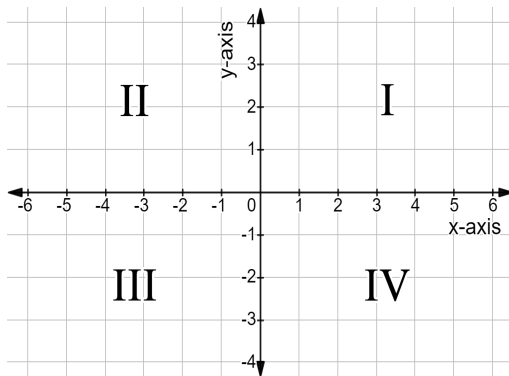


## Cartesian coordinates

- A coordinate system is a set of numbers that allows you to specify the location of a point in some space.
- The Cartesian coordinates is one such system, which uses a set of three numbers to specify the distance of a point from three perpendicular planes.
- In general, this system uses N numbers if there are N perpendicular planes, including in higher dimensions



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## Alibey Dam

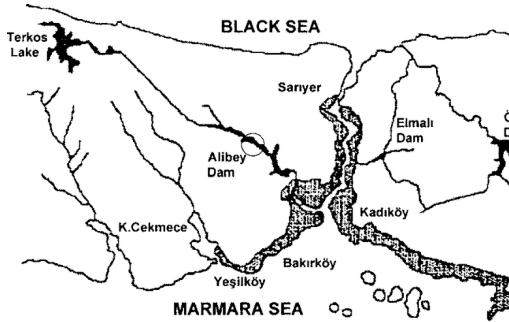
BIG SHOT



A dry reservoir behind the 16th century Guzelce aqueduct at the Alibey Dam in Istanbul on Saturday. Due to heatwaves and lack of rain this summer, drought conditions have set in. Istanbul's dams' occupancy rates have decreased by 28.65%. Increased temperatures have seen water consumption rise across the city. GETTY IMAGES



- A dry reservoir behind the 16th century Guzelce aqueduct at the Alibey Dam in Istanbul on Saturday.
- Due to heatwaves and lack of rain this summer, drought conditions have set in. Istanbul's dams' occupancy rates have decreased by 28.65%.
- Increased temperatures have seen water consumption rise across the city.



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### Right to information

- For 13 years, the Right to Information Act, 2005, helped citizens obtain information and data from Central and State institutions that are not readily available in the public domain.
- The RTI Act allows any citizen to make requests for access to data, documents, and other information in the government's possession.
- The RTI Act makes one exemption it prohibits the personal data disclosure of citizens by the government, unless there is an overriding public interest in doing so.
- The Digital Personal Data Protection Act, 2023, amended this qualified prohibition into a total prohibition.
- However, the National Campaign for Peoples' Right to Information (NCPRI) argued that it would make 'social audits' in ration distribution impossible to carry out.
- In social audits, a community member gets a list of ration beneficiaries through an RTI request, and individually verifies that the beneficiaries got what they appear to have received on paper.
- There are also concerns that powerful public officials would evade accountability by invoking this blanket ban on disclosing personal information. Past

amendments to the RTI Act have also raised concerns.

- The Right to Information (Amendment) Act, 2019 gave the Union Government unilateral power in deciding how long information commissioners, who hear appeals against unsatisfactory or absent RTI responses, can serve, and what their salaries are
- The RTI Act's implementation is dependent on subordinate rules made by the Union Government and State Governments
- Tardy appointments to information commissions the Central Information Commission (CIC) for the Union Government, and various State Information Commissions (SICs) have also undermined confidence in the RTI framework, as appeals can take months or even years to be heard, if ever
- Many States do not have an online RTI portal, and even if they do, it is common for many State Government bodies to simply not be registered on the portal.
- The Union Government's RTI portal launched in 2013 is also past its prime.
- While many public authorities under the Union Government are on the portal, filing applications on it has become harder.
- Having an account on the RTI Online portal allowed citizens to have their personal particulars filled in on each application by default.
- Now, however, the facility to create an account has disappeared, and the site forces all users to enter their particulars afresh each time they file an application.

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## **One nation one election**

- The Central government set up a panel headed by former President Ram Nath Kovind to explore the feasibility of the 'one nation, one election' (ONOE) plan.
- **What is the ONOE plan?**
- The idea of ONOE centres around the concept of synchronising the timing of Lok Sabha and State Assembly elections across all States to reduce the frequency of polls throughout the country.
- After the enforcement of the Constitution on January 26, 1950, the first ever general elections to Lok Sabha and all State Assemblies were conducted simultaneously in 1951-1952.
- The practice continued into the three subsequent Lok Sabha elections until 1967, after which it was disrupted.
- The cycle was first broken in 1959 after the Centre invoked Article 356 (failure of constitutional machinery) of the Constitution to dismiss the then Kerala government.
- Subsequently, due to defections and counterdefections between parties, several Legislative Assemblies dissolved post 1960, which eventually led to separate polls for Lok Sabha and State Assemblies.
- Currently, the assembly polls in the States of Arunachal Pradesh, Sikkim, Andhra Pradesh and Odisha are held together with the Lok Sabha elections.
- In August 2018, the Law Commission of India (LCI), chaired by Justice B. S. Chauhan, released a draft report on simultaneous elections, wherein the constitutional and legal questions

related to the issue were analysed.

- Notably, the Commission submitted that simultaneous elections are not feasible within the existing framework of the Constitution.
- It said that the Constitution, the Representation of the People's Act 1951 and the Rules of Procedure of Lok Sabha and State Assemblies would require appropriate amendments to conduct simultaneous polls.
- The commission also recommended it receive ratification from at least 50% of the States.
- However, with respect to the advantages of holding simultaneous polls, the commission said that ONOE will lead to the saving of public money, reducing the strain on the administrative setup and security forces, timely implementation of

government policies, and administrative focus on development activities rather than electioneering.

### **What are the concerns?**

- The foremost concern is with regard to its feasibility. Article 83(2) and 172 of the Constitution stipulates that the tenure of Lok Sabha and State Assemblies respectively will last for five years unless dissolved earlier and there can be circumstances, as in Article 356, wherein assemblies can be dissolved earlier.
- Therefore, the ONOE plan raises serious questions what would happen if the Central or State government collapses mid tenure?
- Would elections be held again in every State or will the President's rule be imposed?
- Second, the idea of ONOE

does not square with the concept of 'federalism' as it is established on the notion that the entire nation is "one" contradicting the content of Article 1 which envisages India as a "Union of States".

- Third, the present form of recurrent elections can be seen as beneficial in a democracy as it allows voters to have their voices heard more frequently.
- As the underlying issues of national and State polls are different, the present framework prevents the blending of issues, ensuring greater accountability.

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### DIKSHA

- The National eGovernance Division (NeGD) of the Ministry of Electronics and Information Technology (MeitY) is set

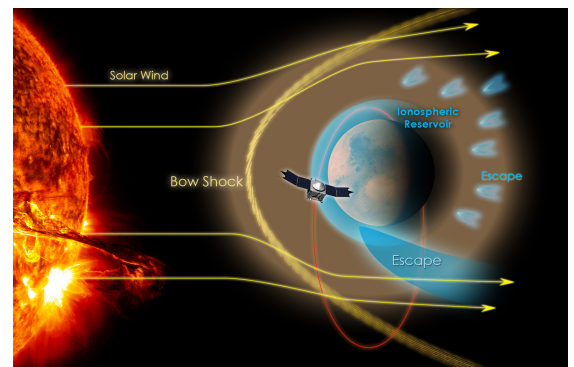
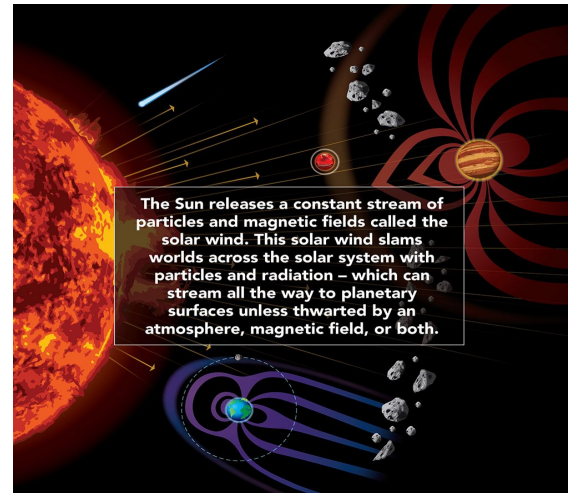
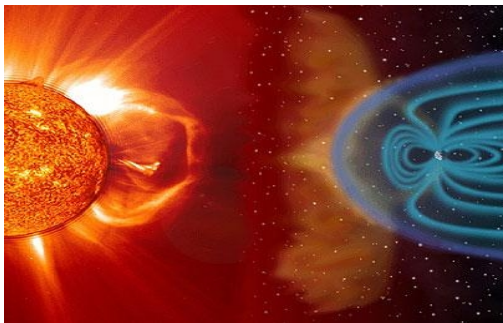
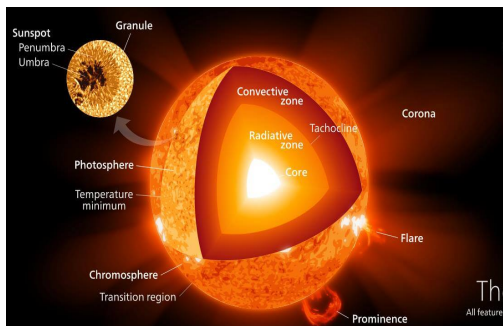
to integrate Personalised Adaptive Learning (PAL) into its existing Digital Infrastructure for Knowledge Sharing (DIKSHA) platform.

- The PAL's software-based approach is expected to allow each student to have an individualised learning experience over the course of the curriculum based on their unique needs and abilities.
- DIKSHA, which comes under the Education Ministry, provides e-content for schools by an online portal and a mobile application.
- It has embedded assistive technologies for learners with visual or hearing challenges.
- However, DIKSHA is a static content repository. DIKSHA features digitised National Council of Educational Research and Training (NCERT) textbooks used by national and State Boards.

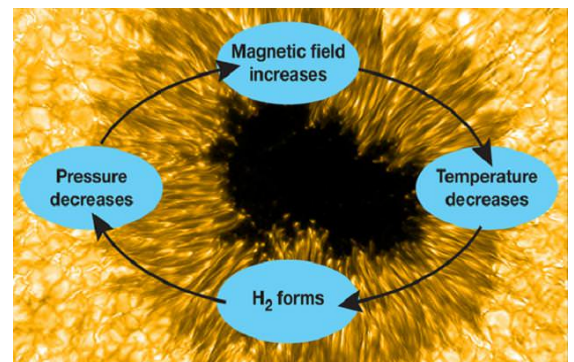
- Apart from this, DIKSHA hosts 2.43 lakh contributions by 11,624 academics by way of teaching videos, explainers, and practice questions.

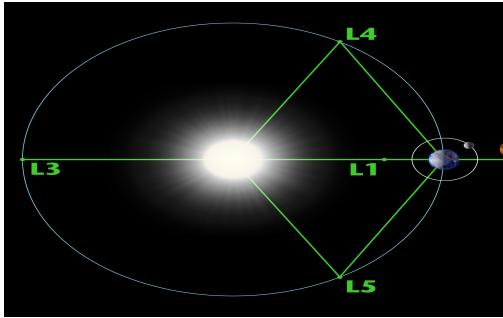
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## Aditya L1



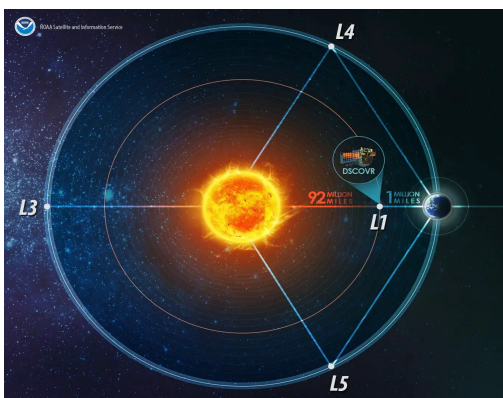
A magnetic field is a vector field in the neighbourhood of a magnet, electric current, or changing electric field in which magnetic forces are observable.





## What is Lagrange points

- Lagrange Points are positions in space where the gravitational forces of a two body system like the Sun and the Earth produce enhanced regions of attraction and repulsion.
- These can be used by spacecraft to reduce fuel consumption needed to remain in position.
- Lagrange points are named in honour of Italian-French mathematician Joseph-Louis Lagrange.

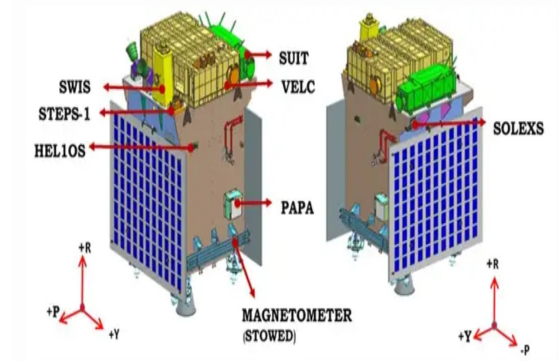


- Aditya L1 will be ISRO's 2nd space-based astronomy mission after

AstroSat, which was launched in 2015.

- Aditya 1 was renamed as Aditya-L1. The Aditya 1 was meant to observe only the solar corona.
- Aditya L1 is the first space-based Indian mission to study the Sun from a halo orbit around the Lagrangian point 1 (L1) of the Sun-Earth system.
- This mission with seven payloads on board to observe the photosphere, chromosphere and the outermost layers of the Sun (the corona) will provide greater advantage of observing the solar activities and its effect on space weather, according to officials of Indian Space Research Organisation (ISRO).

Aditya-L1 Payloads:





## Current Affairs 4th September 2023 by Saurabh Pandey

Type	Sl.No.	Payload	Capability
Remote Sensing Payloads	1	Visible Emission Line Coronagraph(VELC)	Coronal Imaging & Spectroscopy
	2	Solar Ultraviolet Imaging Telescope (SUIT)	Photosphere and Chromosphere Imaging- Narrow & Broadband
	3	Solar Low Energy X-ray Spectrometer (SoLEXS)	Soft X-ray spectrometer: Sun-as-a-star observation
	4	High Energy L1 Orbiting X-ray Spectrometer(HELIOS)	Hard X-ray spectrometer: Sun-as-a-star observation
In-situ Payloads	5	Aditya Solar Wind Particle Experiment(ASPEX)	Solar Wind Particle Analyzer Protons & Heavier Ions with directions
	6	Plasma Analyser Package For Aditya (PAPA)	Solar Wind Particle Analyzer Electrons & Heavier Ions with directions
	7	Advanced Tri-axial High Resolution Digital Magnetometers	In-situ magnetic field (Bx, By and Bz).

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