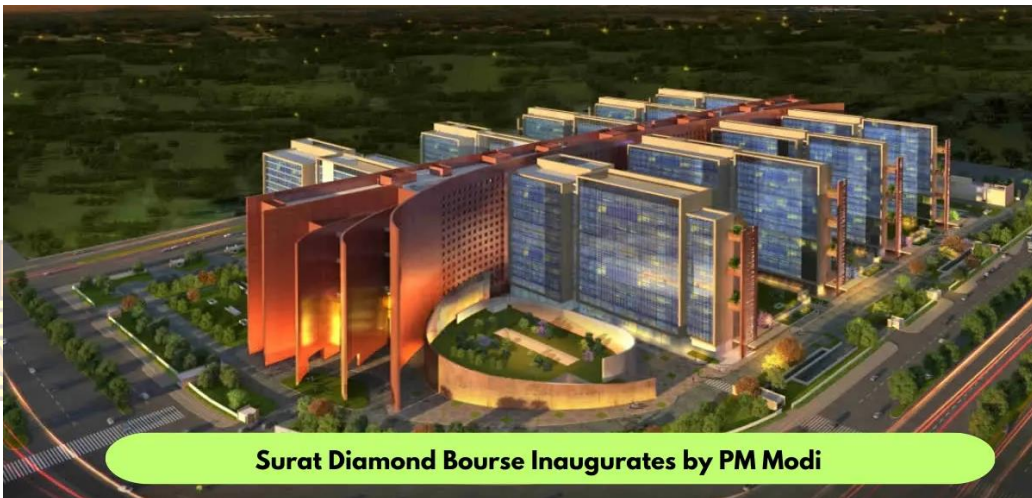
- The **digital age has ushered** in unprecedented connectivity but also raised concerns about the potential harm children may face on social media platforms.
- The UK government, led by Prime Minister Rishi Sunak, is contemplating additional measures to protect teenagers below the age of 16 from online dangers, despite the recent implementation of the Online Safety Act.



- The **Online Safety Act**, a landmark legislation mandating social media platforms to shield minors from harmful content or face substantial fines, marked a significant step toward ensuring online safety for children. However, reports suggest that the government is exploring further restrictions, prompting concerns and discussions within the public sphere.
- The **government plans to initiate a consultation** to investigate the risks faced by children using social media.
- While there are speculations about potential bans for those under 16, a government spokesperson downplayed such claims.

Surat Diamond Bourse

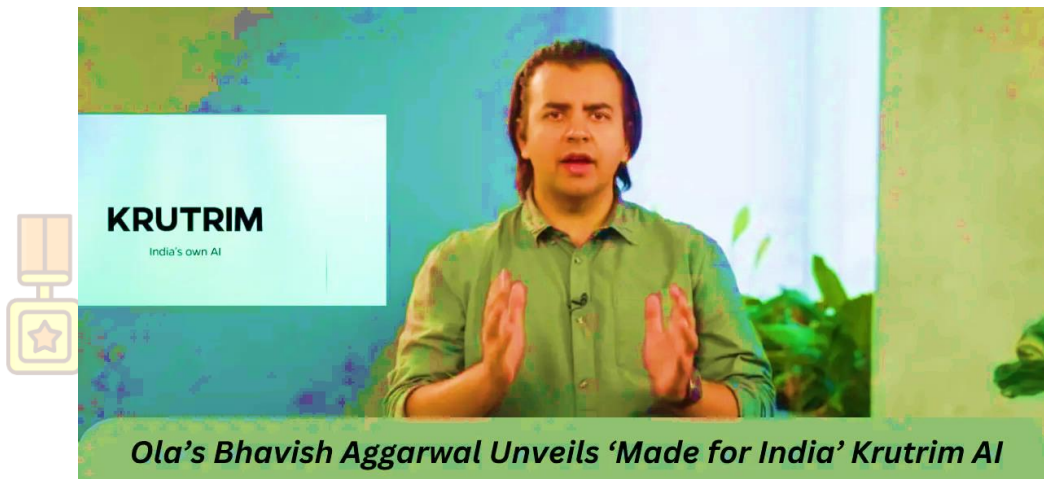
- Prime Minister Narendra Modi recently inaugurated the **Surat Diamond Exchange**, marking a historic moment as it **surpassed the Pentagon** to become the **world's largest office complex**.
- This sprawling complex spans an impressive **6.7 million square feet** and was completed at a cost of ₹32 billion. The iconic Pentagon, a symbol of American power, has an area of 6.5 million square feet.
- The Surat Diamond Exchange's inauguration marks a significant milestone in India's diamond industry and urban development.



- As it continues to grow and serve as a **global trading hub for diamonds and jewelry**, it stands as a testament to Prime Minister Narendra Modi's vision for transformative projects that shape the nation's future.
- Among its many offerings, the complex includes a **state-of-the-art 'Customs Clearance House'** designed for efficient import-export operations. Additionally, it houses a vibrant jewelry mall catering to retail jewelry businesses and provides facilities for international banking and secure vaults.
- The Surat Diamond Bourse is well-equipped to handle 1,200 domestic passengers and 600 international passengers during peak hours.
- The annual handling capacity is expected to reach 55 lakh passengers.

‘Made For India’ Krutrim AI

- **Krutrim AI Designs**, the new artificial intelligence venture founded by **Bhavish Aggarwal**, co-founder of Ola, has introduced a family of multilingual AI models specifically tailored to address the distinctive requirements of the Indian ecosystem.
- The models, named Krutrim Pro, are designed to **operate in 22 Indian languages**, emphasizing cultural connect and accessibility at India-first cost structures.
- **Krutrim, which means ‘artificial’** in Sanskrit, comes in two sizes. The base model, Krutrim, is trained on an impressive 2 trillion tokens and unique datasets.



- Krutrim is a groundbreaking AI model capable of understanding and generating content in **22 Indian languages**. With a focus on inclusivity, it covers languages such as Marathi, Hindi, Bengali, Tamil, Kannada, Telugu, Odia, Gujrati and Malayalam.
- The model's training data includes over two trillion tokens for Indian languages, making it stand out in terms of its extensive linguistic understanding.
- The full open release of Krutrim APIs from February 2024. Aggarwal mentions that Ola group companies are already utilizing Krutrim for various internal tasks, including customer support, voice and chat interactions and customer sales calls.
- The model operates in multiple modes, including text and voice, catering to diverse user preferences.

India Korea Electronic Origin Data Exchange System

- **Mr. Sanjay Kumar Agarwal**, Chairman of the Central Board of Indirect Taxes & Customs (CBIC), inaugurated the **India-Korea Electronic Origin Data Exchange System (EODES)** in New Delhi.
- The ceremony was attended by **Mr. KO Kwang Hyo**, Commissioner of Korea Customs Service (KCS), and his delegation.
- EODES **aims to streamline** the implementation of the **India-Korea Comprehensive Economic Partnership Agreement (CEPA)** through the electronic exchange of origin information between the customs administrations of both nations, specifically for goods traded under CEPA.
- The system enables the **electronic sharing** of data fields in a Certificate of Origin (CoO) by the exporting customs administration with the importing customs immediately upon the issuance of the certificate. This electronic exchange expedites the clearance process for imported goods.



- Mr. Sanjay Kumar Agarwal emphasized **the significance of Customs cooperation** between India and Korea, focusing on aspects such as automated data exchange, capacity-building, and enforcement.
- He expressed optimism that the **success of the EODES project** would set a global standard for international Customs cooperation.
- Mr. KO Kwang Hyo acknowledged the **collaborative efforts of both teams and highlighted** that the operationalization of the system would provide a new momentum to preferential trade between India and Korea.

- With the **soft launch of EODES**, both sides committed to its early utilization in a live environment. The launch is considered a major milestone in the ongoing bilateral relations between the two countries.

Deepest Lab On Earth

- In a groundbreaking development, China has achieved a significant milestone in the **field of physics** with the operationalization of the world's deepest and **largest underground laboratory**.
- According to a report, the physics laboratory, known as the **Deep Underground and Ultra-low Radiation Background Facility** for Frontier Physics Experiments (DURF), reaches an impressive depth of 2,400 meters.
- This underground marvel is the result of three years of extensive upgrades and expansion, with construction commencing in December 2020.
- Jointly built by **Tsinghua University and Yalong River Hydropower Development Company, Ltd.**, the facility provides unique testing conditions that are not available to scientists elsewhere.
- One of the **primary objectives of DURF** is to contribute significantly to the global search for dark matter—a mysterious form of matter that seems to defy interaction with light or the electromagnetic field.



- Scientists believe that the **extreme depth of DURF** will play a pivotal role in this quest by effectively blocking most cosmic rays that can interfere with observations. This strategic advantage positions DURF as a potential game-changer in deep-earth experiments.
- DURF is exposed to an incredibly small amount of cosmic rays—**merely one hundred-millionth** of that on the Earth's surface.

- This feature enables the facility to offer an unparalleled environment for conducting experiments, free from the interference of cosmic intrusions.
- **DURF prides itself on several key advantages** that elevate its scientific capabilities. These include ultra-low cosmic ray flux, extremely low environmental radiation, exceptionally low radon concentration, and ultra-clean space.

Khelo India Games

- Khelo India Games will be held in **Tamil Nadu** in January 2024. The State Government said that the games will be held in Chennai, Coimbatore, Madurai and Trichy from 19th to 31st January, 2024.
- More than 5,500 sports persons and over 1,600 coaches are expected to participate in the event. More than 1000 referees and 1200 volunteers will be part of the sporting event in which 27 types of sport will be played.
- For the **first time, squash will be included** in Khelo India games.



**KHELO
INDIA**

**ck
KAMS**

REVIEW QUESTIONS

1. Which Country Had Deepest Lab In World

- A. Russia
- B. China
- C. UK
- D. USA

ANSWER: B

2. Krutrim AI Is Unveiled By

- A. Bhavish Aggarwal
- B. Ritesh Aggarwal
- C. Siddarth Aggarwal
- D. Ayush Aggarwal

ANSWER: A

3. Which Country Limited Age For Social Media Usage

- A. USA
- B. Russia
- C. Canada
- D. UK

ANSWER: D

4. Khelo India 2024 Will Be Held In

- A. Tamil Nadu
- B. Madhya Pradesh
- C. Gujrat
- D. Kerala

ANSWER: A

5. Which Game Is Included For First Time In Khelo India Games

- A. Snooker
- B. Swimming
- C. Squash
- D. Cricket

ANSWER: C

6. Which South American Country Reported Outbreaks Of Highly Pathogenic Avian Influenza For 1st Time

- A. Chile
- B. Brazil
- C. Argentina
- D. Bolivia

ANSWER: B

7. USA Signed 1st Ever Defence Cooperation Agreement With Which Country

- A. Sweden
- B. Finland
- C. UAE
- D. New Zealand

ANSWER: A

8. Jude Bellingham, Who Was Seen In News, Plays Which Sports

- A. Cricket
- B. Football
- C. Tennis
- D. Chess

ANSWER: B

9. Which Private Bank Launched A Global Service Account

- A. NSSO
- B. NITI Aayog
- C. IDFC Foundation
- D. Larsen and Toubro

ANSWER: C

10. Which Organisation Released Draft Of A Global Climate Agreement Which Presented 3 Options To Tackle Fossil Fuels

- A. UN
- B. WEF
- C. NITI Aayog
- D. IMF

ANSWER: A

11. Which Company Is Associated With 'Accelerating India's Potential To Address Global XR Opportunity' Report

- A. Apple
- B. Meta
- C. Microsoft
- D. Google

ANSWER: B

12. Umrah Is A Pilgrimage Associated With Which Religion

- A. Islam
- B. Hinduism
- C. Sikhism
- D. Jainism

ANSWER: A

13. Which European Country Ban Disposable Electronic Cigarettes

- A. France
- B. Germany
- C. Italy
- D. Romania

ANSWER: A

14. India Offered To Host Which Edition Of COP To UNFCCC

- A. 29th
- B. 30th
- C. 32nd
- D. 33rd

ANSWER: D

15. Full Form Of PABS Mentioned In Draft Pandemic Treaty Discussions

- A. Public Awareness And Behavioral Study System
- B. Pathogen Access And Benefit Sharing System
- C. Pharmaceutical Advancements And Biomedical Sciences System
- D. Pathogenic Analysis And Bio Synthesis System

ANSWER: B

16.iCET Or International Cooperation And Education On Technology Is Administered By Which Ministry

- A. Ministry of Science and Technology
- B. Ministry of Education
- C. Ministry of External Affairs
- D. Ministry of Commerce

ANSWER: C

17.New Species Of Amphipod Demaorchestia Alanensis Discovered In State

- A. Karnataka
- B. Odisha
- C. Assam
- D. West Bengal

ANSWER: B

18.With Reference To Medical Field, What Is Methotrexate

- A. Anti Cancer Drug
- B. Covid Vaccine
- C. Anti Inflamming Agent
- D. Vitamin C Supplement

ANSWER: A

19.Krishnaveni Sangeetha Neerajanam Festival Is Associated With Which State

- A. Tamil Nadu
- B. Andhra Pradesh
- C. Kerala
- D. Karnataka

ANSWER: B

20.The Painting Of Bharat Mata Was Originally Done By_____

- A. Rabindranath Tagore
- B. Jamini Roy
- C. Nandalal Bose
- D. Abanindranath Tagore

ANSWER: D