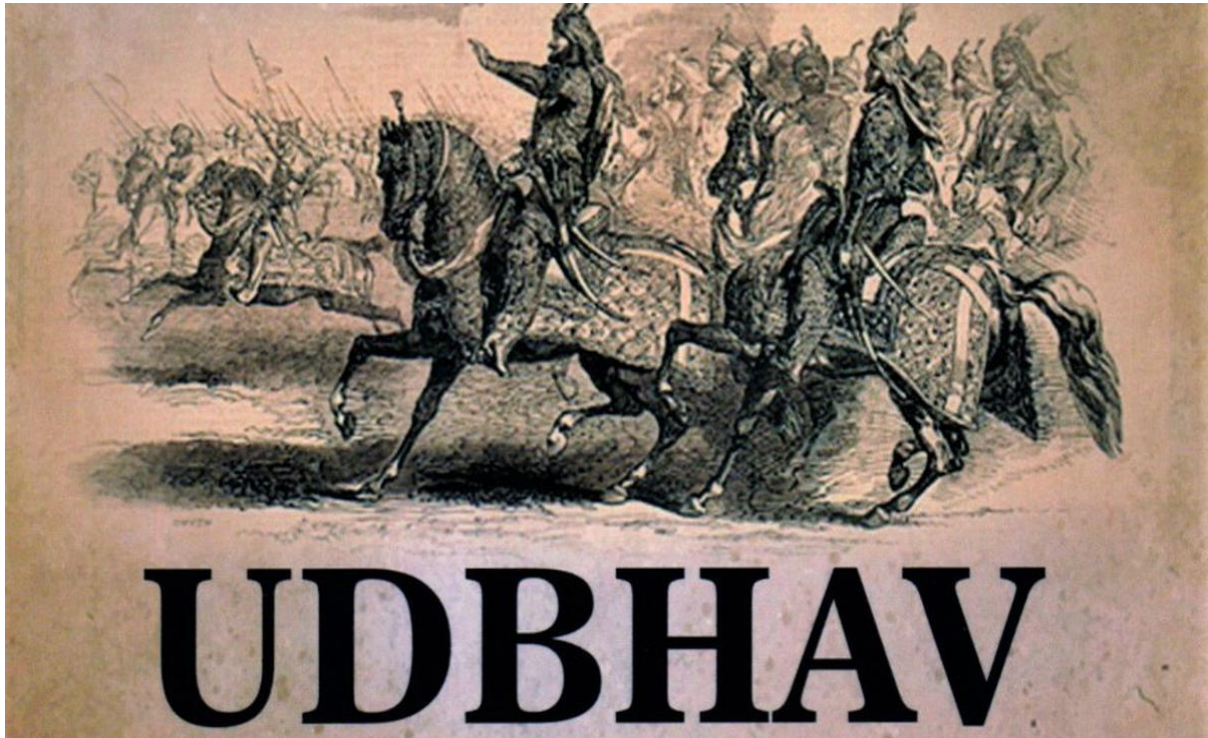


UPSC CURRENT AFFAIRS NOTES 01-10-2023

Project Udbhav: To rediscover 'Indic heritage of statecraft' from ancient texts

The Indian Army has started an initiative, named Project Udbhav, to rediscover the profound Indic heritage of statecraft and strategic thoughts.



Project Udbhav

Project Udbhav was started in 2021 by the Indian Army in collaboration with the United Service Institution of India, a defence think-tank.

It is an initiative to rediscover the profound Indic heritage of statecraft and strategic thoughts derived from ancient Indian texts of statecraft, warcraft, diplomacy and grand strategy.

It focuses on a broad spectrum including Indigenous Military Systems, Historical Texts, Regional Texts and Kingdoms, Thematic Studies, and intricate Kautilya Studies.

This pioneering initiative stands testimony to the Indian Army's recognition of India's age-old wisdom in statecraft, strategy, diplomacy, and warfare.

What is the Significance of the Project Udbhav?

At its core, Project Udbhav seeks to bridge the historical and the contemporary to integrate age-old wisdom with modern military pedagogy.

By reintroducing these classical teachings into contemporary military and strategic domains, the Army aims -

To nurture its officers to apply ancient wisdom in modern scenarios and

To allow a more profound understanding of international relations and foreign cultures.

It seeks to understand the profound depths of indigenous military systems, their evolution, strategies that have been passed down through the ages, and the strategic thought processes that have governed the land for millennia.

The Project is not limited to just rediscovering these narratives but also to also develop an indigenous strategic vocabulary, which is deeply rooted in India's multifaceted philosophical and cultural tapestry.

News Summary Regarding Project Udbhav:

A study to compile Indian stratagems based on ancient texts has been ongoing since 2021, and a book has been released listing 75 aphorisms selected from ancient texts.

Recently, a dialogue on the study of ancient texts from the 4th century BCE to the 8th century CE, with a focus on Kautilya, Kamandaka, and the Kural has been undertaken under the Project.

In connection with the Project, USI will conduct a Military Heritage Festival on October 21 and 22, to acquaint future thought leaders -

With the dynamics of comprehensive national security,

With special emphasis on India's strategic culture, military heritage, education, modernisation of security forces and Atmanirbhar Bharat.

Financial Stability Board (FSB)

The Financial Stability Board (FSB) is launching a probe into the buildup of debt outside traditional banks, as it seeks to limit hedge funds' borrowing and boost transparency.



FSB was established by the G20 in 2009 in the wake of the financial crisis.

Mandate: It was created expressly to coordinate at the international level the work of national financial authorities and international standard-setting bodies and to develop and promote the implementation of effective regulatory, supervisory, and other financial sector policies in the interest of financial stability.

The FSB brings together national authorities responsible for financial stability (central banks, supervisory authorities, and finance ministries), international organisations, and standard-setting bodies.

The FSB operates by monitoring, analyzing, and making recommendations on key aspects of the financial system. It assesses emerging issues that could impact global financial stability.

The FSB's decisions are not legally binding on its members.

Headquarters: Basel, Switzerland.

Members:

The FSB consists of 68 member institutions. It comprises several central banks, ministries of finance, and supervisory and regulatory authorities from 25 jurisdictions, as well as 10 international organizations and six Regional Consultative Groups (RCGs).

The board includes all G20 major economies.

Structure:

The Plenary, which serves as the sole decision-making body.

The Steering Committee, which takes forward operational work in between plenary meetings.

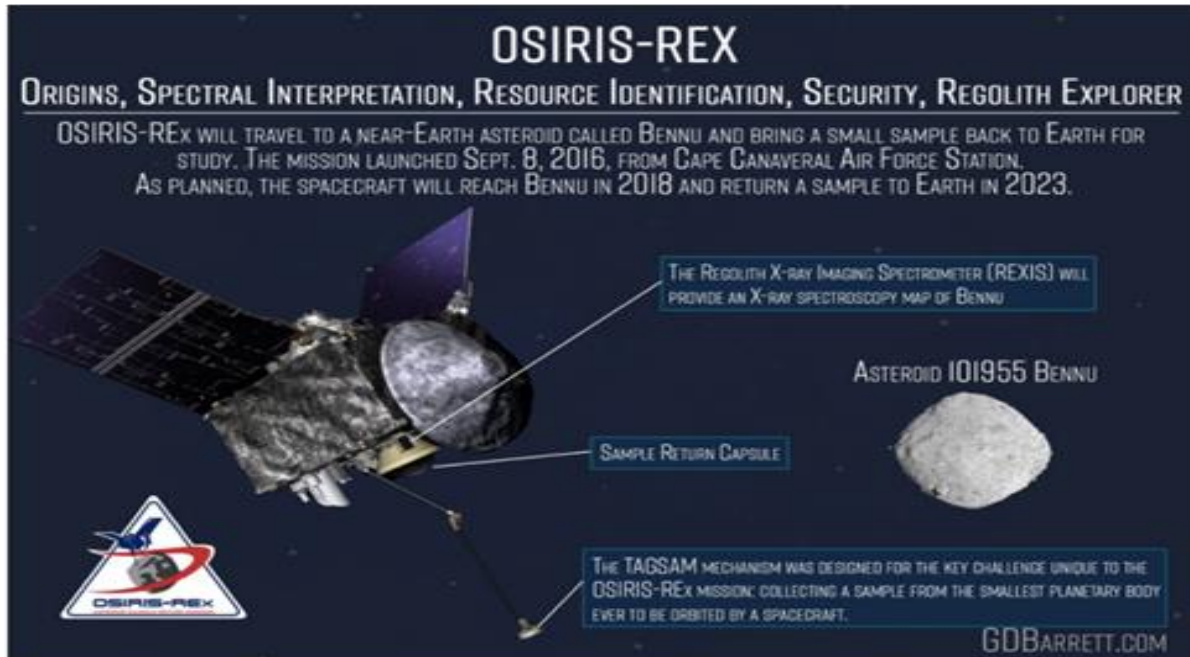
Three Standing Committees, each with specific but complementary responsibilities.

India and FSB: India is an active member of the FSB, having three seats in its Plenary represented by the Secretary (Dept of Economic Affairs), Deputy Governor-RBI, and Chairman-SEBI.

OSIRIS-Rex Spacecraft Brings Back Sample from Asteroid Benu

OSIRIS-REx (Origins, Spectral Interpretation, Resource Identification, and Security-Regolith Explorer), the first US mission to collect a sample from an asteroid, returned on Earth with material from asteroid **Benu**.

So far, **Japan** is the only other country to similarly bring asteroid samples to the Earth.



OSIRIS-REx (Origins, Spectral Interpretation, Resource Identification, Security, Regolith Explorer) is a NASA (National Aeronautics and Space Administration) asteroid-study and sample-return mission.

The mission was launched in September, 2016. The spacecraft reached asteroid Bennu in 2018.

Objective: To obtain a sample of at least 60 gm from Bennu and return the sample to Earth for a detailed analysis.

In October 2020, the spacecraft contacted the surface of the asteroid successfully and fired a burst of nitrogen gas meant to stir rocks and soil.

Once the surface was disturbed, the spacecraft's robotic arm captured some samples.

NASA had also confirmed that shortly after the spacecraft made contact with the surface, it fired its thrusters and "safely backed away from Bennu".

About Asteroids:

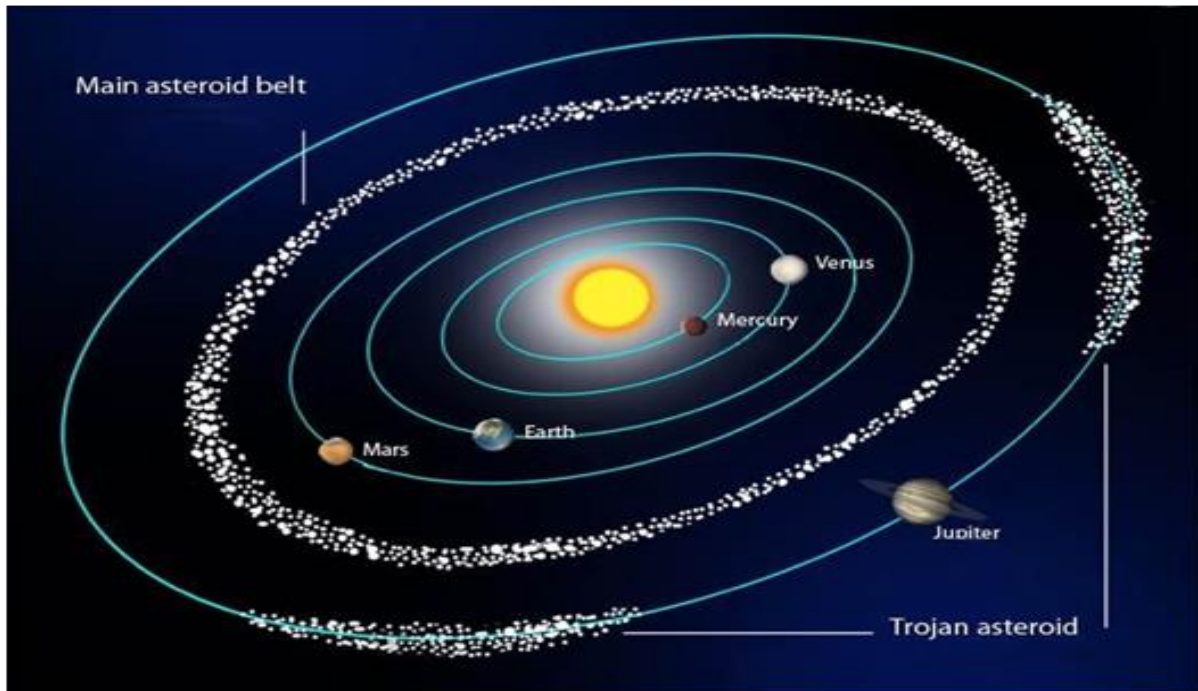
Asteroids are small, rocky objects that orbit the Sun.

Although asteroids orbit the Sun like planets, they are much smaller than planets. They are also known as planetoids or minor planets.

There are millions of asteroids, ranging in size from hundreds of kms to several feet across.

In total, the mass of all the asteroids is less than that of Earth's moon.

Classification of Asteroids:



Asteroids lie within three regions of the solar system:

Asteroid Belt:

Asteroid belt is the region between Mars and Jupiter.

This region contains the majority of known asteroids and is estimated to have 1 to 2 million asteroids larger than 1 km in diameter and millions of smaller ones.

Near-Earth Asteroids:

Near-Earth asteroids (NEAs) circle closer to Earth than the Sun.

About 10,000 NEAs have been discovered to date. And over 1,400 have been classified as Potentially Hazardous Asteroids or PHAs.

Astronomers employ the Torino Scale for categorizing the impact hazard associated with PHAs.

Trojan Asteroids:

Asteroids share an orbit with a larger planet.

The Trojan Asteroids do not collide with the parent planet because they are located in places known as **Lagrange points** where the gravitational pull of the Sun and the planet are balanced.

Jupiter has the largest number of Trojan asteroids discovered to date.

Neptune, Mars and Earth also have Trojan asteroids.

About Asteroid Bennu:

Bennu is a B-type Near-Earth Asteroid.

B-type asteroids are a relatively uncommon type of carbonaceous asteroid.

Because of its high carbon content, the asteroid reflects about four per cent of the light that hits it, which is very low.

Earth reflects about 30 per cent of the light.

There is a slight possibility that Bennu might strike the Earth in the next century, between the years 2175 and 2199.

Why Bennu was Chosen as the Target Asteroid?

Bennu is a "time capsule" from the birth of the Solar System.

Scientists believe that it is 4.5 billion years old.

It hasn't undergone drastic changes since its formation and, therefore, it contains chemicals and rocks dating back to the birth of the Solar System.

In particular, Bennu was selected because of the availability of pristine carbonaceous material, a key element in organic molecules necessary for life.

News Summary:

On September 24th, NASA's first asteroid samples, fetched from asteroid Bennu, were dropped by Osiris-Rex into the USA's Utah desert by the OSIRIS-Rex spacecraft.

Engineers estimate the canister holds 250g of material from Bennu, plus or minus 100g.

It will take a few weeks to get a precise measurement.

These samples carried by the OSIRIS-REx mission are important because asteroids such as Bennu can act as a "time capsule" for our solar system's earliest history.

The asteroid sample will help researchers learn about how our planet and solar system formed, as well as the origin of organics that may have led to life on Earth.

This was NASA's third sample return from a deep-space robotic mission.

The Genesis spacecraft dropped off bits of solar wind in 2004, but the samples were compromised when the parachute failed and the capsule slammed into the ground.

The Stardust spacecraft successfully delivered comet dust in 2006.

On the other hand, Osiris-Rex spacecraft is already chasing the asteroid Apophis and will reach it in 2029.

India's education system offers a unique fusion of traditional knowledge and latest world-class technology;



Chandrayaan-3, Aditya-L1, World's First Made in India DNA vaccine etc. endorse this exclusive advantage, says Dr. Jitendra Singh

Bharatiya Vidya Mandir Schools: A blend of India's Culture, Civilization & Modern Technology, says Dr. Jitendra Singh

India is now ahead of the best developed economies of the world under PM Narendra Modi unimagined a decade before, says Dr. Jitendra Singh

India takes a lead in addressing global concerns & also leads the global climate movement under PM Narendra Modi: Dr. Jitendra Singh

Union Minister of State (Independent Charge) Science & Technology; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr. Jitendra Singh today said, India's education system offers a unique fusion of traditional knowledge and latest world-class technology, thus giving an exclusive advantage to India to lead the world.

Consumer Price Index for Industrial Workers (2016=100) – August, 2023

The Labour Bureau, an attached office of the M/o Labour & Employment, has been compiling Consumer Price Index for Industrial Workers every month on the basis of retail prices collected from 317 markets spread over 88 industrially important centres in the country. The index is compiled for 88 centres and All-India and is released on the last working day of succeeding month. The index for the month of August, 2023 is being released in this press release.

The All-India CPI-IW for August, 2023 decreased by 0.5 points and stood at 139.2 (one hundred thirty nine point two). On 1-month percentage change, it decreased by 0.36 per cent with respect to previous month compared to increase of 0.23 per cent recorded between corresponding months a year ago.

The maximum downward pressure in current index came from Food & Beverages group contributing 0.71 percentage point to the total change. At item level, Wheat, Poultry/Chicken, Eggs-hen, Cotton Seed Oil, Apple, Brinjal, Cauliflower, Chillies Green, Ginger, Lady's Finger, Tomato, Electricity Domestic, Kerosene Oil, etc. are responsible for the fall in index. However, this decrease was checked by Rice, Arhar Dal, Onion, Cumin Seed/Jira, Cooked Meal, Tailoring Charges, Books School/ITI, Private Tutor/Coaching Centre Fees, Tuition and other Fees-College and School/ITI, Stationery, etc. putting upward pressure on the index.

At centre level, Jaipur recorded a maximum decrease of 4.8 points. Among others, 3 centres recorded decrease between 3 to 3.9 points, 11 centres between 2 to 2.9 points, 13 centres between 1 to 1.9 points and 22 centres between 0.1 to 0.9 points. On the contrary, Cuttack recorded a maximum increase of 4.4 points followed by Jalandhar with 4.0 points and Dadra & Nagar Haveli and Kollam with 3.7 points each. Among others, 3 centres recorded increase between 2 to 2.9 points, 9 centres between 1 to 1.9 points and 18 centres between 0.1 to 0.9 points. Rest of 4 centres' indices remained stationary.

Year-on-year inflation for the month stood at 6.91 per cent compared to 7.54 per cent for the previous month and 5.85 per cent during the corresponding month a year before. Similarly, Food inflation stood at 10.06 per cent against 11.87 per cent of the previous month and 6.46 per cent during the corresponding month a year ago.

SIMBEX 23 CONCLUDES



Indian Naval Ships Ranvijay (guided-missile Destroyer), Kavaratti (ASW Corvette), submarine Sindhukesari and a long range Maritime Patrol Aircraft P8I participated in the 30th edition of Singapore India Maritime Bilateral Exercise (SIMBEX) in Singapore.

First held in 1994, the three-decade-old annual exercise kicked off with an opening ceremony on 21 September 2023, which was attended by personnel from both the navies. The ceremony saw unveiling of the SIMBEX 30th Edition Logo. The Harbour Phase witnessed a wide range of professional interactions, Subject Matter Expert Exchanges, conduct of combined aviation and firefighting/ damage control exercises, and the signing of a Joint Standard Operating Procedure (JSOP) on Submarine Rescue between India and Singapore in presence of the High Commissioner of India to Singapore and the Singapore Navy Fleet Commander. The Commanding Officers of the Indian Navy contingent also paid homage at the Kranji War Memorial in a solemn wreath laying ceremony.



Other activities undertaken during the stay in harbour included sports exchanges, cross-deck visits, and onboard visit of school children and personnel from the Indian High Commission.

The Sea Phase of SIMBEX 23 was conducted from 25 to 28 September 2023, wherein units of Indian Navy along with RSS Stalwart, Valour, Tenacious, a submarine, Maritime Patrol Aircraft Fokker F-50 and fighter aircraft engaged in complex maritime security exercises including advanced anti-submarine warfare, surface and air defence exercises, as well as tactical manoeuvres and weapon firings.

SIMBEX 23 ended on a high note reaffirming the close bonds of friendship and interoperability between the two maritime nations.

Sela Tunnel Project

The BRO officials recently said that nearly 96 percent of the work on the strategically crucial Sela Tunnel is complete, and it is likely to be inaugurated by year-end.



Location: It is located in the West Kameng district of Arunachal Pradesh.

Once completed, the Sela tunnel will be the world's longest bi-lane tunnel at an altitude above 13,000 feet.

It will ensure all-weather connectivity between Guwahati in Assam and Tawang in Arunachal Pradesh.

It is being excavated below the Sela Pass on the NH-13 component of the Trans-Arunachal Highway system.

It is being built by the Border Roads Organisation (BRO) under Project Vartak and the tunnel's construction commenced on April 1, 2019.

Project Details:

Tunnel 1: This single-tube tunnel has a length of 980m.

Tunnel 2: This bi-lane tunnel has a length of 1555m. It includes one escape tube for emergencies.

Roads: Approach to Tunnel 1 is 7100m, the road between the two tunnels is 1340m, and the approach to Tunnel 2 is 340 m long.

Key Facts about Sela Pass:

It is a high-altitude mountain pass located in the Tawang district of Arunachal Pradesh.

Elevation: 4,170 meters above sea level

It connects Tawang Valley to the rest of India.

Open throughout the year, Sela Pass is managed by the BRO.

Intelligent Grievance Monitoring System (IGMS) 2.0

Recently, the union Minister of State (Independent Charge) Science & Technology, MoS Personnel, Public Grievances, Pensions launched the Intelligent Grievance Monitoring System (IGMS) 2.0

About Intelligent Grievance Monitoring System (IGMS) 2.0:

- It is a public grievance portal and Automated Analysis in Tree Dashboard portal of the Department of Administrative Reforms and Public Grievances (DARPG).
- It has been implemented by IIT Kanpur.
- Objectives: The Dashboard provides instant tabular analysis of Grievances Filed & Disposed, State-wise & District-wise Grievances Filed & Ministry-wise data.
- It will also help the officials identify the root cause of the grievance.
- This portal will help the DARPG with creation of draft letter for selected scheme/ministry and expedite the grievance redressal process by the concerned ministry/department.
- It has been enabled with Artificial intelligence (AI) capacity.

What is CPGRAMS?

- Centralised Public Grievance Redress and Monitoring System (CPGRAMS) is an online platform available to the citizens 24x7 to lodge their grievances to the public authorities on any subject related to service delivery.

- It is a single portal connected to all the Ministries/Departments of Government of India and States.
- Every Ministry and States has role-based access to this system.
- It is also accessible to the citizens through standalone mobile application downloadable through Google Play store and mobile application integrated with UMANG.
- The status of the grievance filed in CPGRAMS can be tracked with the unique registration ID provided at the time of registration of the complainant.

Sastra Ramanujan Prize

Ruixiang Zhang, Assistant Professor, University of California, Berkeley, USA will be awarded with the 2023 SASTRA Ramanujan Prize for his outstanding contributions in mathematics.



About Sastra Ramanujan Prize:

- The prize was instituted in the year 2005.
- It is awarded every year by the SASTRA University on its campus near Kumbakonam in Tamil Nadu, on Ramanujan's birth anniversary, December 22.



- The prize is conferred annually to mathematicians from across the world who is less than 32 years of age, working in an area influenced by the Srinivasa Ramanujan.
- The age limit is 32 years to commemorate the fact that Ramanujan accomplished a phenomenal body of work in this short span.
- Cash prize: It carries a citation and an award of \$10,000.
- This award has gained global repute ever since it was instituted.
- Other recipients: Manjul Bhargava and Akshay Venkatesh

Contribution of Ruixiang Zhang

He is a young mathematician whose fundamental work spans from analytic number theory, combinatorics, and Euclidean Harmonic Analysis to geometry.

Building on his Princeton PhD thesis, Zhang in collaboration with Shaoming Guo proved a multivariable generalisation of the main conjecture in Vinogradov's Mean Value Theorem.

This work, which has appeared in *Inventiones Mathematicae* in 2019, is considered a major achievement.