

NATIONAL FARMER'S DAY

National Farmer's Day being observed on December 23.



About National Farmer's Day:

- National Farmer's Day is celebrated every year.
- National Farmer's Day is being observed on **December 23** to commemorate the birth anniversary of the fifth Prime Minister of

India, Chaudhary Charan Singh, and his contributions towards the upliftment of farmers in the country.

- The Kisan Leader, Chaudhary Charan Singh, served as president from **July 28, 1979, until January 14, 1980.**
- In 2001, the government declared Kisan Diwas in honor of Charan Singh's birth anniversary.
- On this day, awareness campaigns and drives are organised across the country to educate people about the role of farmers and their contribution to the economy.

ADJOURNMENT SINE DIE

Both the Houses of Parliament were adjourned on December 23, sine-die, six days ahead of their schedule of the Winter Session.



About Adjournment Sine Die:

- **Adjournment sine die** means terminating a sitting of Parliament for an indefinite period i.e. without naming a day for reassembly.
- The power of adjournment sine die lies with the **presiding officer of the House.**
- He can also call a sitting of the House before the date or time to which it has been adjourned or at any time after the House has been adjourned sine die.

Productivity of the houses during Winter Session 2022:

- **Lok Sabha:**
 - The productivity of the house was **97 percent during the session.**
 - **A total of 13 sittings took place in which seven bills were passed while nine bills were introduced in the House.**
- **Rajya Sabha:**
 - The House had productivity of **102 percent during the session.**
 - The House passed and returned **nine bills during the period.**
 - **31 private member bills** were also introduced in the House.

INDIAN KNOWLEDGE SYSTEM (IKS)

The Kerala State Higher Education Council (KSHEC) has recently constituted a committee to formulate an expert opinion on the University Grants Commission (UGC)'s draft guidelines for faculty training on Indian knowledge system (IKS).



About Indian Knowledge System (IKS):

- **Indian Knowledge System (IKS) is an innovative cell under Ministry of Education (MoE) at AICTE, New Delhi.**
- It is established to promote interdisciplinary research on all aspects of IKS, preserve and disseminate IKS for further research and societal applications.
- It will actively engage for spreading the rich heritage of our country and traditional knowledge in the field of Arts and literature, Agriculture, Basic Sciences, Engineering & Technology, Architecture, Management, Economics, etc.

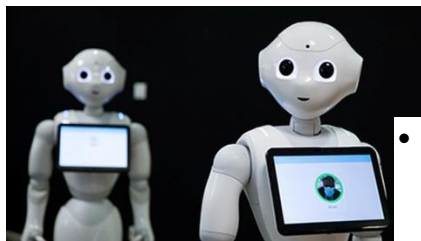
Functions of IKS division:

- Facilitate and coordinate IKS based/related inter and trans disciplinary work done by various institutions in India and abroad including universities, institutions of national importance, R&D laboratories and different ministries and inspire private sector organizations to engage with it.
- Establish, guide and monitor subject-wise interdisciplinary research groups comprising of researchers from institutes, centers and individuals.

- Create and promote popularization schemes.
 - Facilitate funding of various projects and develop mechanisms to undertake research.
 - Make Policy recommendations wherever required for the promotion of IKS.
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WHAT ARE GELBOTS?

Recently, John Hopkins University scientists built a soft robot named Gelbots.



About:

- Gelbots are **made out of gelatin**, capable of moving without requiring an extra power source because of the way their shape, dimensions and patterning of gel are designed and are reportedly a significant advance in the world of soft robotics.
- They are **created by 3D printing** and would be easy for mass production.

What is the Principle?

- The gels swell or shrink in response to temperature.
- This property can be strategically manipulated to move robots forward and backwards on flat surfaces or to have them crawl in certain directions with an undulating, wave-like motion.

What are the Potential application areas?

- They can be used to create smart structures.
 - Even they can be used for moving on surfaces through the human body to deliver targeted medicines.
 - They could also be deployed as marine robots, patrolling and monitoring the ocean's surface.
 - Gelbots can be trained to crawl in response to variations in human biomarkers and biochemical.
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NATIONAL PROGRAMME ON HIGH-EFFICIENCY SOLAR PV MODULE

The Government of India has recently approved the Production Linked Incentive Scheme (Tranche II) on ‘National programme on High-Efficiency Solar PV Modules’, with an outlay of Rs. 19,500 crores



About National programme on High-Efficiency Solar PV Module:

- The national programme on High-Efficiency Solar PV Modules aims to build an ecosystem for the manufacturing of high-efficiency solar PV modules in India.
- **Associated Ministry:** The Ministry of New & Renewable Energy.
- **Funding:** Under it, the government has provided an outlay of Rs.19,500 crores for achieving manufacturing capacity.
- PLI will be disbursed for 5 years post commissioning of solar PV manufacturing plants on sales of high-efficiency solar PV modules from the domestic market will be incentivised.

What is the Significance?

- This programme will strengthen the Atamnirbhar Bharat initiative and generate employment.
- It will help in reducing the country’s import dependence in the area of Renewable Energy.

[IN FIRST TALKS AFTER TAWANG, INDIA & CHINA AGREE ON STABILITY ALONG LAC IN LADAKH](#)

In News:

- Recently, the 17th round of the corps-commander-level meeting was held at the Chushul-Moldo border meeting point on the Chinese side.
- The meeting saw India pressing China for early and complete disengagement at the remaining friction points, including in Demchok and Depsang.

Background

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- In May 2020, Indian and Chinese troops clashed at various points along the Line of Actual Control (LAC).



- These points included:
 - Pangong Tso, Galwan Nalah and Demchok in Ladakh and at Naku La (a mountain pass at an altitude of over 5000 metres) in Sikkim.
 - Later, a violent clash at Galwan Valley started between Indian troops and soldiers of the People's Liberation Army (PLA) on the night of June 15, 2020.
 - It was the first deadly clash between India and China in at least 45 years. 20 Indian soldiers lost their lives.
 - After this incident, both sides deployed a large number of troops in the area along with heavy weaponry.
 - The infrastructure build-up has also been very heavy and the standoff between the two forces is continuing.

The Corps Commander level talks

- India and China have been holding the talks on the Line of Actual Control (LAC) in Eastern Ladakh area to resolve the standoff.
- Earlier to the current talk, the 16 round of Corps Commander-level talks had been held between the two countries.
- The 16th round took place in July 2022.

Outcomes of the previous rounds of talks

- Troops were disengaged on the north and south banks of Pangong Tso and Gogra Post.
- However, at Hot Springs they continue to face each other.
- China had refused to complete the stalled troop disengagement at the Patrolling Point (PP) – 15 in the Hot Springs-Gogra-Kongka La area.
- The Chinese have also been preventing Indian troops from accessing five traditional patrolling points on the Depsang Plains.
- These five traditional patrolling are —PP10, PP11, PP11A, PP12 and PP13.

- Depsang plains are not far from the strategic Indian outpost at Daulat Beg Oldie near the Karakoram Pass in the north.
- The no-patrol buffer zones have been created after disengagement at
 - PP-14 in Galwan Valley,
 - PP-17A near Gogra
 - Pangong Tso
- However, these zones have largely come up in what India claims to be its territory.

News Summary

- Military commanders from India & China held a fresh round of high-level talks in order to resolve the remaining issues along the Line of Actual Control in eastern Ladakh.
- During the meeting, India pressed China for early and complete disengagement at the remaining friction points, including in Demchok and Depsang.
 - India maintained that disengagement, followed by de-escalation, is essential for bilateral ties to return to normal.
 - China, however, believes the border situation in eastern Ladakh is no longer as serious as it was in 2020, when the military stand-off started, and wants to resume bilateral exchanges.
- However, there was no sign of any breakthrough in the talks.
- In a joint statement, issued after the meeting, they agreed to maintain security and stability in the western sector.
- They also decided to maintain dialogue for a mutually acceptable resolution of the remaining issues at the earliest.

[BILL TABLED TO DECRIMINALISE OFFENCES, SEC 66A TO BE OMITTED FROM IT ACT](#)

In News:

- The Central government introduced Jan Vishwas (Amendment of Provisions) Bill, 2022, in Lok Sabha, which seeks to amend 183 provisions across 42 laws and is meant to decriminalise several offences.

- On the list of provisions proposed to be omitted is the controversial **Section 66A from the Information Technology Act** that saw adverse court rulings.

Background on Section 66A of the IT Act:

- The Information Technology Act was enacted in 2000 when Internet was still relatively new in India.
- As social media websites and mobile apps gained popularity in India, misuse and abuse of the platforms came up as a challenge.
- As a result, Section 66A was inserted into the IT Act in **2009**.

Provisions under Section 66A:

- Section 66A made **sending of offensive messages using a computer or any other communication devices a crime**.
- The police had to determine whether an information sent in the message qualified as offensive or not.
- To be booked under Section 66A, the information in the message had to be –
 - Grossly offensive;
 - False and meant for the purpose of causing annoyance, inconvenience, danger, obstruction, insult, injury, criminal intimidation, enmity, hatred or ill will;
 - Meant to deceive or mislead the recipient about the origin of such messages.
- The crime was **punishable with three-year jail term and fine**.

Why was it struck down?

- The problem was with the vagueness about what is “offensive”.
- The word having a very wide connotation, was open to distinctive, varied interpretations.
- It was seen as subjective, and what might have been innocuous for one person, could lead to a complaint from someone else and, consequently, an arrest under Section 66A if the police prima facie accepted the latter person’s view.

Shreya Singhal vs Union of India (2015):

- One of the PILs was filed by Shreya Singhal, then a 21-year-old law student in Delhi.
- She challenged Section 66A arguing that it curbed freedom of speech and expression and violated fundamental rights guaranteed under **Articles 14, 19 and 21** of the Constitution.
- Her petition contended that the law was “vague”, “ambiguous” and subject to “wanton abuse” as **it conferred subjective powers on the police to interpret Section 66A of the IT Act.**

Supreme Court’s Judgement:

- In March 2015, a two-judge bench of the Supreme Court ruled in Shreya Singhal v. Union of India **declared Section 66A unconstitutional for “being violative of Article 19(1)(a) and not saved under Article 19(2).**
 - **Article 19(1)(a)** gives people the right to speech and expression whereas **Article 19(2)** accords the state the power to impose “reasonable restrictions” on the exercise of this right.
- The decision was considered a landmark judicial pushback against state encroachment on the freedom of speech and expression.
- **The Court observed that –**
 - Section 66A is cast so widely that virtually any opinion on any subject would be covered by it ...and if it is to withstand the test of constitutionality, the chilling effect on free speech would be total.
- In its order, the Supreme Court rendered Section 66A extinct from the very date of its insertion into the IT Act — October 27, 2009. But it lived on.

News Summary:

- The Central government introduced **Jan Vishwas (Amendment of Provisions) Bill, 2022**, in Lok Sabha, which seeks to amend 183 provisions across 42 laws and is meant to decriminalise several offences and allow for compounding and rationalisation of penalties.
- Over the last few years, the Central government has sought to decriminalise several laws, such as the Companies Act, but this is the most comprehensive exercise.
- On the list of provisions proposed to be omitted is the controversial Section 66A from the Information Technology Act that saw adverse court rulings.

- The list also includes aspects like carrying/using non-biodegradable nature-polythene bags, which currently carries an imprisonment of up to six months under the Cantonments Act, 2006.
 - Similarly, imprisonment of up to two years under Indian Post Office Act, 1898, for sending unpaid postal articles is being removed.
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THE UNCONTROLLED RE-ENTRIES OF SATELLITES

In News

- More than 140 experts and dignitaries have signed an open letter published by the Outer Space Institute (OSI) calling for both national and multilateral efforts to restrict uncontrolled re-entries.
 - The Outer Space Institute is a transdisciplinary international institute dedicated to space studies.
- Among others, the letter is addressed to S. Somanath, chairman of the Indian Space Research Organisation (ISRO).

Uncontrolled re-entry of rockets

Background: different stages of rockets

- Rockets have multiple stages. Once a stage has increased the rocket's altitude and velocity by a certain amount, the rocket sheds it.
- Some rockets jettison (throw away) all their larger stages before reaching the destination orbit; a smaller engine then moves the payload to its final orbit.
- Others carry the payload to the orbit, then perform a deorbit manoeuvre to begin their descent.
- In both cases, rocket stages come back down — in controlled or uncontrolled ways.

Uncontrolled re-entry

- In an uncontrolled re-entry, the rocket stage simply falls. Ground stations usually lose control on such rockets.
- Its path down is determined by its shape, angle of descent, air currents and other characteristics. It will also disintegrate as it falls.
- As the smaller pieces fan out, the potential radius of impact will increase on the ground.

- Some pieces burn up entirely while others don't. But because of the speed at which they're travelling, debris can be deadly.
- Most rocket parts have landed in oceans principally because earth's surface has more water than land. But many have dropped on land as well.

Recent examples of uncontrolled re-entry

- Parts of a Russian rocket in 2018 and China's Long March 5B rockets in 2020 and 2022 striking parts of Indonesia, Peru, India and Ivory Coast, among others.
- In October 2022, ISRO's RISAT-2 satellite made an uncontrolled re-entry in the Indian Ocean near Jakarta.
- Parts of a SpaceX Falcon 9 that fell down in Indonesia in 2016 included two refrigerator-sized fuel tanks.

Associated dangers

- Any kind of re-entry will inevitably damage some ecosystem and there is also an associated risk of human casualties on the ground as well.
 - A 2021 report of the International Space Safety Foundation said, an impact anywhere on an airliner with debris of mass above 300 grams would produce a catastrophic failure, meaning all people on board would be killed.
- If re-entering stages still hold fuel, atmospheric and terrestrial chemical contamination is another risk.

International Regulations

- There is no international binding agreement to ensure rocket stages always perform controlled re-entries nor on the technologies with which to do so.
 - These technologies include wing-like attachments, de-orbiting brakes, extra fuel on the re-entering body, and design changes that minimise debris formation.
- The **Liability Convention 1972** requires countries to pay for damages, not prevent them.