Samyak

An Institute For Civil Services

Monthly
Current Affairs

October-2023

USEFUL FOR ALL COMPETITIVE EXAMS

INDEX

MONTHLY CURRENT AFFAIRS
OCTOBER : 2023

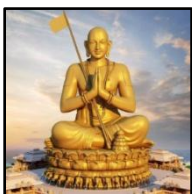**Near Riddhi-Siddhi Circle, Gopalpura Bypass, Jaipur**

1   International Affairs

India – Argentina Social Security Agreement

- Social Security Agreement has been signed India - Argentina with the aim of protecting the legal rights of professionals in both the countries. It ensures protection of rights and social benefits of workers and professionals in both the countries.

Statue of Equality

A 19-foot tall statue of Dr. B.R. Ambedkar, the creator of the Indian Constitution, was unveiled on October 14, 2023, in the US capital Washington. This statue installed in Maryland has been named the 'Statue of Equality'. It has been prepared by Indian sculptor Ram Sutar.

Cheriyapani Ferry Service

- 'Cheriyapani' ferry service between India and Sri Lanka was formally inaugurated on October 14, 2023. This service will connect Nagapattinam in Tamil Nadu to Kankesanthurai in Jaffna, Sri Lanka. This ship named 'Cheriyapani' will operate under the supervision of Shipping Corporation of India. It may be noted that due to the civil war in Sri Lanka in the year 1982, the operation of the said ferry service was stopped, which has now been restored after 41 years.

Sri Lanka's IORA chairmanship

- Sri Lanka assumed the Chairmanship of the Indian Ocean Rim Association (IORA) at the 23rd Council of Ministers meeting held on October 11, 2023 in Colombo, Sri Lanka and will preside over it till 2025. Sri Lanka has taken over the chairmanship from Bangladesh.

- **Indian Ocean Rim Association**:- During the visit of the then South African President Nelson Mandela to India in 1995, the idea of IORA came to light. The Indian Ocean Rim Initiative came into existence in March 1995 and was renamed the Indian Ocean Rim Association in March 1997. It currently has 23 member countries (Australia, Bangladesh, Comoros, France, India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Maldives, Mauritius, Mozambique, Oman, Seychelles, Singapore, Somalia, South Africa, Sri Lanka, Tanzania, Thailand, United Arab Emirates, Yemen) and 11 dialogue partners (China, Egypt, Saudi Arabia, Germany, Italy, Japan, South Korea, Russia, Turkey, United Kingdom

and United States). Pvt. Its secretariat is in Mauritius.

Visit of Tanzanian President to India

- Tanzanian President Samia Suluhu Hassan is on a visit to India from October 8-10, 2023. She attended the India-Tanzania Trade and Investment Forum meeting here on October 10. After talks with the Prime Minister of India Narendra Modi, the following six agreements/MoUs were signed between the two countries :

1- Sharing of digital solutions,
2- Sharing of white shipping information,
3- Cultural exchange,
4- Sports fields. Cooperation in,
5- Establishment of Industrial Park in Tanzania,
6- Marine Industry. India also invited Tanzania to become the partner country for the Surajkund Fair to be held in Faridabad in February 2024.

Sri Lanka Free Visa Pilot Project

- Sri Lanka has approved the policy of issuing free tourist visas to travelers from seven countries namely Japan, China, Russia, Malaysia, Indonesia, Thailand including India on October 24, 2023. This has been done to increase tourism and foreign exchange reserves in the country.

Multinational Security Mission in Haiti

- The United Nations Security Council (UNSC) has approved a Kenya-led Multinational Security Mission (MSS) in October 2023 to establish security in Haiti, protect infrastructure and control violence. Let it be known that Haiti has been facing internal violence for almost a year. Here,a gang called 'L9 and Family', has disrupted the main fuel port and capital city of Port-au-Prince.

2 National Affairs

Inauguration and Announcements

Projects worth Rs 7200 crore launched in Chittorgarh:-

- Prime Minister Narendra Modi announced the launch of 9 projects worth about Rs 7800 crore in Chittorgarh.
- He inaugurated the 'Tourist Interpretation' and 'Cultural Centre' in Nathdwara (Rajsamand).
- Facilities worth crores of rupees like water laser show, tourist facility centre, amphitheatre, cafeteria etc. in Sanwaliya Seth temple were also inaugurated.

Bill approved for establishment of Sammakakka Sarakka Central Tribal University:-

- The Union Cabinet chaired by the Prime Minister has approved the introduction in the Parliament of the Central University Bill, 2003 to amend the University Act, 2009 for the Sammakka Sarakka Central Tribal University in Mulugu district of Telangana as per the provisions of the 13th Schedule of the Andhra Pradesh Reorganization Act, 2014 (Bill No. 6). Approved.
- An amount of Rs 889.07 crore was provisioned for its establishment.

MERA YUVA BHARAT

- MY BHARAT (MERA YUVA BHARAT) is an autonomous body established by the Government of India for the development of youth in the age group of 15 to 29 years.
- This program provides youth with opportunities for skill development, leadership skills and social participation.

Main objectives of MERA YUVA BHARAT -

- To help youth develop their skills and abilities.
- To provide opportunities for youth to participate in leadership roles.
- To inspire youth to contribute to their communities and development.

India's first Regional Rapid Transit System (RRTS):-

- Prime Minister Narendra Modi inaugurated the primary section of Delhi-Ghaziabad-Meerut corridor based on RRTS (Regional Rapid Transit System) from Sahibabad Rapid Station (Uttar Pradesh).
- RRTS is a new computer-based, semi-high speed, high-frequency rail transit system.
- This train with its 180 kmph speed has been designed to develop the capability of short time and high frequency for intercity travel.

Sir JJ School of Art declared de novo deemed university

- The 166 year old Sir JJ School of Art was declared a deemed university by Union Minister of Education and Skill Development and Entrepreneurship Dharmendra Pradhan.
- It will become the only deemed-to-be university run by the Government of

Maharashtra and will join the list of selected institutions carrying the 'de novo' tag across the country.

> • **What is de-novo?** De-Novo meaning "anew", de-novo deemed universities are institutions dedicated to cutting-edge teaching and research in the arts, sciences or some other specialized field. These universities are given special status by the government, giving them greater autonomy and flexibility than traditional universities.

Inauguration of Liquid Nano DAP Plant:-

- The Liquid Nano DAP plant was inaugurated by Union Home and Cooperation Minister Amit Shah at Kalol (Gandhinagar, Gujarat).
- It will be constructed by IFFCO.
- Its greatest utility is in maintaining the fertility of the land by reducing the use of urea.

What is Liquid Nano DAP?

- Liquid Nano DAP (Diammonium Phosphate) is a new type of fertilizer made using nanotechnology. It contains nanoparticles of nitrogen and phosphorus, which are easily available to plants. It is used more efficiently than conventional DAP and increases crop productivity.
- Liquid Nano DAP can be used as a seed treatment or foliar spray. For seed treatment, seeds are treated at the rate of 25 ml Nano DAP per kilogram of seed. For foliar spray, spraying is done at the rate of 200-400 ml Nano DAP per hectare.
- Liquid Nano DAP can be used for a variety of crops, including wheat, paddy, maize, soybean, cotton, vegetables and fruits.

India-Bangladesh Joint Development Project:-

- On 1 November 2023 Indian Prime Minister Narendra Modi and Bangladeshi Prime Minister Sheikh Hasina, inaugurated the completion of the agreement on three projects through video conferencing.

The completed projects with Indian cooperation are as follows-

- Akhaira-Agartala cross-border rail link
- Khulna-Mongla Port Railway Line
- Maitri Super Thermal Power Plant Unit-II
- Maitri Super Thermal Power Unit has been implemented by "Bangladesh India Friendship Power Company (Pvt.) Limited (BIFPCL)", which is a joint venture between NTPC and Bangladesh Power Development Board in 50:50 partnership respectively.

Prime Minister Anusuchit Jaati Abhyudaya Yojana(PM AJAY Scheme):-

There are 3 centrally sponsored schemes by the Ministry of Social Justice and Empowerment namely –

- Pradhan Mantri Adarsh Gram Yojana (PMAGY) – It is a 100% Central Government sponsored scheme, under which various development works are carried out in the rural areas of the country. Under this scheme, the Ministry of Tribal Affairs is currently trying to develop 36,428 villages and 500 Scheduled Tribes with at least 50% tribal population across the country as 'Model Tribes'.
- Special Central Assistance to Scheduled Castes Sub Plan (SCA to SCSP - Special Assistance to Scheduled Castes Sub Plan)
- PM-Ajay Yojana was started by subsuming Babu Jagjivan Ram Hostel Scheme (BJRCY).
- In 2021-22 this scheme was implemented for skill development, employment generation, poverty alleviation and socio-economic upliftment of Scheduled Castes and Scheduled Tribes.

Achievements of the current financial year 2023-24 :-

- This financial year, 1260 villages have been declared as model villages.
- 9 new hostels were approved under the hostel component.
- This scheme was approved from the perspective of the states under the grant-in-aid component.

Jamrani Dam Multipurpose Project :-

- The Parliamentary Committee on Economic Affairs, chaired by the Prime Minister, approved the Jamrani Dam Multipurpose Project in Uttarakhand under the "Pradhan Mantri Krishi Sinchai Yojana – Accelerated Irrigation Benefit Program" (AIBP).
- This is a joint project of Uttarakhand and Uttar Pradesh.
- There was an agreement between the two states in 2017, according to which Uttarakhand will have a monopoly on drinking water and Uttar Pradesh and Uttarakhand together will be supplied with water for irrigation.

Accelerated Irrigation Benefit Program (AIBP- Accelerated Irrigation Benefit Program) -

- It is a component of the Pradhan Mantri Krishi Sinchai Yojana (PMKSY), which was launched by the Government of India in 1996-97 to provide central assistance to major/medium irrigation projects. The objective of this program is to expedite the implementation of such projects which were beyond the resource capacity of the States or were in advanced stages of completion.
- This program provides partial financial assistance to identified major/medium irrigation projects in the form of loans to State Governments. Since its inception, 297 irrigation multipurpose projects have been included for funding under AIBP, out of which 143 projects have been completed and 5 projects have been closed.

National Turmeric Board

- The Government of India has recently established the National Turmeric Board, which aims to develop the turmeric industry.
- India is the largest producer of turmeric in the world as well as the largest consumer and exporter country. India has 75 percent share in the world's total turmeric production.
- **Major turmeric-producing states:-** Maharashtra, Telangana, Karnataka and Tamil Nadu.

Cleanliness is service Pakhwada (fortnight)

- Swachhta Hi Seva (Cleanliness is service) Pakhwada was organized by Swachh Bharat Mission-Urban and Rural between 15 September to 2 October 2023. It aims to increase people's participation through activities like Indian Sanitation League 2.0, Safai Mitra Safety Camps, and mass cleanliness drives.
- **Swachh Bharat Mission-Urban**:- Swachh Bharat Mission-Urban (SBM(U)) was launched by the Ministry of Housing and Urban Affairs on October 2, 2014 to ensure cleanliness, sanitation and proper management of waste in urban areas. Under this, cities and towns across the country are to be made clean and free from open defecation. It is noteworthy that in the last 9 years, 12 crore toilets have been built across the country.
- **Swachh Bharat Mission-Urban 1.0**:- It focused on making urban India free from defecation.
- **Swachh Bharat Mission-Urban 2.0**:- Swachh Bharat Mission-Urban 2.0 was announced in the Union Budget for the year 2021-22. Its goal is to go beyond ODF to ODF+ and ODF++ and make urban India garbage-free. It promotes sustainable sanitation practices, waste management and a circular economy.

Operation Ajay

- 'Operation Ajay' was launched from October 11, 2023 to assist citizens returning to India after the Israel-Palestine conflict. Special charter flights are underway to repatriate its citizens.

Increase in minimum support price

- The Center has announced an increase in the Minimum Support Price (MSP) for wheat and five other Rabi crops for the 2024-25 marketing season.

- **MSP**:- The government provides a minimum guarantee amount to farmers while purchasing their crops, which is called MSP. It is based on the recommendations of the Commission for Agricultural Costs and Prices (CACP), which is an attached office of the Ministry of Agriculture and Farmers Welfare. It came into existence in January 1965.

One Nation, One Student ID

- The Education Ministry has issued instructions to all states and union territories to start the process of creating Automated Permanent Academic Account Registry (APAAR) ID for students. It may be noted that in the National Education Policy 2020, there is a provision of 'One Nation, One Student ID' for every student from pre-primary to higher education. Under this, all students will have a 12-digit ID which will track their educational qualifications and achievements.

3   Economic Affairs

National Investment and Infrastructure Fund (NIIF) launches India-Japan Fund

- NIIF- (National Investment and Infrastructure Fund) has partnered with the Government of India and the Japanese Bank for International Co-operation and established India-Japan fund of $600 million in which the share of India – Japan will be 49:51 respectively.

- It aims to increase Japanese investment in India as well as focus investment on environmental sustainability and low carbon emissions policy.

Scheme to increase UJJWALA Subsidy Scheme

- The Central Government has increased the price subsidy on 14.2 kg domestic cooking cylinders by Rs 200 on Rakshabandhan, which in turn has made the subsidy increase to Rs 300. Hence, the cylinder of Rs 703 will now be available for Rs 603.

- So far, more than 9.6 crore connections have been given under this scheme and Rs 6100 crore was spent on it in the financial year 2022-23.

Benefits of Ujjwala Yojana :-

- Health Benefits – Use of LPG reduces exposure to cooking smoke, thereby reducing the risk of respiratory diseases.

- Safety Benefits – LPG is safer than traditional cooking fuels, such as wood or coal, which can pose a fire hazard.

- Socio-economic benefits – The time women spend in cooking is reduced, giving them more time for education, employment or other activities.

- Economic benefits – LPG provides financial assistance to poor families through subsidy.

- *Currently around 68 lakh Ujjwala LPG connections have been distributed in* Rajasthan *till December 2023.*

Schemes

PM SVANidhi Scheme:-

- Pradhan Mantri Street Vendors Atmanirbhar Nidhi (PM SVANidhi)Yojana is a micro loan scheme for urban street vendors.

- Starting from June 1, 2020, in this scheme, interest up to Rs 50000 is given to urban traders with 7% interest subsidy.

Reason for being in discussion:-

- More than 50 lakh street vendors (urban) joining this scheme in the last 3 years proves the strength of financial inclusion.

4 | Rajasthan Affairs

Rajasthan Trending News

Increase in duration of campaign with administration cities (*Prashashan Shehro k Sang*)

- The Rajasthan government again changed the last date of the campaign with the administration cities starting from 2nd October, 2021 and increased its duration by 6 months and extended it till 31st March, earlier the expiry period was 30 September 2023.
- The target was to issue 10 lakh pattas (lease), out of which now 9 lakh 35 thousand pattas (lease) have been issued.

Ramsagar Dam :-

- Ramsagar Dam, located near Jaipur, the capital of Rajasthan, is becoming polluted due to chemical-laden water. Hundreds of fish have died and tourism is also being affected.

Inauguration of IIIT Campus :-

- Prime Minister Narendra Modi virtually inaugurated the permanent campus of IIIT (Indian Institute of Information Technology) at Sanwaliya Seth in Ranpur (Kota) at a cost of Rs 120 crore.
- The Central Government had announced IIIT in Kota in 2011 and in 2013
- It was started in MNTT Jaipur in 2013.
- Now after 10 years the permanent campus has been constructed.

Inauguration of Mahatma Gandhi Park:-

- Mahatma Gandhi Park was inaugurated on Gandhi Jayanti by Food and Civil Supplies Minister Pratap Singh Khachariyawas at Seva Sankul Residential Complex, RPA (Rajasthan Police Academy) Shastri Nagar.
- It was developed by Heritage Municipal Corporation at a cost of Rs 50 lakh.

Prorogation of the last session of the 15th Legislative Assembly:-

- Governor Kalraj Mishra prorogued the last session of the Assembly on October 2.
- A total of 8 sessions were held in the 15th Assembly and the 8th session remained a controversial issue as it lasted for the whole year.
- Under the 15th Assembly, the House functioned for 147 days, which was the highest in 33 years after the 8th Assembly because the proceedings of the 8th Assembly lasted for 180 days.

64th Annual Art Exhibition of Rajasthan Lalit Kala Academy :-

- Art and Culture Minister B. D. Kalla Rajasthan Lal inaugurated the 64th annual art exhibition at the Sri Kala Academy premises. In this, 79 artworks were selected by 64 artists and 10 of them were given awards.

Rajasthan Lalit Kala Academy :-

- It was established by the Government of Rajasthan in 1957.
- The purpose of its establishment is to provide support and encouragement to regional art and artists.
- Headquarters – Jaipur

Release of Rajasthan Mission 2030 Master Plan Vision Document:-

- It was released by Honorable Chief Minister Ashok Gehlot on 5 Oct 2023 at Commerce College Ground (Jaipur).
- In this, a master plan has been made to increase the progress of Rajasthan 10 times.

World-class synthetic AstroTurf football field -

- As per FIFA rules, a world class synthetic AstroTurf football field will be built in Vidyadhar Nagar Stadium for Rs 13 crore.
- It is being constructed by JDA.

What is synthetic AstroTurf?

- It is a flat field of artificial grass in which artificial grass is stronger than normal grass and does not crumble during the game.

Other features -

- 400 meter synthetic astro track
- Disc throw area
- 3000 audience gallery
- Players dressing room

Appointment of member secretary and members in the State Backward Classes Commission:-

- Bhalaram Parmar, retired from the post of District and Sessions Judge of the State OBC Commission, was appointed to the post of Member Secretary.

The other 3 members:

(i) Dr. Surendra Yadav (Former Principal, College of Law, Alwar)

(ii) Lalit Tunwal (State Congress Organization General Secretary)

(iii) Rajendra Sain (National Coordinator of Congress OBC Department)

State Backward Classes Commission :

- After the Indra Shawney case of 16 November 1992, the OBC Commission was constituted by the state government on 11 March 1993.
- It was notified on 21 October 2016 and given statutory stability on 24 October 2016.

Unveiling of Ambedkar statue and Constitution Park -

- Statue of Constitution maker Dr. Bhimrao Ambedkar and Constitution Park unveiled by MLA Ashok Lahoti in Kiron Ki Dani (Sanganer).

Inauguration and foundation stone laying of total projects worth Rs 1155 crore in the context of Model Health State Rajasthan:-

- On 5 October 2023, Chief Guest Ashok Gehlot from Commerce College (Jaipur) inaugurated and laid the foundation stone of schemes worth about Rs 1155 crores.

Laid the foundation stone of :-

(i) Medical College – Rajsamand, Jalore and Pratapgarh

(ii) Nursing College – Masuda (Beawar), Rawatbhata (Chittorgarh).

Inauguration:-

- Psychological Counseling Center (SDM Hospital, Jodhpur).

Launch :-

- Launch of 200 new ambulances under Chiranjeevi Ambulance Project.

Approval of formation of Agrasen Welfare Board-

- On the demand of Agrasen community, Chief Minister Ashok Gehlot approved the formation of a 5-member Agrasen Welfare Board.
- These will include 5 non-official members - Chairman, Vice Chairman and 3 members
- These include - Sanskrit Education Department, Commercial Tax Department, Industry Department,
- Government Secretary, Commissioner, Director and their representatives of Rural Panchayati Raj Department, Labour, Social Justice Empowerment Department will join as government members.

Launching ,Inauguration and foundation stone laying of 18 projects worth Rs 5900 crore in Jodhpur:

- Prime Minister Narendra Modi inaugurated, laid the foundation stone and inaugurated projects worth Rs 590 crore at Residency Road (Jodhpur, Rajasthan) on 5 October.

Inauguration -

(i) Permanent campus of Indian Institute of **Technology (IIT) Jodhpur - This is the first IIT** of the state spread over 852 acres.

(ii) In Rajasthan Central University (Ajmer) - Education School and Yoga Vigyan Bhawan (cost 7 crores)

Foundation stone laid for -

(i) New Terminal – Udaipur Airport

(ii) Advanced Trauma and Critical Care Block (AIIMS Jodhpur)

Launch:-

(i) **Jaisalmer** - Delhi New Rail Service:- Direct connectivity of Western Rajasthan with the country's capital.

(ii) **Marwar Junction** - Kamli Ghat Heritage Rail Service: - Efforts to increase tourism development

Launch of the state's first Vistadome heritage train-

- It was virtually inaugurated by Prime Minister Narendra Modi from Jodhpur.
- The state's first Vistadome heritage train was launched from Goramghat in Pali district.
- This train will pass through Todgarh-Raoli Sanctuary and Bhil Beri Waterfall will also be seen from it.
- This train is operated on steam engine.

Exemption for women in roadways monthly pass:-

- Under Vision 2030, CM Ashok Gehlot announced 90% discount on monthly passes for working women.
- Now they will have to bear only 10% of the amount.

Appointment in Shraman Sanskriti Board:-

- Rajasthan Government has appointed 5 member Shraman Sanskriti Board which consists of -

(i) **Chairman** – Sundhashu Kasliwal

(ii) Vice President – Prakash Singhvi

(iii) **Members** –   (a) Ashok Patni

(b) Dinesh Khodnia

(c) Manish Mehta

- Their tenure will be for 3 years.

Go Seva Sammelan (Mansarovar, Jaipur) :-

- Chief Minister Ashok Gehlot participated in the organization of Gauseva Sammelan and made the following announcements -

(i) Announcement of three new districts – Malpura, Sujangarh, Kuchaman (now the number of districts has increased to 53.)

(ii) Announcement of conducting caste census.

(iii) Formation of 'Rajasthan State Farmers Debt Relief Scheme Commission'.

(iv) Approval of formation of 'Shri Karni Charan and Dingle Sahitya Research Preservation and Development Board'.

Rajasthan State Agricultural Debt Relief Commission Act 2023 :-

- Presiding – Retired High Court Judge
- Member - Agriculture Expert Incorporated

Work -

(i) To ban **the** auction of farmers' lands.

(ii) **Disputes** between indebted farmers and **financing** institutions

(iii) **Solutions** through mediation.

(iv) **Assistance** to farmers in disaster affected districts.

Municipal bond of Rs 100 crore issued by Bharatpur Municipal Corporation:-

- Bharatpur Municipal Corporation was given permission by the state government to issue municipal bonds worth Rs 100 crore.
- Bharatpur Municipal Corporation is the first municipal body in Rajasthan to issue such bonds.
- Municipal **bonds** – These are debt instruments issued by state or local governments that are used to raise capital

from the market. In return the bondholder is paid interest which is tax free. These bonds were first issued in India in 1997. After being closed in 2005, SEBI revived them in 2015.

Election announcement in Rajasthan :-

- The Election Commission fixed the election date as 23 November, which was later changed to 25 November.
- With this the code of conduct came into force in the state.
- Nominations will start from 1st November.
- Appointment of chairpersons and members of major boards of the state-
    1. **RPSC –**
        (i) Kailash Chand Meena
        (ii) Prof. Ayub Khan
    2. **State Staff Selection Board –**
        (i) Sajjan Poswal
        (ii) Dr. Ripunjay Singh
    3. **Veer Tejani Welfare Board Chairman -**
        President- Richpal Mirdha
        Vice President – Dinesh Kaswan
        Member - 7
    4. Economically Backward Classes Board (Chairman) – Devendra Singh Butati
    5. Architecture Board (Chairman) – Mukesh Verma
    6. Agrasen Welfare Board (Chairman) – Rakesh Kumar Gupta
    7. Animal Husbandry Welfare Board Chairman – Godaram Dewasi , Vice President – Sukhdev Devasi
    8. Veer Shiromani Maharana Pratap Board Chairman - Lal Singh Jhala Vice President – Raghuveer Singh Rathod

NGT notice on Kota river front:-

- National Green Tribunal has issued a notice regarding the Chambal River Front of Kota and has sought a reply from UIT Kota within 4 weeks.

Reason :-

- "Despite being under the ownership of the National Chambal Crocodile Sanctuary, the work was started without environmental clearance, which poses a threat to the environment and wildlife."
- For this reason, NGT asked to form a committee comprising one representative each from Kota Collector, Central Pollution Board, Rajasthan Water Resources Department and Rajasthan Biodiversity Board and submit a report. Whose nodal agency will be Rajasthan Pollution Control Board.

RAJASTHAN

Jan Samman Utsav Public Conference -

- On the occasion of Gandhi Jayanti on 2nd October, Jan Samman Utsav Jan Sammelan was organized at JECC, Sitapura, Jaipur.

Expenditure limit fixed for assembly elections:-

- The expenditure limit for the upcoming assembly elections has been fixed by the State Election Commission.
- The election expenditure limit in 2018 was Rs 28 lakh, which has been increased by 20% to

Rs 40 lakh for 2023.

- In this, rate list of 135 materials has been released.
    ➢ General expenses incurred by the candidates -
    ➢ Workers' tea - Rs 5
    ➢ Samosa – Rs 12
    ➢ Garland to be worn by the candidate – Rs 20
    ➢ Lunch and Dinner – Rs 60
    ➢ 52-seater bus fare – Rs 10,500 etc.

Increase in the number of urban bodies in Rajasthan -

- There were 213 urban bodies in Rajasthan as of May 2022. Rajasthan formed 39 new urban bodies, increasing their current number to 252.
- The number of municipal corporations in the state has been increased to 10.

Increase in allowances of chairpersons of urban bodies of Rajasthan

- As per the orders of the state government, the monthly allowances of chairpersons of Municipal Corporation, Municipal Council and Municipal Corporations were increased by 20%.

Previous Monthly Allowance Current Monthly Allowance :

- Municipal Corporation Rs 24000 Rs 27000
- Municipal Council Rs 14400 Rs 16560
- Municipality Rs 9000 Rs 10350

26th Lokrang Mahotsav:

- The 11-day folk color festival presentation started at Jawahar Kala Kendra (Jaipur).
- In this, artists from 8 states presented on various genres.

Dholpur - Karauli Tiger Reserve :-

- As a result of the continuous increase in the number of tigers in this tiger reserve, it has come to the third position in the state.
- The clan of tigers here has increased to 10.
- There are now more than 120 tigers and tigresses in the state.

Dearness allowances approved by the State Election Commission:-

- The State Election Commission has approved the proposal of increasing dearness allowance by the state government.
- Now with an increase of 4% the allowance has increased from 42% to 46%.
- This will benefit 8 lakh employees and 4.5 lakh pensioners.

State One Health Action Plan for Control of Zoonotic Diseases -

- A "Multi-Sectoral Consultation" workshop was organized under the joint auspices of the Department of Health, National Center for Disease Control and the US Centers for Disease Control and Prevention.
- Additional Chief Secretary of the Medical and Health Department, Shubhra Singh, said in this workshop organized in Jaipur that national level subject experts and technical supporting institutions will jointly prepare the outline of the country's first 'Rajasthan State One - Health Action Plan'.

Autumn Color Festival -

- It was jointly organized by the Delphic Council of Rajasthan and Zonal Culture Centre, Patiala at Jawahar Kala Kendra.
- This program was for three days.

New Renewable Energy Policy 2023 -

- The new renewable energy policy was implemented in the state on 6 October 2023.
- **Provision** -
1. 65000 MW solar production is targeted by 2030.
2. The target is to produce 15000 MW in wind energy by 2030.
3. The target is to produce 10000 MW in hydro power by 2030.

Platinum Jubilee of Rajasthan High Court

- Established on 29 August 1949
- Successfully organized the 75th Anniversary of Rajasthan High Court at JECC (Sitapura, Jaipur).
- In which Supreme Court Chief Justice D.Y. Chandrachud, Chief Justice of Rajasthan High Court A.G. Christ and other judges of the Supreme Court and the High Court also attended.
- On this occasion, the slogan - 'Satya ki Jai Ho' and the digital gallery of all the judges of Rajasthan High Court till date were launched.

Beginning of Abhaneri festival-

- A two-day Abhaneri Utsav was organized in Abhaneri (Bandikui, Dausa) under the joint auspices of the Tourism Department and Dausa District Administration.
- Harshat Mata Temple is also located here.

Garh Ganesh Automatic Planter-

- The bhoomi pujan of the temple ropeway at Garh Ganesh Temple (Brahmapuri, Jaipur) was performed by Mahant Pradeep Audichya.
- This ropeway is being constructed by Shivam Prime Infra Project Private Limited
- It will be ready in 2 years.

Increase in state service posts by RPSC -

- The Rajasthan State Public Service Commission has increased 76 posts by issuing a notification for the RAS Recruitment Examination 2023.
- Now the number of posts has increased from 905 to 972.

Neither daughter-in-law nor sister, now dowry should be burnt

- A unique campaign was launched by Rajasthan Police against atrocities against women.
- They are trying to make the common people aware through film songs, poetry, punchlines, dialogues etc. on social media.

New pair of lion and lioness arrived in Nahargarh Biological Park

- A new pair of Asiatic lion and lioness was brought from Sakkarbaug Zoo in Gujarat to Nahargarh Biological Park (Jaipur).

Announcement of assembly elections in five states

- The Election Commission of India announced the dates of assembly elections in five states of the country, Rajasthan, Chhattisgarh, Madhya Pradesh, Telangana and Mizoram on October 9, 2023.

Rajasthan:-

- Assembly seat – 200
- Voting - 25 November
- Counting of votes – 3 December

Chhattisgarh:-

- Assembly seat – 90
- Voting – 7th and 17th November
- Counting of votes – 3 December

Mizoram:-

- Assembly seat – 40
- Voting - 7 November
- Counting of votes – 3 December

Telangana:-

- Assembly seat – 119
- Voting - 30 November
- Counting of votes – 3 December

Madhya Pradesh:-

- Assembly seat – 230
- Voting - 17 November
- Counting of votes – 3 December

5 Defence, Science and Technology

Science and Technology

SARAS and SAMPANN Portal

- Office of the Controller General of Communications Accounts showcased its SARAS and SAMPANN portals for telecom license holders and pensioners at the "Indian Mobile Congress" 2023.
- **SARAS Portal** - SARAS is a portal for telecom licensees to report and pay their revenues to the Department of Telecommunications, India (DoT). It provides information on license fee collection, spectrum usage charges, license agreements, DVR submission and other revenue matters. The portal is a web-based application that enables licensees to digitally file, and verify statements, bank guarantee details, etc. to make online payments.
- **SAMPANN Portal** - Through this, a pension amount of Rs 1237 crore is being distributed every month to more than 4 lakh pensioners of the Department of Telecommunications.

Notice issued to X., YouTube and Telegram:-

- The Ministry of Electronics and Information Technology issued a notice to X, YouTube and Telegram warning them to remove child sexual abuse content for violating Rule 3(1)(b) and Rule 4(4) of the IT Rules 2021.
- If they do not take immediate action then I.T. Under Section 79 of the Act, their safe haven will be cancelled and necessary action will be taken.

What is safe harbour in the Act?

- The safe harbour clause in Section 79 of the Information Technology Act 2005 protects an intermediary from being held liable for third party content on its platform – provided the intermediary has followed prescribed 'reasonable rules'.

Inauguration of Robotic Process Automation Lab :-

- MeitY (Ministry of Electronics and Information Technology) has approved Uttar Pradesh's first Robotic Process Automation Lab which is established in NIELIT (National Institute of Electronics and Information Technology), Gorakhpur (U.P.)
- It has been established to bridge the gap between industry and education.
- This laboratory is going to play an important role in transforming the country into a global technology powerhouse.
- **Future Skills Prime Project** – Future Skills Prime is an innovative and evolutionary ecosystem designed to equip learners with the cutting-edge skills required in today's rapidly evolving digital landscape, an industry-backed NASSCOM certification program aligned with National Occupational Standards (NoS) and National Skills Qualification Framework (NSQF) enabling learners to acquire in-demand skills that are highly valued by employers.

Agreement with IBM on Quantum AI and Semiconductor: -

- The objective of the agreement with IBM Group is to accelerate AI-based national strategy, self-reliance in semiconductors and advance the National Quantum Mission.
- For this, IBM signed MoUs with three affiliated organizations of MeitY -

(i) IBM - India, AI:- To develop in artificial intelligence by establishing a world-class national AI innovation platform.

(ii) IBM - Semiconductor Research Centre:- To develop infrastructure as a knowledge partner of India Semiconductor Mission.

(iii) IBM-C-DAC:- To accelerate the progress of the National Quantum Mission by increasing the level of quantum computing technology.
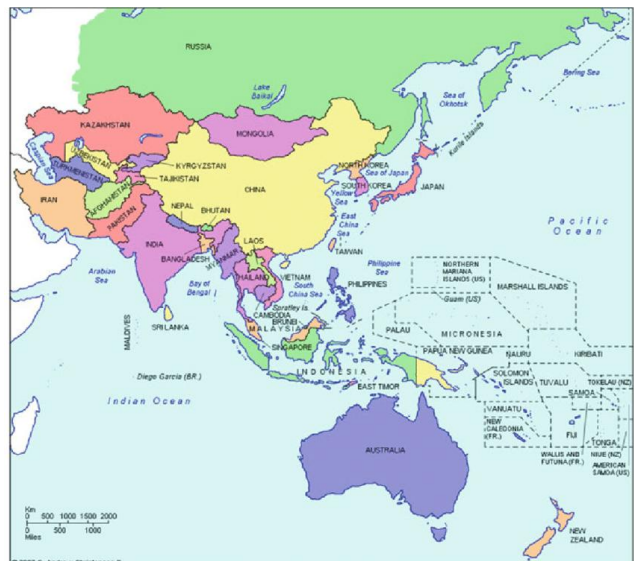
- **India Semiconductor Mission** – India Semiconductor Mission (ISM) is a special and independent business division within Digital India Corporation. It aims to create a vibrant economic and performance ecosystem to enable India to emerge as a global hub of electronics manufacturing and design. ISM has the financial and administrative independence to promote India's long-term plans for the development of semiconductor and display manufacturing units as well as the semiconductor design environment.

- **National Quantum Mission** – The National Quantum Mission is a government initiative to promote quantum research and development in quantum technology. The budget of the mission is Rs. 6003.65 crore and the tenure is eight years. The mission aims to establish India as a global leader in quantum technologies and applications. The Mission also supports national goals like Digital India, Make in India, Skill India, and Sustainable Development.

AI Security Summit 2023 :-

- Its conference will be held on 1-2 November 2023 at Bletchley Park, Birmingham, UK.

- The two-day summit organized by the British government will bring together ministers and representatives of various countries including Britain, America, Australia, Canada, France, Germany, Indonesia, Ireland, Italy, Kenya, Saudi Arabia, Netherlands, South Korea on one platform.

- From India's side, Central Skill Development, Entrepreneurship and Electronics and IT Minister of State Shri Rajiv Shekhar participated.

India will chair the Asia-Pacific Institute for Broadcasting Development (AIBD):-

- India has been elected President of AIBD for the third consecutive time. Earlier, India had been the President for 2018-21 and 2021-23.

- **AIBD**:- It is a specialized regional intergovernmental organization established under the auspices of UNESCO which was established in 1977 and India is among its founding members.

  Objectives of AIBD –

  1. To achieve a vibrant and harmonious electronic media environment in the Asia-Pacific region through policy and resource development.

  2. It also aims to provide a window for regional policymakers to access and draw from information on mass media policy-making and regulations around the world.

  3. To establish inter-regional contacts and cooperation for media and communication development.

  4. Develop regional programming that will reflect the traditional values of the Asia-Pacific region.

R-21/ Matrix- M:-

- A vaccine for the prevention of malaria was developed by the Serum Institute of India and Oxford University, which was accepted and recommended by the World Health Organization.
- The R-2 Matrix – M vaccine focuses on the Plasmodium sporozoite, which is the initial stage of the malaria parasite when it enters the human body. When an Anopheles mosquito carrying the malaria parasite bites a person, it delivers the parasite into the bloodstream, where it undergoes various changes in its life cycle. The complexity of this life cycle has posed challenges to malaria vaccine development over the years.
- The R21 Matrix-M vaccine specifically targets the Plasmodium 'sporozoite', which is the earliest form of the malaria parasite when it enters the human host. During a mosquito bite, a small number (10-100) of sporozoites are injected before the parasite begins to grow. This alone makes sporozoites an ideal target for inoculation.

Efforts made by India to eradicate malaria –

- ✓ **National Strategic Plan for Malaria Elimination (2017)** focused on malaria control and elimination and provided a roadmap to eliminate malaria in 571 out of 678 districts of India by 2022.
- ✓ **Malaria Elimination Research Alliance – India (MERA - India)** – a group of partners working on malaria control (established by the Indian Council of Medical Research ICMR).
- ✓ **National Framework for Malaria Elimination** – The National Framework for Malaria Elimination (NFME – 2016-2030) outlines India's strategy to eliminate the disease by 2030.

DEFENCE

Indian Coast Guard ship 'Samudra Pahari' reaches Indonesia:-
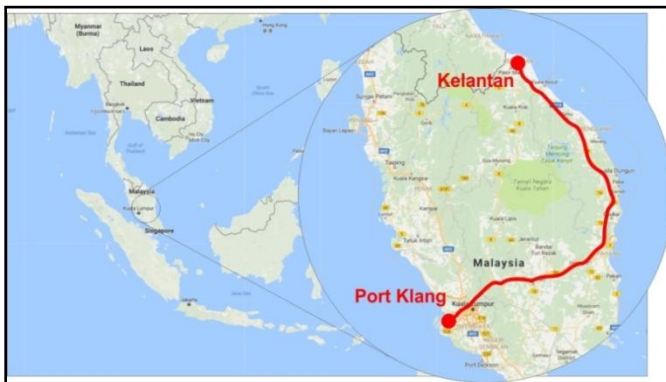
- Indian Pollution Control Ship "Samudra Pahari" arrived at Tujung Priok Port, Indonesia with the Cadets of National Cadets Core as part of the Marine Pollution Response Initiative. Through this, **'Punit Sagar Abhiyan'** will get international reach.
- **Puneet Sagar Campaign –** Itis a nationwide flagship campaign launched by NCC. The campaign aims to clean sea beaches or other water bodies including beaches, rivers and lakes by removing plastic and other garbage.
- It was launched initially for one month on December 1, 2021. The campaign also seeks to raise awareness among the local population about the importance of keeping beaches and river banks clean.

1st Training Squadron at 'Port Klang', Malaysia:-

- Indian Navy ships INS Tir, INS Sujata, ICGS Saathi arrived at Port Klang (Malaysia) for training activities and training exchanges in South East Asia.
- It included exercises like training, community interaction, cross deck visits etc. with the Royal Malaysian Navy.
- Military exercise with Malaysia - Ex - Harimau Shakti

SAMPRITI XI :-

- There is an annual joint military exercise between India and Bangladesh which took place in Umrai (Meghalaya).
- It was started in Jorhat (Assam) in 2009, currently its 11th edition is completed.
- Military exercise with Bangladesh – Ex - Bongosagar

1st Training Squadron on visit to Changi, Singapore:-

- The first training squadron INS Tir, INS Sujata, INS Sudarshini and ICGS Sarathi entered Changi Port (Singapore) to train the youth of the Indian Navy and build the Maitri Setu.
- Military exercises with Singapore – Bold Kurukshetra, SITMEX

New symbol of Indian Air Force:-

- The Indian Air Service (IAF) adopted its new emblem on 8 October 2023.
- The new insignia of the IAF features the national emblem Ashoka insignia at the top

of the crust and 'Satyamev Jayate' written in Devanagari below it. Below the Ashoka insignia is a Himalayan eagle with outstretched wings surrounded by a green ring, on which Indian 'Bhartiya Vayu Sena' is written.

- Below the Himalayan Eagle is the motto 'Nabh: Sparsham Deeptam', taken from the 24th verse of the 11th chapter of the Bhagavad Gita, which means "touches the sky with splendor".

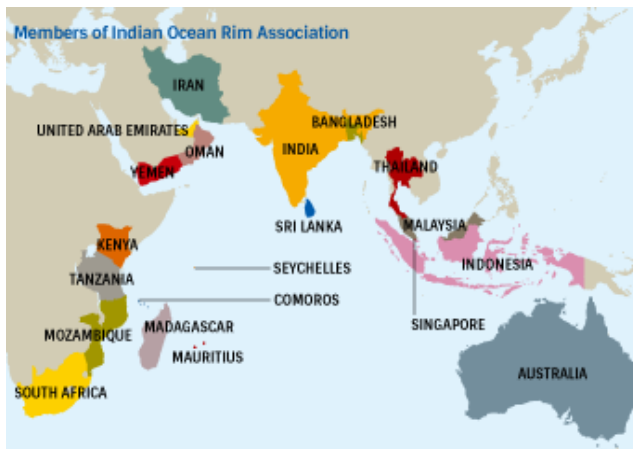
Annual Joint HADR Exercise (Cyclone) 2023 :-

- Started in 2015, the three-day exercise is a multi-agency effort involving participation of the three services, paramilitary forces, disaster response organizations, NGOs, academic institutions, and international organizations.
- The exercise is being conducted by the Indian Navy from October 9 to October 11 in Goa.
- Central Water Commission, FICCI, DRDO, three Indian armies and other organizations participated in it.
- Objective – Humanitarian Assistance and Disaster Relief (HADR).

INS Sagardhwani:-

- This is DRDO's Oceanographic Research Ship which left Southern Naval Command Kochi for Sagar Maitri Mission-4 for 2 months.
- Its objective is to establish long-term scientific partnerships with Indian Ocean Rim countries.

Sagar Maitri Mission –

- It is a unique initiative of DRDO with the overarching objective of SAGAR (Safety and Growth for all in the Region), aimed at close cooperation in socio-economic aspects as well as to promote greater scientific interaction in marine research across the Indian Ocean.
- The objective of this program is to establish long-term scientific cooperation with eight countries of the IOR (Oman, Maldives, Sri Lanka, Thailand, Malaysia, Singapore, Indonesia and Myanmar) in the field of 'Ocean Research and Development' and data collection with focus on the Andaman Sea.
- **Indian Ocean Rim Association (IORA)** - This is an international organization that includes 23 countries bordering the Indian Ocean. The organization was established in 1997 to promote regional cooperation and sustainable development within the Indian Ocean region. IORA is a trilateral forum that brings together representatives from government, business, and academia to promote cooperation and closer interaction between them. The organization is based on the principles of strengthening economic cooperation, particularly trade facilitation and investment promotion, as well as the social development of the region. The headquarters of IORA is located in Ebene, Mauritius.

Members of Indian Ocean Rim Association

Coastal Security Exercise – East Coast Sagar Kavach 2023 :-

- Exercise East Coast Sagar Kavach commenced by the Indian Navy with the support of approximately 2500 personnel from all security agencies in Andhra Pradesh, Tamil Nadu and Puducherry.
- Its purpose is to provide a security system in case of maritime danger.
- The effectiveness and strength of the system have to be assessed.

INS Sumedha :-

- INS Sumedha has been deployed in Lagos, Nigeria in the Gulf of Guinea to strengthen India-Nigeria diplomatic relations and ensure the security of maritime trade.
- This is the second deployment for piracy control in the Gulf of Guinea after INS Tarkash.

INS Beas :-

- The Indian Defence Ministry and Cochin Shipyard Limited have signed a contract to upgrade the steam-powered Brahmaputra class frigates to diesel-powered ones. It is proposed to be inducted into the Indian Navy by 2026.
- This contract is an important step towards 'Atmanirbhar Bharat' by the Make in India initiative.

Contract for construction of the first Indian Coast Guard training ship:-

- A contract for construction of a Coast Guard training ship at a cost of Rs 310 crore was signed by the Ministry of Defense and Mazagon Dock and Shipbuilder Limited (Mumbai) under 'Atmanirbhar Bharat'. This will help in providing the first dedicated training with integrated helicopter capability and ensuring advanced vigilance system.

'Imphal Destroyer' included in Indian Navy :-

- "12706 Imphal" is the third stealth destroyer of the 156 class Guided Missile Destroyer

launched by Mazagon Dock Shipbuilders Limited under Project 15B. It is armed with BrahMos and Barak-8 missiles.

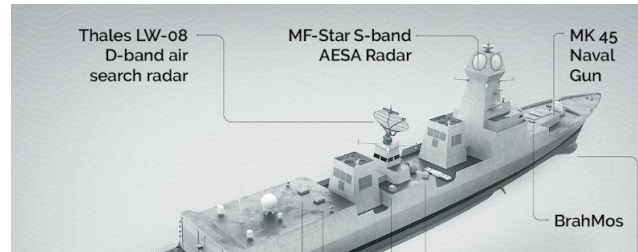- It is also equipped with anti-submarine weapons and sensors.

Project 15B–

- Under this project, four different destroyer warships are to be built and commissioned by India.
- The first warship, INS Visakhapatnam, was launched in April 2015 after laying the foundation stone in October 2013. Visakhapatnam completed her river trials in December 2020 and commenced sea trials in January 2021 before being handed over to the Indian Navy on 28 October 2021. On November 21, 2021, it was deployed by the Western Naval Command of the Indian Navy in Mumbai.
- Mormugao first began operations in September of 2016. It went for sea trials on December 14, 2021, on the anniversary celebrations of Goa Liberation Day. Mormugao was unveiled on December 18, 2022.
- Imphal was commissioned in April 2019 and is the third stealth destroyer.
- Surat is the last ship of this class and will be launched in May 2022.

'Guided Missile Destroyer' - It is a type of destroyer equipped with guided missiles as its primary weapon. The primary purpose of these destroyers is to provide anti-aircraft battle screening for the fleet. They are also capable of conducting anti-surface operations with surface-to-surface missiles and naval guns, and anti-submarine warfare with torpedoes and helicopters.

Barak-8 - Barak is a Hebrew word which means lightning. Barak-8 is a naval air defense missile system jointly developed by India and Israel. Currently this air defense system is used in India, Israel and Azerbaijan.

BrahMos – It is a supersonic cruise missile which can be launched from land, sea and air. It is a joint venture between the Indian Defense Research and Development Organization (DRDO) and the NPO Mashinostroyenia of the Russian Federation. This missile has been named after the Brahmaputra rivers of India and Moskva rivers of Russia.

Project Udbhav [UDBHAV] :-

- It is an initiative launched by the Indian Defense Minister to integrate ancient Indian strategic knowledge with modern military pedagogy. The project, in collaboration with United Service Institution (USI), is based on the philosophy and culture of India. To create an indigenous strategic vocabulary. The project will explore less-explored, strategic thinking, governance, art and warfare from the classical texts and enrich military training curricula such as Chanakya's Arthashastra and Thirukkural. Its focus will be on the study of ancient Indian texts and historical military campaigns and leaders to educate military leaders and provide a body of knowledge for scholars and defense personnel to connect to contemporary military practices.

First Military Heritage Festival :-

- To inspire the youth of the country towards defense sector and to showcase India's rich military power, the first edition of Military Heritage Mahotsav was inaugurated by Defense Minister Shri Rajnath Singh in New Delhi.
- Project – UDBHAV (Udbhav) was launched in this program.

Harimau Shakti Abhyas- 2023

- **Harimau Shakti Abhyas- 2023**bilateral exercise, will run from 23 October to 5 November in Umroi Cantonment (New Delhi).
- This exercise is going on between the 5th Royal Battalion of Malaysia and the battalion of Bharat Rajput Regiment.
- It aims to increase the level of India-Malaysia defense cooperation.

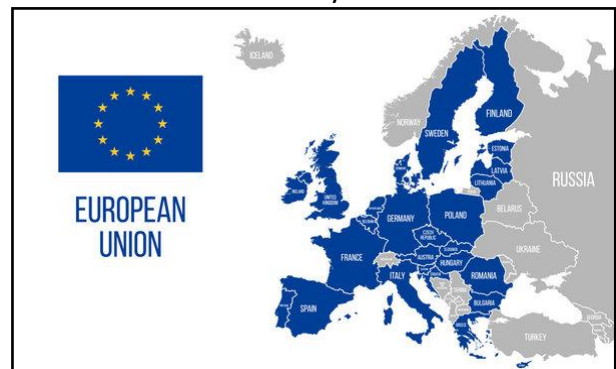## 4th Goa Maritime Conference (GMC)- 2023 :-

- The 4th GMC is being conducted by the Indian Navy at the National War College, Goa.
- The theme of the 4th edition of the 2023 series of this biennial event, started in 2017, is "Maritime Security in the Indian Ocean Region: Translating Common Maritime Priorities into a Collaborative Mitigation Framework".
- Its chief guest is Indian Defense Minister Rajnath Singh and it includes representatives from Bangladesh, Comoros, Indonesia, Madagascar, Malaysia, Mauritius, Myanmar, Seychelles, Singapore, Sri Lanka and Thailand etc. are included.

First joint naval exercise between European Union and India :-

- The first joint naval exercise between India and the EU was held in the Gulf of Guinea on 24 Oct 2023.
- The outline of this exercise was prepared in the third meeting of the EU-IND Maritime Security Dialogue held in Brussels on 5 Oct 2023.
- **Why is the Gulf of Guinea important?** –

    It is a large gulf located in the north-eastern part of the tropical Atlantic Ocean, off the west coast of Africa. This gulf extends from Cape Lopez near the equator to Cape Palmas at 7 degrees west longitude. This area is important for many reasons.

- ✓ **Oil Reserves** – The Gulf of Guinea is rich in oil reserves, which are an important resource for the countries in the region.
- ✓ **Maritime trade** – The Gulf is a major shipping route for goods and commodities including oil, timber and minerals.
- ✓ **Fishing** – The bay is home to a variety of fish species, which support the local fishing industry.
- ✓ **Biodiversity** – The Bay is home to a wide variety of marine life including sea turtles, dolphins and whales.
- These factors make the Gulf of Guinea an important region for the economies of the countries bordering it, as well as for global trade and biodiversity.

LSAM-17 :-

- Indian Navy launched LSAM-17 on October 27, 2023, its third Ammunition cum Torpedo cum Missile (ACTCM) Barge. It was built by M/s Suryadipta Projects Pvt. Ltd., Thane, an MSME in line with 'Atmanirbhar Bharat'. The barge is equipped with all major and supporting equipment, and systems procured from indigenous manufacturers, making it a proud flag bearer of the 'Make in India' initiative of the Ministry of Defence. The availability of ACTCM barges will accelerate the operational commitments of the Indian Navy by facilitating embarkation and disembarkation of cargo, and ammunition to Indian Naval ships at the wharves and outlying ports.

- **What is a Barge?**

A barge is a type of flat-bottomed ship used to transport goods on inland waterways. Barges are not independent ships or boats, but rather floating vessels, usually towed by other vessels. Barges can be seen on rivers, canals, bays, or estuaries.

Mahabali:-

- It is a 25 Tonn bollard pull tug, which was recently commissioned by the Indian Navy. It was constructed by Shoft Shipyard, located in Bharuch, Gujarat, as per the classification rules prescribed by the Indian Register of Shipping (IRS). The tug is equipped to enhance firefighting capabilities both aboard ships as well as at anchorage and is also equipped for limited search and rescue operations. It will play a vital role in assisting naval ships and submarines during berthing and unberthing operations as well as navigating through confined waters.

- The most commonly used measure of bollard pull ship-assisted tug performance is the propeller in which the propeller is optimized for maximum thrust near zero speed.

LAUNCH OF 25T BOLLARD PULL TUG 'MAHABALI'

-

7th KAZIND Exercise 2023 :-

- This is a joint military exercise between India and Kazakhstan.

- It was organized on 11 November in Otar, Kazakhstan.

- It started in 2016 under the name of 'Prabal Dostyk' exercise but the name of it was changed to the KAZIND exercise in 2018 and it was made a bi-service exercise by involving the Air Force along with the Navy.

6 Index and Reports

Global Energy Outlook Report - 2022 :-

- Global Energy Outlook Report was released by the International Energy Agency (IEA).

According to the report :-

(i) Global emissions (H_2O (water vapor), CH_4 (methane), CO_2, NO_2, HF_6) will peak in 2025.

(ii) Energy requirement:- The increasing demand for energy services till the year 2040 is dependent on the economic growth which will be slightly less till 2030 as compared to the previous report but will be on average 2.8% per year till 2050.

(iii) Net Zero Emissions by 2050: - To achieve 1.5 °C temperature rise rate stabilization in global average temperature.

(iv) Global energy demand will be met by approximately 1% annual renewable energy by 2030 under the Stated Policy Scenarios (STEPS).

(v) Effect of Russia-Ukraine war:- This war created an environment of global instability regarding natural gas, in which the global energy crisis is proving to be a challenge for a stable future.

- International Energy Agency (IEA):- Established in 1974 as an inter-governmental organization in Paris (France).
- India became its associate member in 2017 and joined as a full member in 2021.

India Artificial Intelligence (India AI) Report-(MEITY)

- Electronics and Information Technology presented the first version of India AI report.
- In this, under the roadmap of artificial intelligence, efforts will be made to make India a digital economy of 1 trillion dollars.

- India AI will also promote other areas such as the 'India Database Programme' and the 'India Compute Platform' while catalyzing the start-up and entrepreneurship ecosystem.

International Migration Outlook Report 2023 :-

- International Migration Outlook Report 2023 was released by the Organization for Economic Co-operation and Development (OECD).

According to the report :-

- After Covid, India ranks first in migration into OECD countries by 2022.
- India has been at the top for both consecutive years with 4.1 lakh migrants in 2021 and 2022. China came in second place with 2.3 lakh new migrants and Romania with 2 lakh new migrants.
- According to the report, in 2023, about 1.79 crore people of India left their motherland and settled abroad in search of work.
- Gulf countries are at the top in migration of Indians every year and America is at the second position.
- Maximum 34.71 lakh Indian expatriates reside in UAE and 27.23 lakh Indian expatriates reside in America.

India's position in international remittances:-

- The money received by the country from abroad comes under the category of international remittances.
- In 2020, India is at the top by receiving 83.15 billion dollars. After this, China ($60 billion) and Mexico ($43 billion) are in second and third position respectively.
- In India the highest remittance was received

from the United States of America and Kerala state received the highest remittance from abroad.

Global Hunger Index 2023 :-

- This report is released every year by Concern Worldwide and European NGOs named Welthungerhilfe to bring to light the situation of hunger in the countries of the world.
- India ranked 121st among 125 countries in the 2023 report. India's score was 28.7 (severe).
- India's situation is not better than its neighboring countries.
- Pakistan - 102
- Bangladesh - 81
- Nepal - 69
- Sri Lanka - 60
- In 2022, India was ranked '107th' among 121 countries.
- India's position has seen a decline for three consecutive years.

India rejected the report:-

India believes that this report is wrong and misleading which does not reflect the real situation. It does not represent the entire population because three of its four indicators are related to children's health and the fourth indicator is based on opinion polls. On this basis, India says that this is an attempt to tarnish its image.

Facts -

- Rate of wasting among children in India – 18.7%
- Undernutrition rate – 16.6%
- Mortality rate of children under 5 years of age – 3.1%
- Anemia rate among women aged 15-24 – 58.1%

Hurun Global Rich List 2023:-

- The top global billionaire on the Hurun Global Rich List is Elon Musk ($2005B USD). After them, there is Jeff Bezos, Bernard Arnault, Bill Gates etc.
- Globally, Mukesh Ambani (103B USD) ranked 9th.

Speed Test Global Index :-

- The report was released by 'Ookla', an organization providing information on broadband internet speed.
- India achieved 47th rank.
- India's rank in 2022 was 119th, this time India has improved by 47 places.
- The download speed of the country increased from 13.87 Mbps in September 2022 to 50.21 Mbps in August 2023.
- India's rank is much better than the rank of neighboring countries. It is also ahead of G-20 countries like Mexico (90), Turkey (68), Britain (61), Japan (58), Brazil (50) and South Africa (48).

7. Places in News

Bissau (Jhunjhunu) :-

- This area is world famous because of its unique silent Ramlila.
- Ramlila was staged here from 15th October.
- It was started about 200 years ago.

Pokaran Field Firing Range:-

- This strategically important place located in Jaisalmer is currently in the news due to it being in the grip of a massive fire.
- This fire was so severe that all the vegetation in the area of 8-10 km was burnt to ashes.

Jaisalmer Fort:-

- This fort is better known as a 'Living Fort' and is situated in Jaisalmer.
- More than 700 families live here and from tourism point of view it is rich and especially worth visiting during winter tourism.

Dwarkadhish Temple (Jhalrapatan, Jhalawar):-

- Recently a woman priest, Mamta Sharma, was appointed by the Devasthan Department to serve Thakur ji in the Dwarkadhish Temple (Jhalrapatan, Jhalawar).

Sangameshwar Mahadev Temple (Dungarpur) :-

- Situated at the confluence of Som-Mahi-Jakham river, this temple remains submerged in water for 8 months.
- Hence worship here is done through a boat.
- This time due to excessive rainfall and opening of gates of Mahi Dam, the water level has increased due to which it has become submerged again.

Udaipur City Palace:-

- This palace, signifying the merger of Mewar state into the Indian Union, is world famous for its grandeur.
- It was here that the first Prime Minister, Jawahar Lal Nehru, administered the oath to the first Maharaja of Mewar, Maharana Bhupal Singh.

Sanwaliya Seth Temple:-

- This famous temple of Chittorgarh, which is the famous Krishna Dham, is in the news due to the arrival of the Prime Minister and the virtual inauguration of various projects.

Vibhishan Temple (Kaithoon, Kota) -

- The only temple in the country dedicated to Vibhishan, devotee of Ram and Ravana's brother, who played an important role in the victory of Lanka, is in Kaithoon (Kota), which is 200 years old.

Sundelav Pond (Jalore):-

- The historic pond of Jalore, which was cleaned under the Amritam Jalam campaign, is bursting with beauty due to the monsoon rains and cyclone Biparjoy.

Khamnaur (Rajsamand) :-

- The royal gardens of Khamnaur are not only famous in the country for rose perfume but also have their identity in medicinal use and making beverages.

Tripura Sundari Mata Temple :-

- Located in Banswara district, this temple houses a grand 18-armed statue of Tripura Sundari Mata.
- The Mother Goddess is seated here on the support of a lotus lion and a peacock.

Annapurna Mata Temple:-

- There is a 500 years old Mata temple located in Bhavani Mandi (Jhalawar).
- At present, 321 stairs are being constructed

by the villagers for easy access to the temple.

- 'Chamunda Mata Temple (Ajmer)
- Chamunda Mata, situated in this temple established 1160 years ago, has a legend of being the family goddess of Emperor Prithviraj Chauhan.
- It is believed that Prithviraj used to come here before going to any war.

Popular Places

South Lhonak Lake

- South Lhonak Lake is located in the north of Sikkim. It is situated approximately 5,200 meters above sea level. Recently, the bursting of glacier in the lake led to flood situation. Due to its water entering Teesta river, Mangan, Gangtok, Pakyong and Namchi districts of the state were affected. Chungthang hydro-dam built on the Teesta

river in Sikkim also collapsed due to floods.

Dhordo

- The United Nations World Tourism Organization (UNWTO) has awarded the 'Best Tourism Village' award to village Dhordo in Kutch district of Gujarat. The award was given at a ceremony held in Samarkand, Uzbekistan on October 19, 2023.

Satoli

- Satoli village is located near Mukteshwar in the Nainital district of Uttarakhand. To commemorate 75 years of friendship between India and Switzerland, a three-day program named 'Swiss Himalayan Bounty' was organized here in October 2023. It is noteworthy that on August 14, 1948, the Friendship Treaty was signed between India and Switzerland.

8. Person in News

Lal Bahadur Shastri

- The birth anniversary of former Prime Minister of India Late Lal Bahadur Shastri was celebrated on October 2, 2023. He served as the second Prime Minister of the country from 1964 to 1966. During his tenure, the country fought the war with Pakistan, the food crisis in the country, drought, etc. with great skill. He gave the slogan 'Jai Jawan, Jai Kisan'.
- **Death**: Shastri ji died on January 10, 1966, in Tashkent, Nayat (now Uzbekistan) while negotiating the Tashkent Agreement with Pakistan President Muhammad Ayub Khan.
- **Bharat Ratna**:- Shastri ji was awarded Bharat Ratna posthumously in the year 1966.

Mahatma Gandhi

- The 154th birth anniversary of Mahatma Gandhi (Mohandas Karamchand Gandhi) was celebrated on October 2, 2023. Gandhiji was born on October 2, 1869 in Porbandar,

Gujarat. His father's name was Karamchand Gandhi and mother's name was Putlibai. Gandhiji returned to India in 1915 after practicing law in South Africa. In 1921 he actively joined the Congress.
- Gandhiji started his first Satyagraha in 1917 from Champaran, Bihar. Here the British used to exploit people in indigo plantations.
- Gandhiji's autobiography 'The Story of My Experiments with Truth' was published in 1927.
- 1930 - Salt Satyagraha
- August 8, 1942 - Quit India Movement

Jaiprakash Narayan

- The birth anniversary of Loknayak Jayaprakash Narayan was celebrated on 11 October. He was born on 11 October 1902 in Sitab Diara, Bihar. In the year 1929, J.P. joined the Indian National Congress. Influenced by Vinoba Bhave, he dedicated his life to the Bhoodan Yagya movement. He

protested against the Indira Gandhi regime in response to the violation of electoral law. J.P. carried forward the 'Total Revolution' program in the year 1974. Jayaprakash Narayan's objective was to bring social change in accordance with the ideals of Sarvodaya. He died on October 8, 1979. In the year 1999, he was posthumously awarded Bharat Ratna.

Nanaji Deshmukh

- Nanaji Deshmukh's birth anniversary was celebrated on 11 October. Born on October 11, 1916 in Hingoli district of Maharashtra, Nanaji Deshmukh actively participated in the Bhoodan movement of Acharya Vinoba Bhave. He established India's first rural university 'Chitrakoot Gramodaya Vishwavidyalaya' in Chitrakoot. He was nominated as a Rajya Sabha member in the year 1999 and in 1999, he was awarded the Padma Vibhushan. Nanaji Deshmukh died on 27 February 2010. In the year 2019, he was posthumously awarded Bharat Ratna.

9. Sports

Asian Games- 2023

- The 19th Asian Games 2022 was held from September 23 to October 8, 2023 at the Hangzhou Olympic Sports Center Stadium (Big Lotus), China. India finished fourth in the medal tally with a total of 107 medals (28 gold, 38 silver and 41 bronze). China stood first with a total of 383 medals (201 gold, 111 silver and 71 bronze) and Japan stood second with a total of 189 medals. India participated in the competition with 655 athletes.

Some basic facts:-

- 45 countries participated in the competition.
- The motto of the games was 'Dil Se Dil / Future'
- Hockey athlete P R Sreejesh and female boxer Lovlina Borgohainwere were the flag bearers of India.
- The 20th Asian Games will be organized in Aichi-Nogaya, Japan in the year 2027.
- This time two new trends, e-sports and breakdancing, were added to the Asian Games.
- Asian Railways was started in New Delhi in the year 1951. It is organized once every four years. The symbol of these games is interconnected rings with a rising sun.

5 new events in the Olympics

- The International Olympic Committee has approved the addition of five new venues for the 2028 Olympic Games in Los Angeles. The schedule for LA28 will include Cricket (T20),
- Baseball/Softball, Flag Football, Lacrosse and Squash.

37th National Tournament in Goa

- Prime Minister Narendra Modi officially inaugurated the 37th National Railways at the Pandit Jawaharlal Nehru Stadium in Margao, Goa in October 2023.

Para Asian Games 2023

- Indian para-athletes won 111 medals (29 gold, 31 silver and 51 bronze) at the Para Asian Games held from October 22-28, 2023 in Hangzhou, China. India finished 5th in the medal tally behind China, Iran, Japan and Republic of Korea.
- 44 countries took part in the competition.
- The motto of the games was 'Hearts meet, dreams shine'

Rugby World Cup

- South Africa has won the Rugby World Cup title for the fourth time in a row. South Africa defeated New Zealand 12-11 in the final match played in St. Denis, France on October 28, 2023. At the same time, England won the bronze medal by defeating Argentina.

Atal Bihari Vajpayee Disabled Sports Training Center

- Prime Minister Narendra Modi inaugurated the country's first disabled stadium training center 'Atal Bihari Vajpayee Disabled Sports Training Center' in Gwalior on October 2, 2023.

10. Awards/Books/Appointmen

Nobel Prize 2023

Peace:-

- The Royal Swedish Academy's prestigious Nobel Peace Prize, 2023 has been awarded to Iranian social activist Nargis Mohammadi. She has been given this award for her struggle against oppression of women, human rights and freedom. It may be noted that this award for the year 2022 was given to Ales Bialiatsky of Belarus, Russian human rights organization 'Memorial' and the Ukrainian human rights organization 'Center for Civil Liberties'.
- **Prize money:**- 10 million Swedish krona

Medical:-

- The Nobel Prize in Medicine was announced on October 2, 2023. This award has been given to Hungarian-American scientist Catalin Kariko and American scientist Drew Weissman for their work on nucleoside base modification of messenger ribonucleic acid. It is noteworthy that this award for the year 2022 was given to Svante Paabo of Sweden.
  - **Prize money**:- 10 million Swedish krona

Physics:-

- The Nobel Prize for the year 2023 in the field of Physics was announced on October 3, 2023. The award has been given to three scientists - Pierre Agostini (USA), Ferenc Krausz (Germany) and Anne L'Huillier (Sweden). They have contributed to the discovery of an experimental method for generating attosecond pulses of light for the study of electron mobility.
- **Prize money:**- 10 million Swedish krona

Chemistry:-

- The Royal Swedish Academy of Sciences announced the Nobel Prize in Chemistry on October 4, 2023. This award has been given to Moungi G Bawendi (USA), Lewis E Bruce (Denmark) and Alexey Ekimov (USA). They have been given this award for his unprecedented invention and synthesis of quantum dots.
- **Prize money**:- 10 million Swedish krona

Literature:-

- The Nobel Prize in Literature 2023 has been awarded to Norwegian writer and playwright Jon Fosse by the Swedish Academy on October 5, 2023. He has been given this award for his innovative plays and prose that express human emotions in simple words. Last year this award was given to French writer Anne Arnoux.
- Prize money:- 10 million Swedish krona

Economics :-

- On October 9, 2023, The Royal Swedish Academy of Sciences announced the award of the Nobel Prize in Economics to Harvard University Professor Claudia Goldin. She has been given this award for research related to improving the understanding of discrimination between men and women in the labor market. She is the third woman to be honored with this award. For the year 2022, this award was given jointly to America's Ben S. Bernanke, Douglas W. Diamond and Philip H. Dybvig.
- **Prize money:**- 10 million Swedish krona

National Award

Saraswati Samman

- Tamil writer Sivashankari has been honored with Saraswati Samman-2022. This honor has been given to her for the memoir 'Surya Vamsam'.
- About the award - This award is given every year by the KK Birla Foundation for literary works published in the last 10 years by Indian writers of 22 languages included in the 8th Schedule of the Indian Constitution. Under this, Rs 15 lakh, a plaque and a citation are given.

Global Leadership Award

- Reliance Foundation founder and chairperson Nita Ambani was honored with the 'Global Leadership Award' on October 29, 2023, by the US-India Strategic Partnership Forum. Ambani has been given this award for philanthropy and corporate social responsibility.

Appointments

Arindam Bagchi

- External Affairs Ministry spokesperson Arindam Bagchi has been appointed India's Permanent Representative to the United Nations and other international organizations in Geneva on October 16, 2023. He has replaced Indramani Pandey on this post.

Justice Siddharth Mridul

- The Union Ministry of Law and Justice has appointed Delhi High Court judge Justice Siddharth Mridul as the Chief Justice of Manipur High Court.

Indramani Pandey

- Senior diplomat Indramani Pandey has been appointed as the Secretary General of 'Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Corporation' (BIMSTEC). He is the first Indian to be appointed to this post. He will replace Bhutan's Tenzin Lekphell.
- The Bay of Bengal Initiative for Multi Sectoral Technical and Economic Corporation is a regional organization of 7 countries which includes five countries of South Asia, India, Bangladesh, Bhutan, Nepal, Sri Lanka and two countries of Southeast Asia, Myanmar and Thailand. It was formed on 6 June 1997. The secretariat of BIMSTEC is located in Dhaka.

Books

- Understanding the Gender Gap: An Economic History of American Women:- Claudia Goldin
- Career and Family: Women's Century – Long Journey Toward Equity:- Claudia Goldin
- Surya Vamsam:- Sivashankari
- An Indian Success Story: Agriculture and Co-operative:- M. S. Gill
- Roman Stories:- Jhumpa Lahiri
- Memoir of the Maverick - Mani Shankar Iyer

11. Demises

M S Swaminathan

- Mankombu Sambasivan Swaminathan (98), the 'Father of the Green Revolution', passed away in October 2023. In India, which was facing food crisis in the 1960s and 1970s, Swaminathan brought a revolution by developing new varieties of wheat and rice.

- **Awards**:- Swaminathan was awarded Padma Shri (1967), Padma Bhushan (1972) and Padma Vibhushan (1989), Ramon Magsaysay Award (1971) and Albert Einstein World Science Award (1986) etc.

Lewis Gluck

- Nobel laureate and American poet Louise Gluck (80) passed away on October 23, 2023. He was awarded the Nobel for Literature in the year 2020.

Martti Ahtisaari

- Former President of Finland Martti Ahtisaari (86) died on 16 October 2023. He was the President of Finland from 1994 to 2000. He was awarded the Nobel Peace Prize in 2008 for resolving international conflicts.

Bishan Singh Bedi

- Former Indian cricket team captain and spinner Bishan Singh Bedi (77) passed away on October 23, 2023 in New Delhi. He played a total of 77 matches for India, in which he took 273 wickets.

M. S. Gill

- Former Chief Election Commissioner and Congress leader Manohar Singh Gill (87) passed away on October 15, 2023. Padma Vibhushan awardee Gill served as the Chief Election Commissioner of India from 1996 to 2001.
- He was also a Rajya Sabha member from 2004 to 2016. He wrote the book 'An Indian Success Story: Agriculture and Co-operative'.

12. Important Dates/Day

S.No.	Date	day	theme
1.	1 October	• International Day of Older Persons	Resilience of older people in a changing world
2.	2 October	• Gandhi Jayanti • Lal Bahadur Shastri Jayanti • international day of inonviolence	
3.	5th October	• world teachers day	
4.	8th October	• Indian Air Force Day	
5.	10th October	• world mental health day	Mental health is a universal human right.
6.	11 October	• international girl's day	Investing in girls' rights: Our leadership, our well-being.
7.	16th October	• world Food Day	Water is life, water is food, leave no one behind.
8.	24th October	• united nations day • world polio day	The frontlines of climate action
9.	24th October	• world polio day	
10.	31st October	• national unity day • Sardar Vallabhbhai Patel Jayanti	148th birth anniversary of Sardar Patel.

Key Weeks (October 2023)

Sl.No.	Date	Week
1.	1-7 October	world wildlife week
2.	4-10 October	world space week
3.	9-13 October	world postal week
4.	30 October to 5 November	vigilance awareness week

GIST - YOJANA & KURUKSHETRA

Earth's journey to understand her Sun:-

- An indigenous Sun Mission Aditya L1 was launched by ISRO for systematic study of the Sun. The satellite is to be placed at Lagrange point L1 which is 1.5 million km from the Earth.

Sun:-

- The Sun is the nearest star and the largest body in our solar system. Its estimated age is 4.5 billion years and is 150 million kilometers far from the Earth. It is made of hydrogen and helium gases.

About Aditya L1 :-

- This is the first Indian solar mission to study the Sun. The vehicle of this mission will be placed in a halo orbit around the Lagrange point L1 located between the Earth and the Sun.
- It has 7 payloads, out of which 4 payloads directly observe the Sun and the remaining 3 payloads study the particles and fields at the Lagrange point L1.
- Its objective is to understand the problems related to coronal heating, coronal mass injection, pre-flare and flare activities and their characteristics and international weather dynamics.

Lagrange point:-

- Those points which are located between any two large bodies having gravitational pull, where the gravitational force applied on placing an object is equal to its centripetal force.
- There are 5 Lagrange points between the Sun and the Earth – L1, L2, L3, L4 and L5

Why study the Sun from space?

- The Earth's atmosphere provides a protective shield against the radiations emitted by the Sun due to which the instruments present on the Earth are not able to accurately observe and study the Sun's activities.

- Therefore, to study the radiations and various chemical changes emitted by the Sun, it was considered the best step to study the Sun by coming outside the Earth's atmosphere.

Challenges of the mission -

- In this mission, due to the fixed capacity of payload, only limited equipment can be sent with the vehicle.
- Studying the sun's polar regions is also a challenge.

Basic facilities related to space:-

- Space related activities in India started with the establishment of "National Space Research Committee (INCOSPAR)" in 1962 and in the same year the Thumba Equatorial Rocket Launch Center (TERLS) was established in Thiruvananthapuram.

ISRO :-

- The Indian Space Research Organization (ISRO) was established on 15 August 1969 with the aim of harnessing the benefits of outer space for the welfare of India and humanity as a whole.

Space Department:-

- In June 1972, Space Commission and Department of Space were formed and in September 1972, ISRO was brought under the Department of Space.
- The headquarters of the Department of Earth and Space is located in Antriksh Bhawan, Bengaluru.

Vikram Sarabhai Space Centre (VSSC):-

- Located in Thiruvananthapuram, this center works to design and develop launch vehicle technology.

The following aerospace systems have been developed by it-

- Polar Satellite Launch Vehicle (PSLV), Geosynchronous Launch Vehicle (GSLV),

Launch Vehicle Mark-3 (LVM - 3), Rohini Sounding Rocket, Small Satellite Launch Vehicle (SSLV), Reusable Launch Vehicle (RLV), Test Vehicle Project (TVP), Air Breathing Propulsion and Gaganyaan etc.

U R Rao Satellite Center:-

- This institute is based in Bangalore which designs and develops communication, navigation, remote sensing systems, scientific and small satellite missions.

Satish Dhawan Space Centre (SDSC):-

- This organization, called 'India's Space Coast', provides basic infrastructure facilities to the **Indian space program so that launches can be accurate and accessible.**

Liquid Propulsion System Center (LPSC) :-

- This institute is responsible for designing, developing and delivering propulsion systems like cryogenic, semi-cryogenic, electric propulsion etc. for space missiles.

Space Applications Center (SAC):-

- This center located in Ahmedabad is the major research and development center of ISRO.
- It mainly meets the communication, navigation and remote sensing needs of the country.
- Human Space Flight Center:-
- This institution was formed in 2019 for human space flight activities.
- The Center conducts multidisciplinary research and development activities in new areas of human science and technology in accordance with high standards of reliability and human safety.
- It is currently operating at ISRO Headquarters Complex (Bangalore).

National Remote Sensing Center (VI):-

- This center works in receiving satellite data, creating data products, aerial remote sensing data acquisition, assistance in disaster management, geospatial services for good governance, **setting** up ground stations for capacity building of students, etc.

ISRO Propulsion Complex (ISRO)

- Mahendragiri Location: This center is responsible for assembly, integration, testing etc. of liquid propulsion systems for launch vehicles. It is also responsible for the qualification, inspection and acceptance of liquid engines, cryogenic engines, spacecraft engines and launchers.
- ISRO Telemetry, Tracking and Command Network (ISRO Telemetry, Tracking and Command Network)
- This organization provides telemetry, tracking, and command and mission control for ISRO's major launch vehicles, Electro-Optics Systems Laboratory (ELS) and interplanetary spacecraft missions.
- Other work- Development of radar system, tele-medicine, tele-education Help in work etc.

Indian Institute of Remote Sensing (IIRA):-

- Located in Dehradun, this institute was established in 1966 as the Indian Photo Interpretation Institute. Its objective is to build capacity in remote sensing and geoinformatics and their applications through education and training programs at the postgraduate level.

Indian Institute of Space Science and Technology (ISST):-

- It is Asia's first space university, established in 2007 in Thiruvananthapuram to meet the demands of the Indian space program and enhance the quality of education in space science and technology.

Indian National Space Promotion and Authorization Center:-

- An independent nodal agency under QUA was established in Ahmedabad to control the activities of private enterprises and startups.
- Other institutions - ISRO Inertial Systems Unit, Laboratory for Electro-Optics Systems,

Development and Educational Communication Unit, Physical Research Laboratory, National Atmospheric Research Laboratory, North Eastern Space Applications Centre, Antrix Corporation Limited, NewSpace India Limited etc.

- Thus, by establishing various institutions, space research has come a long way and has achieved a different dimension on the global stage.

Agricultural infrastructure

- It has emerged from the severe food crisis in the 1950s and 1960s as the largest exporter of agricultural products like grains, fruits, vegetables, spices, sugarcane, cotton etc. Has become the leading exporter of rice and wheat. All this is the effect of Green Revolution.

Development journey in agriculture:-

- Food security in the 1950s and 1960s depended on imports, and a three-year drought from 1964 to 1966 led to severe food insecurity. Wheat imports reached a high of 7.78 percent in 1966. This includes Rs 480 imported wheat from America. This situation was called 'ship to mouth' situation.
- To come out of this situation, India increased its production capacity mainly by using 'Green Revolution' with new varieties of wheat and rice.
- As a result, India started exporting rice from 2000 and came at the top with 40% share in global rice exports and a huge decline in wheat imports was also seen.
- Efforts were made to ensure access to food to the people through National Food Security Mission, Kisan Credit Card, Pradhan Mantri Garib Kalyan Anna Yojana etc.

Trends in agricultural production:-

- Total food production (cereals and pulses) increased from 15 tons in 1950-51 to more than 330 tons in 2022-23.
- Since 1950-51, food grain production has seen an increase of 6.5 times and vegetable production has seen an increase of 12 times.
- The availability of quality agricultural infrastructure such as irrigation resources, electricity, water availability, seed kits, pesticides, fertilizers etc. increased the level of production.

Government purchases of DACH increased price stability.

- The production of coarse grains increased from 15.38 tonnes in 1950-51 to 55 tonnes in 2022-23 and India attained the top position in coarse grain production and the year 2023 was declared 'International Year of Millets' by the Indian resolution in the United Nations.
- India is the largest producer and consumer of pulses. India increased its production of pulses from 8.4 tonnes in 1950-51 to 27 tonnes in 2022-23. In which the maximum increase was in the production of gram.
- India is dependent on imports in case of oilseeds. For this, Oilseed Technology Mission was started in 1986 to increase the domestic oilseed production, in which the import dependence was reduced to 2% in 1993-94, which has increased to 55% in the year 2022-23.
- In 1995, under the AWG Agreement, Open General License system was implemented to reduce the import rates of edible oils.
- To promote oilseed production for self-sufficiency in edible oils, National Food Security Mission Oilseeds was started in 2018-19 and to increase palm oil production, National Edible Oil Mission Palm Oil was started in 2021-22.

Agricultural resources and inputs:-

- The net area under crop sowing increased from 118.75 W in 1950-51 to 139.90 W in 2019-20, thus an increase of 1.17 times, but in comparison the population growth was 3.8 times.
- In 1950, PTI released more than 6000 varieties of crops.

- With the recommended use of fertilizers (nitrogen, phosphorus and potash-3:2:1), the use of fertilizers increased from 0.5 kg/hectare in 1950-51 to 140 kg/hectare in 2019-20.
- The nutrient based subsidy introduced in 2010 has been revised and Neem coated urea has been introduced in 2023 to reduce its use in non-agricultural purposes.
- For development in the irrigation sector, through the Command Area Development Program (1974.75) and Accelerated Irrigation Benefit Program (1997) etc., the net irrigated area increased from 17.55% in 1950-51 to 53% in 2019-20.

Price Policy and Market:-

- Under the price policy, the announcement of DACH by the Central Government (1965) and the MCD portal for sale etc. have ensured that farmers get fair prices for their crops.
- Thus, through timely development in various agricultural sectors, agricultural infrastructure has reached its present form. As a result, India appears to be in a strong position in both food production and consumption.

EDITORIAL

Plastic Pollution

Context

- Recently, the Organisation for Economic Co-operation and Development (OECD) has released the interim report titled-Towards Eliminating Plastic Pollution by 2040: A Policy Scenario Analysis, ahead of the Intergovernmental Negotiating Committee on Plastic Pollution (INC3). As per Organization for Economic Cooperation and Development (OECD), plastic waste produced globally is set to almost triple by 2060, with about half ending up in landfill and under a fifth recycled.

Key Highlights of the Report

- **Plastic pollution:** In 2022, 21 million tonnes (MT) of plastics leaked into the environment globally.
- **Plastic usage:** If no significant changes are made, plastic usage would increase, resulting in a 50% rise in macroplastic leakage by 2040. Due to this, ~ 30 MT of plastic is leaking into the environment, with 9 MT entering aquatic environments.
- **Critical point breakage:** Stabilising primary plastic use at 2020 levels by 2040 would still result in significant plastic leakage (12 MT) by 2040.
- **Ambitious global action:** It could drastically reduce waste generation, almost eliminating mismanaged waste and nearly eliminating plastic leakage by 2040.
- **Impact of Burgeoning Plastic Use:** Habitat destruction, soil contamination, climate adversities, and human health.
- **Impact on emissions:** Plastics contribute 3.8% of total global greenhouse gas emissions (1.9 GtCO2 e in 2022).
- **Cost of Action:** Global ambition could virtually eliminate mismanaged waste by 2040 (from 119 to 4 MT), as a result, plastic leakage would also be nearly eliminated (1.2 MT in 2040).

- **Increase in stocks of plastics in rivers and oceans:** It would still rise from 152 MT in 2020 to 226 MT in 2040 (74 MT less than in the baseline).
- **Increased investments:** Fast-growing countries with less advanced waste management systems will require investments (over USD 1 trillion between 2020 and 2040) for waste collection, sorting, and treatment.

Recommendations

- **Need for various policy scenarios:** It emphasises the necessity of a comprehensive approach to address plastic pollution throughout its lifecycle.
- **Overcoming technical and economic barriers:** They are essential to eliminate plastic leakage by 2040.
- **Recycling breakthroughs and scaling up well-functioning international markets** for scrap and secondary plastics are crucial strategies.

Plastic

- Derived from the Greek word plastikos: It means "capable of being shaped or moulded."
- Plastic: Wide range of synthetic or semi-synthetic materials that use polymers as a main ingredient with their defining quality being their plasticity - ability of a solid material to undergo permanent deformation.
- Formation: Most modern plastics are derived from fossil fuel-based chemicals like natural gas or petroleum.
- Biodegradable variants: Made from corn or cotton derivatives.

Concerns of plastics

- **Plastic pollution:** Caused due to plastic waste that is mismanaged and leakage and accumulation of plastic objects and particles that can adversely affect humans and the living and non-living environment

- **Slow degradation:** Plastics are hard to eradicate due to their slow decomposition rate in natural ecosystems.

- **Microplastics:** Plastics break down into their smaller units which are less than five millimetres in diameter. An average human consumes ~ 50,000 microplastic particles annually.

- **Effect on Human Health:** BPA present in plastic contaminates food and drinks, causing alterations in liver function, insulin resistance, foetal development in pregnant women, reproductive system & brain function.

- **Marine pollution:** The largest collection of plastics and microplastics in the ocean is in the Great Pacific Garbage Patch – a collection of marine debris in the North Pacific Ocean.

- **Plastisphere:** Plastics are becoming part of the Earth's fossil record and a marker of the Anthropocene, our current geological era. They have even been called the "plastisphere".

- **Climate change:** Plastic also contributes to global warming. If plastic waste is incinerated, it releases toxic fumes and carbon dioxide.

- **Tourism and Economy:** Plastic waste damages the aesthetic value of tourist destinations, leading to decreased tourism-related incomes.

Initiatives to curb the menace of plastics	
Global Efforts	**India's Efforts**
The 1972 Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter (or the London Convention) **The 1996 Protocol to the London Convention** (the London Protocol) **The 1978 Protocol** to the International Convention for the Prevention of Pollution from Ships (MARPOL). **GloLitter Partnerships (GLP)** - a project launched by the International Maritime Organization (IMO) and the Food and Agriculture Organization of the United Nations (FAO). **Clean Seas Campaign** - Launched by the United Nations Environment in 2017 to galvanise a global movement to turn the tide on plastic. **Greenpeace** - An environmental NGO dedicated to conserving the oceans and marine life across the globe.	**Ban on single-use plastics** by India. Eg, bags, cups, plates, cutlery, and straws in many states. **Extended Producer Responsibility (EPR)** - making plastic manufacturers responsible for managing and disposing of the waste generated by their products. **Plastic Waste Management Rules,2016** - They provide a framework for managing plastic waste through recycling, waste-to-energy initiatives etc. **Plastic Waste Management (Amendment) Rules, 2022** - It banned the manufacture, import, stocking, distribution, sale and use of carry bags made of virgin or recycled plastic less than seventy-five micrometres. **Swachh Bharat Abhiyan** - It includes the collection and disposal of plastic waste. **Plastic Parks** - Specialised industrial zones for recycling and processing plastic waste.

- **United Nations resolution** - 124 countries which are party to the United Nations Environment Assembly including India signed a resolution to draw up an agreement which will in the future make it legally binding for the signatories to address the full life of plastics from production to disposal, to end plastic pollution.

- **Beach clean-up drives -** Organised by the Indian government and various NGOs.

- **Awareness campaigns -** to educate people about the harmful effects of plastic pollution and encourage them to use sustainable alternatives.

- **India is a signatory to MARPOL** (International Convention on Prevention of Marine Pollution).

- **India Plastic Challenge –** Hackathon 2021 - A unique competition calling upon start-ups and students of Higher Education Institutions (HEIs) to develop innovative solutions to mitigate plastic pollution.
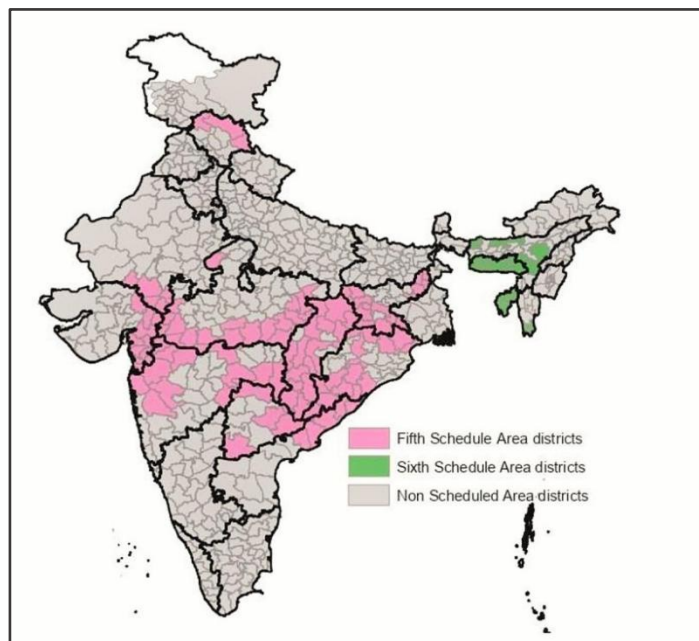
India's Scheduled Areas

Context

India's 705 Scheduled Tribe (ST) communities – making up 8.6% of the country's population – live in 26 States and six Union Territories. Article 244, pertaining to the administration of Scheduled and Tribal Areas, is the single most important constitutional provision for STs. Articles 244(1) provides for the application of Fifth Schedule provisions to Scheduled Areas notified in any State other than Assam, Meghalaya, Tripura, and Mizoram. The Sixth Schedule applies to these states as per Article 244(2).

Fifth Schedule Area districts
Sixth Schedule Area districts
Non Scheduled Area districts

Scheduled Areas

- **About:** Regions covering 11.3% of India's land area, inhabited by various ST communities comprising 8.6% of the country's population.

- **Designated in 10 states under V schedule:** Andhra Pradesh, Telangana, Odisha, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra, and Himachal Pradesh.

- **Designated in 4 States under VI Schedule:** Assam, Meghalaya, Tripura and Mizoram.

- **Criteria for Identification:**
  - Significant tribal population
  - Compactness
  - Reasonable size Viability as an administrative entity
  - Economic backwardness compared to neighbouring areas.

- **Bhuria Commission's recommendations:** It recommended areas with 40% or more tribal population according to the 1951 Census as Scheduled Areas.

- **Constitutional Provisions and Governance:**
  - **Article 244 (1):** It applies the Fifth Schedule provisions to Scheduled Areas in states other than Assam, Meghalaya, Tripura, and Mizoram.
  - **Article 244 (2):** It applies the Sixth Schedule to the aforementioned states.
- **Tribal Advisory Council:** The President of India notifies Scheduled Areas, and states with Scheduled Areas establish a Tribal Advisory Council to advise the Governor on ST welfare matters.
- **Panchayats (Extension to Scheduled Areas) Act (PESA) of 1996:** It empowers gram sabhas, granting them substantial authority through direct democracy, prioritising Local Self-Governance.

Concerns with Scheduled Areas

- **Improper and insufficient inclusion:** A significant portion (59%) of India's ST population is outside the purview of Article 244, denying them rights protected under laws applicable to Scheduled Areas.
- **Absence of viable ST-majority administrative units:** It has further led to demands for the denotification of parts of Scheduled Areas.
- **Denial of rights:** Under the laws applicable to Scheduled Areas, the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 and the Biological Diversity Act 2002.

Provisions Related to STs

- The Constitution of India does not define the criteria for recognition of STs. According to the 1931 Census, STs are termed as "backward tribes" living in the "Excluded" and "Partially Excluded" areas. The Government of India Act of 1935 called for the first time for representatives of "backward tribes" in provincial assemblies.
- **Article** 366**(25):** Defines STs as" such tribes or tribal communities or parts of or groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purposes of this Constitution."
- **Protection of Civil Rights Act, 1955** against Untouchability.
- **Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989.**
- **PESA** Act (Provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996).
- **Scheduled** Tribes **and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.**
- Any living areas or groups of living areas in states and union territories where STs are the largest community should be declared as Scheduled Areas, even if they are not connected and should also include forest lands where the Forest Rights Act of 2006 applies, and the boundaries within regular lands as defined by the state laws.
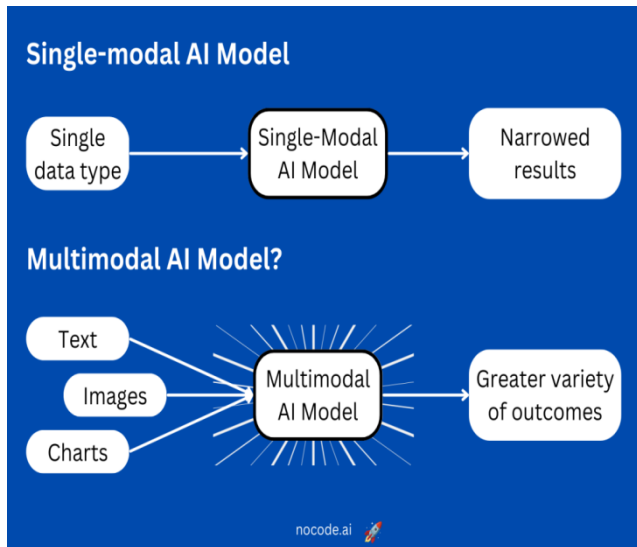
Multimodal artificial intelligence

Context

For anyone curious about what the next frontier of AI models would look like, all the signs are pointing towards multimodal systems, where users can engage with AI in several ways. People absorb ideas and form context by drawing meaning from images, sounds, videos and text around them. A chatbot, even though it can write competent poetry and pass the U.S. bar, hardly matches up to this fullness of cognition. If AI systems are to be as close a likeness of the human mind as possible, the natural course would have to be multimodal.

Multimodal AI

- About: Artificial intelligence that combines multiple types, or modes, of data to create more accurate determinations, draw insightful conclusions or make more precise predictions about real-world problems.

- Mechanism: These systems train with and use video, audio, speech, images, text and a range of traditional numerical data sets.

Recent Developments

- **ChatGPT:** An artificial intelligence language model developed by OpenAI. It's part of the GPT (Generative Pre-trained Transformer) series of models. It's designed to understand and generate human-like text based on the input it receives.

- **Gobi**: OpenAI is working on a project named "Gobi," which aims to create a multimodal AI system from scratch, distinct from the GPT models.

- Google's Gemini Model: Due to its huge collection of images and videos from its search engine and YouTube, Google had a clear edge over its rivals in the multimodal domain.

Comparison between Multimodal and Single Modal AI

Multimodal AI	Single Modal AI
- Processes multiple types of data (text, images, audio, etc.). - Provides richer context and understanding by	- Focuses on a single type of data (e.g., text-only or image-only). - Limited in context and understanding

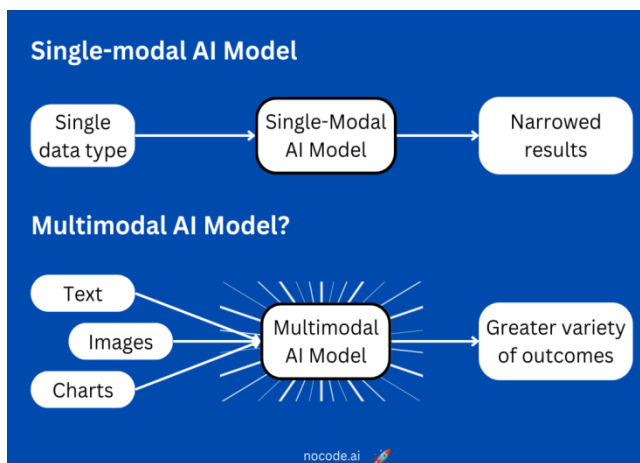| combining modalities. • Enhances accuracy, robustness, and problem-solving across domains. • Enables more natural user interactions. • Supports broader applications but can be more complex to develop.	compared to multimodal systems. • May be simpler to develop for specific tasks in its domain. • Less versatile in handling diverse information sources. • Narrower applications compared to multimodal AI.

Applications of Multimodal AI

- **Healthcare:** Diagnosis via combining patient data and medical imaging.

- **Autonomous Vehicles:** Safe navigation using visual and sensor data fusion.

- **Education:** Interactive learning with text, images, and **audio**.

- **Customer Service:** Improved chatbots integrating text, speech, and visuals.

- **Content Creation:** Multimedia content generation **from** text, images, and videos.

- **Media & Entertainment:** Personalised recommendations **across** different media types.

- **Security & Surveillance:** Threat detection from video, **sensors**, and textual data.

- **Social Media Analysis:** Understanding trends via **text**, images, and videos.

- **Accessibility: Inclusive** tech with speech, image recognition, and gestures.

- **E-commerce: Enhanced** product search using text, images, and user preferences.

Challenges of Multimodal AI

- **Data Fusion:** Integrating diverse data sources **without** losing context or relevance.

- **Alignment & Synchronisation:** Ensuring timing **and** alignment of different modalities for accurate analysis.
- **Complexity in Modelling:** Developing **models** capable of handling multiple data types efficiently.
- **Computational Demands:** High computational resources required for **processing** multiple modalities simultaneously.
- **Domain Adaptation:** Adapting models to different domains and ensuring generalisation across modalities.
- **Bias and Fairness:** Addressing biases inherent in **each** modality to prevent skewed or unfair conclusions.
- **Interpretability:** Understanding and explaining decisions made across multiple data sources.

AI's utility spans diverse domains. In healthcare, it aids in diagnostics, drug discovery, and personalised treatment plans. In finance, it streamlines transactions, detects fraud, and predicts market trends. In education, AI enables personalised learning and assessment. In customer service, it powers chatbots for instant support. From optimising logistics to enhancing cybersecurity, AI's utility lies in automating tasks, analysing vast datasets for insights, and augmenting human capabilities, making processes more efficient, accurate, and adaptable across industries.

Govt.'s fact check unit

Context

The Bombay High Court on September 29 reserved its verdict in a batch of petitions challenging the constitutionality of the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2023 (IT Rules). The Rules permit a Fact Check Unit (FCU) of the Union Government to identify "fake or false or misleading" online content "related to the business of the Central Government" and demand its removal.

Concerns regarding the Fact-Checking Initiative

- **Conflict of Interest:** Concerns about bias are raised since the government might not be neutral.
- **Potential for Censorship:** This unit could hamper the freedom of speech by controlling information.
- **Infringes on Rights:** Changes to the IT Rules have been legally challenged for possibly infringing on constitutional rights.

Way forward

- **Specification of Scope and Powers:** The government should specify the scope and powers of their fact-checking unit.
- **Impartial and free monitoring:** Misinformation and fake news should be managed by independent organisations, not by the government.
- **Judicial Oversight:** To prevent the misuse of the fact-checking powers by the government.
- **Prior Notice and Appeal:** There should be a process for giving a prior notice before labelling information as false, and a right to appeal against such decisions.
- **Stakeholder inclusion:** Journalists and other stakeholders should be involved to ensure a more impartial approach.

Caste census in India

After the publication of a caste survey in Bihar, which found that 63% of Bihar's 13 crore population belong to castes listed under the Extremely Backward Classes (EBC) and Other Backward Classes (OBC) categories, Prime Minister criticised and rejected the demand for a nationwide caste census made by Congress and several other Opposition parties. The Government of India in 2021 had stated in Lok Sabha that it has decided as a matter of policy not to enumerate caste-wise population other than SCs and STs in Census.

Census in India

- **Origin:** The Census of India dates back to the colonial exercise of 1881.
- **Importance:** It is used by the government, policymakers, academics, and others to capture the Indian population, access resources, map social change, and conduct delimitation exercises.

SECC (Socio-Economic and Caste Census)

- **Origin:** It was first conducted in 1931
- **Function:** To collect information on the economic status of Indian families, both in rural and urban areas, to identify indicators of deprivation.
- **Importance:** It also collects data on specific caste names to evaluate the economic conditions of different caste groups.

Difference Between Census & SECC

Census	SECC
It provides a general portrait of the Indian population	It is used to identify beneficiaries of state support
Its data is confidential under the Census Act of 1948	Personal information in SECC is open for use by government departments to grant/ restrict benefits to households.

Arguments for Caste Census

- **Ending the prevalence of caste-based discrimination:** A caste census can help identify the disadvantaged groups and bring them to the forefront of policy making.
- **Ensuring Equitable Distribution of Resources:** A caste census can help policymakers in formulating policies that cater to the specific requirements of each group, thereby promoting inclusive development.
- **Monitoring the Effectiveness of Affirmative Action Policies:** A caste census can help monitor the implementation and outcomes of govt policies like reservation, helping policymakers to make informed decisions.
- **Providing a Comprehensive Picture of Indian Society:** A caste census can provide a comprehensive picture of the diversity of Indian society, shedding light on the social fabric and interplay between different caste groups.
- **Mandate:** Article 340 mandates the appointment of a commission to investigate the conditions of socially and educationally backward classes and make recommendations as to the steps that should be taken by governments.

Arguments against Caste Census

- **Against the spirit of equality & reinforces the Caste System:** Caste-based discrimination is illegal and a caste census would only reinforce the caste system.
- **Difficult to Define Castes:** Defining castes is a complex issue and a caste census would require a clear definition of castes. So, this could lead to confusion, disputes, and further divisions within society.
- **Can deepen Social Divisions:** Caste census could lead to further social divisions and that it is better to focus on promoting social harmony instead.

Way Forward

- **Independent studies at district and state level**: They may provide the data of castes and subcastes at those levels.
- **Use of technologies**: Artificial intelligence and machine learning can help in analysing data.
- **Subcategorization of OBCs** to provide representation to underrepresented subcastes of OBCs.

There are endless arguments for and against a caste census; however, accurate data on the population of OBCs and other groups is necessary for promoting social justice and ensuring equitable distribution of resources. Caste census can help monitor the effectiveness of affirmative action policies and provide a comprehensive picture of Indian society. It is therefore very important for policymakers to carefully consider the arguments of both sides to provide for a more equitable and just society.

Israel's Gaza offensive

Context

On October 7, Hamas, the militant group ruling the Gaza Strip, mounted a scathing attack on Israel from the land, air and water leading to multiple casualties. In response, Israel also launched a series of attack which has led to the death of over 12000 palestinians.

Israel-Palestine Conflict

- **Balfour Declaration:** In 1917, the then British Foreign Secretary Arthur James Balfour expressed official support of Britain for a Jewish "national home" in Palestine under the Balfour Declaration.

- **Creation Of Palestine:** Unable to contain Arab and Jewish violence, Britain withdrew its forces from Palestine in 1948, leaving responsibility for resolving the competing claims to United Nations.

- **UN plan:** The UN presented a partition plan to create independent Jewish and Arab states in Palestine which was not accepted by most Arab nations.

- **Arab Israeli War (1948):** In 1948, the Jewish declaration of Israel's independence caused Arab states to attack. However, Israel controlled about 50 % more territory than originally envisioned by the UN partition plan at the end of the war.

- **UN Partition Plan:** As per the Plan, Jordan controlled the West Bank and Jerusalem's holy sites, and Egypt controlled the Gaza Strip. But it was a failure & led to formation of Palestinian Liberation Organisation in 1964.

- **Palestinian Liberation Organisation (PLO):** It had the aim of freeing Palestine from clutches of Israel and Jewish domination and setting up the dominance of Muslim Brotherhood in the Arab world.

- **Six-Day War, 1967:** Israeli forces seized Golan Heights from Syria, West Bank & East **Jerusalem** from Jordan & Sinai Peninsula & Gaza strip from Egypt.

- **Camp David Accords (1978):** "Framework for Peace in **the** Middle East" brokered by the U.S. set the stage for peace talks between Israel and its neighbours and a resolution to the "Palestinian problem" (a failure).

- **Founding of Hamas, 1987:** A violent offshoot of Egypt's Muslim Brotherhood seeking to fulfil its agenda through violent jihad. It is regarded as a terrorist organisation by the U.S. government. In 2006, Hamas won the Palestinian Authority's legislative elections. It ejected Fatah from Gaza in 2007, splitting the Palestinian movement geographically, as well

- **First Intifada (Palestinian Uprising):** Tensions in the occupied territories of West Bank and Gaza reached boiling point **resulting** in the First Intifada. It grew into a small war between Palestinian militants and the Israeli army.

- **Oslo Accords:** Israel and the PLO agreed to **officially** recognize each other and renounce the use of violence. The Oslo Accords also

established the Palestinian Authority, which received limited autonomy in the Gaza Strip and parts of the West Bank.

- **2005:** Israel began a unilateral withdrawal of Jews **from** settlements in Gaza but kept tight control over all border crossings (blockade).
- **2012:** UN upgraded Palestinian **representation** to that of "non-member observer state".

Territorial Disputes of Israel with Neighboring Countries

West Bank: T

- Between Israel and Jordan.
- Israel occupied it in the 1967 war and has over the years established settlements there.

Gaza:

- Situated between Israel and Egypt.
- Occupied by Israel after 1967.
- Later, it relinquished control of Gaza City and day-to-day administration in most of the territory during the Oslo peace process.
- 2005: Israel unilaterally removed Jewish settlements from the territory, though it continues to control international access to it.

Golan Heights:

- A strategic plateau captured by Israel from Syria in the 1967 war.
- Israel effectively annexed the territory in 1981.

- Jerusalem and Golan Heights recognised as a part of Israel by the USA.

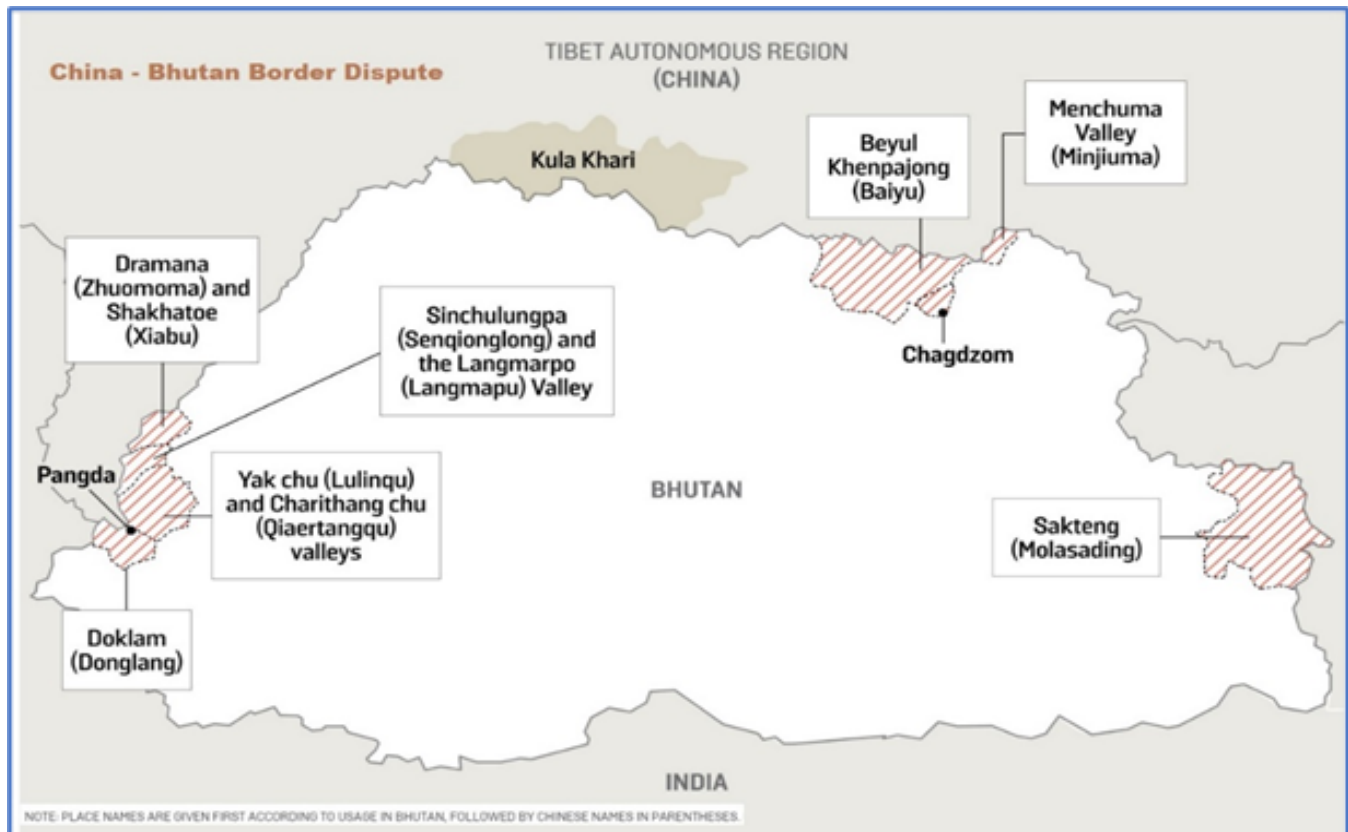## China-Bhutan boundary talks and impact on India

Recently, the Bhutanese Foreign Minister paid a visit to China, which is significant as Bhutan and China do not maintain diplomatic relations and this visit is the first ever by a Bhutanese Foreign minister. China and Bhutan held their 25th round of boundary talks in Beijing and signed a Cooperation Agreement on the "Responsibilities and Functions of the Joint Technical Team (JTT) on the Delimitation and Demarcation of the Bhutan-China Boundary." This is an advance in their commitment towards a 3-Step Roadmap initiated in 2021 for border resolution, building on the positive momentum since their last talks in 2016.

China - Bhutan Border Dispute

- **Bhutan- China Boundary:** 477 km-long border.

China's claims on Bhutan's territories:

- **North -** Pasamlung and Jakarlung valleys (culturally significant for Bhutan)
- **West -** Doklam, Dramana, and Shakhatoe, Yak Chu and Charithang Chu, and Sinchulungpa and Langmarpo valleys (Pasture-rich and strategically located in the Bhutan-India-China trijunction).
- **East -** In 2020, China made new claims on Bhutan's East in the Sakteng sanctuary.

China - Bhutan Border Dispute

NOTE: PLACE NAMES ARE GIVEN FIRST ACCORDING TO USAGE IN BHUTAN, FOLLOWED BY CHINESE NAMES IN PARENTHESES.

Boundary Negotiation between Bhutan and China

- **Initial Border Negotiations:** Bhutan began its first border negotiations with China in 1984.
- **Many rounds of negotiations:** To date, both countries have held 11 expert group meetings and 24 rounds of border negotiations.
- **October 2021:** Bhutan & China signed an MoU on the Three-Step Roadmap for Expediting the China-Bhutan Boundary Negotiations (Not been made public).

India's Concerns

- **India's strategic Interests:** India deems China's presence near Doklam as a major security concern due to its closeness to the strategic Siliguri corridor.
- **Claim on boundary:** China has staked claim to a wildlife sanctuary in Bhutan near the border with Arunachal. Due to this, in Dec. 2022, Indian & Chinese army troops clashed along LAC in Tawang Sector of Arunachal.

Impacts on India due to growing Bhutan-China relations

- **Security implications:** China's presence and influence in Bhutan could pose a threat to India's security interest in the Doklam plateau.
- **Loss of Buffer State:** India would also lose its leverage over Bhutan as a buffer state and have to deal with a potential two-front war scenario with China and Pakistan.
- **Economic implications:** If Bhutan diversifies its economic ties with China, it could reduce its dependence on India and affect India's energy security.
- **Diplomatic implications:** Establishing formal diplomatic relations with China could affect Bhutan's traditional pro-India foreign policy and **challenge** India's influence in the region.
- **Infrastructure and Connectivity:** If Bhutan participates in China's BRI, it might have implications for regional infrastructure development and connectivity.

- **Influence in Regional Organisations:** Bhutan's deal with China could impact India's influence in regional organisations like SAARC & BIMSTEC.

Challenges in solving border dispute between China and Bhutan

- **Not a bilateral issue:** To solve the boundary dispute, China will have to stop treating the Bhutan-China border dispute as a bilateral issue and involve India as well.

- **Increasing Chinese expansion in the Western disputed regions**: India has warned Bhutan of China's intrusions. Despite this, it stays reluctant to seek more Indian assistance, fearing more Chinese assertiveness.

A border deal that addresses Bhutanese concerns in the north while preserving India's red lines in the west will not necessarily undermine New Delhi's interests. Rather than alarm, India must approach the boundary negotiations with a greater understanding of Bhutan's reasoning, and with confidence that India's long-trusted neighbour will take both India's interests and its own into consideration before any final agreement.

Carbon Nanoflorets

Context

- **Recently**, researchers at IIT Bombay created carbon nanoflorets which are capable of converting sunlight into heat with unmatched efficiency.

- This development holds the potential to revolutionise sustainable heating solutions while minimising the carbon footprint.

Carbon Nanoflorets

- **About:** Tiny marigold shaped flowers made only of carbon.

- **Significance:** The carbon nanoflorets demonstrate an impressive light absorption efficiency of 87%.

- **Functioning:** They can absorb multiple frequencies of sunlight, including infrared, visible light, and ultraviolet.

- **Traditional solar-thermal materials:** They typically absorb only visible and ultraviolet light.

How are they made?

- **Heating of DFNS:** Researchers heated a special form of silicon dust called DFNS (dendritic fibrous nanosilica) in a furnace.

- **Introduction of acetylene:** Once heated, acetylene gas was introduced into the chamber which turned the white powder black.

- **Chemical reaction:** They collected the black powder and treated it with a strong chemical that dissolved the DFNS away, leaving carbon particles behind.

- **New structure:** The structure of the silicon particles – 50-1,200 nanometers in size— resembled spikes arranged around a sphere.

Significance

- **Minimises light reflection:** It also ensures maximum internal absorption.

- **Energy efficiency:** This distinctive design captures and retains sunlight, converting it into thermal energy.

- **Minimal Heat Dissipation:** The heat generated within the material is not carried over long distances which reduces dissipation of heat into the environment, allowing the nanoflorets to retain and utilise the generated thermal energy effectively.

Application

- **Efficient heating of water:** A one-square-metre coating of carbon nanoflorets can vaporise ~ 5 litres of water within an hour, surpassing the performance of commercial solar stills. It reduces reliance on fossil fuels.

- **Eco-Friendly Heating:** By utilising nanofloret coatings, users can harness solar energy for heating their homes in an environmentally friendly manner, thereby reducing their carbon footprint.

- **Stability and Longevity:** Coated nanoflorets exhibit exceptional stability with a minimum lifetime of eight years.

Model Question Paper

Q.1 Where was the Atal Bihari Vajpayee Disabled Sports Training Center inaugurated?
(a) Indore   (b) Lucknow
(c) Gwalior   (d) Jaipur

Q.2 Recently, the Government of India and the Japanese Bank for International Cooperation (JBIC) jointly launched the National Investment and Infrastructure Fund (NIIF). In this the partnership ratio between the Government of India and JBIC was-
(a) 50:50   (b) 60:40
(c) 90:10   (d) 49:51

Q.3 An autonomous body approved by the Union Cabinet to increase access of youth to technology and resources is?
(a) young friend   (b) Strong youth
(c) Young India   (d) My Young India

Q.4 Which university was recently given the status of Deemed University by the Union Ministry of Education and Skill Development-
(a) K.K. School of Arts
(b) J.J. School of Arts
(c) S.K. School of Arts
(d) R.R. School of Arts

Q.5 Where was the Liquid Nano DAP plant inaugurated?
(a) Surat   (b) Jaipur
(c) Kalol   (d) Udaipur

Q.6 Where was the art-from-waste-to-sculpture exhibition inaugurated?
(a) Lalit Kala Academy, New Delhi
(b) Lalit Kala Academy, Jaipur
(c) Jawahar Kala Kendra, Jaipur
(d) Central Sanskrit College, Jaipur

Q.7 "Second unit of Maitri Super Thermal Power Plant was commissioned." It was established by agreement between which countries?
(a) India-Nepal
(b) India-China
(c) India-Maldives
(d)India-Bangladesh

Q.8 'PM-AJAY' scheme is related to which ministry?
(a)   Ministry of Social Justice and Empowerment
(b)   Ministry of Defense
(c)   Ministry of Tribal Affairs
(d)   Ministry of Rural Development

Q.9 'Jamarani Dam Multipurpose Project' is related to which state?
(a) Uttar Pradesh   (b) Uttarakhand
(c) Rajasthan   (d) both a and b

Q.10 According to 'Global Energy Outlook Report-2022', in which year will global emissions be at its peak?
(a) 2025   (b) 2030
(c) 2040   (d) 2050

Q.11 Which edition of India Artificial Intelligence Report was recently released by the Ministry of Electronics and Information Technology?
(a) first   (b) second
(c) third   (d) IV

Q.12 Which position did India get in the 'Global Hunger Index-2023'?
(a) 120   (b) 121
(c) 122   (d) 119

Q.13 According to 'Hurun Global Rich List-2023', India's richest person became -
(a) Anil Ambani
(b) Mukesh Ambani
(c) Ratan Tata
(d) Rakesh Jhunjhunwala

Q.14 Speed Test Global Index on Broadband Internet Speed was released by which organization?
(a) Tokla   (b) Jokla
(c) Ocala   (d) Chikla

Q.15 Recently the Ministry of Electronics and Information Technology launched I.T. To which institutions notice was issued due to violation of Rule 2021 -
(a)   (b) YouTube
(c) Telegram   (d. All of the above

Q.16 Where was the first Robotic Process Automation Lab of Uttar Pradesh inaugurated?
(a) Ghaziabad   (b) Noida
(c) Gorakhpur   (d) Mirzapur

Q.17 With which organization was the MoU signed by the Ministry of Electronics and Information Technology for Quantum AI and Semiconductor?
(a) IBM   (b) C-DAC
(c) Apple   (d) VIVO

Q.18 Where was AI Security Summit-2023 held?
(a) America   (b) Britain
(c) India   (d) Sri Lanka

Q.19 Who was elected President of Asia-Pacific Institute for Broadcasting Development for the third consecutive time?
(a) Bhutan   (b) China
(c) Canada   (d) India

Q.20 Recently, WHO approved a vaccine called R-21/Matrix-M, which disease is it related to?
(a) Malaria   (b) Dengue
(c) Chikungunya   (d) elephant foot

Q.21 'Sampriti-XI' exercise took place between which countries?
(a) India-Nepal   (b) India-France
(c) India-Bangladesh   (d) Sri Lanka-India

Q.22 Where was the 'First Military Heritage Festival' organized -
(a) Mumbai   (b) Bengaluru
(c) Kochi   (d) New Delhi

Q.23 A 25T Bollard Tug unveiled in Bharuch (Gujarat) by the Ministry of Defence, Government of India, its name is –
(a) Mahabali   (b) Khali
(c) Dabang   (d) fatal

Q.24 Where was the 7th Congress exercise organized -
(a) Qatar   (b) Dubai
(c) Bengaluru   (d) Visakhapatnam

Q.25 The duration of the campaign with the administration and cities was extended to how much from 30 September 2023 -
(a) 31 Jan 2024   (b) 31 Dec 2024
(c) 31 Mar 2024   (d) 30 April 2024

Q.26 Recently, Prime Minister Narendra Modi inaugurated IIIT campus from Sanwaliya Seth, where is it built?
(a) Jhalrapatan (Jhalawar)
(b) Ranpur (Kota)
(c) Nanta (Kota)
(d) Dhanka (Jaipur)

Q.27 The 15th Assembly has concluded, how many sessions were called in it -
(a) 5   (b) 7
(c) 8   (d) 10

Q.28 Who was recently appointed to the post of Member Secretary in the State Backward Classes Commission?
(a) Dr. Surendra Yadav
(b) Bhalaram Parmar
(c) Lalit Toonwal
(d) Rajendra Sain

Q.29 Where was Rajasthan's first Vistadome heritage train inaugurated by the Prime Minister?
(a) Gauram Ghat
(b) Kamli Ghat
(c) Kewra's cord
(d) Cord of elephant jaggery

Q.30 Rajasthan became the first urban body to issue municipal bonds -
(a) Jaipur Greater Municipal Corporation
(b) Jaipur Heritage Municipal Corporation
(c) Kota North Municipal Corporation
(d) Bharatpur Municipal Corporation

Q.31 Match the following -

Board	President
1. Veer Tejaji Welfare Board	(a) Devendra Singh
2. Economically Backward Classes Board	(b) Rakesh Kumar Gupta
3. Architecture Board	(c) Richpal Mirdha
4. Agrasen Welfare Board	(d) Mukesh Verma

Code :
(a) 1-c, 2-a, 3-d, 4-b   (b) 1-a, 2-b, 3-c, 4-d
(c) 1-a, 2-c, 3-b, 4-d   (d) 1-b, 2-a, 3-c, 4-d

Q.32 By how much has the monthly allowances of chairpersons of urban bodies of Rajasthan been increased?
(a) 10%   (b) 20%
(c) 30%   (d) 25%

Q.33 When was the new Renewable Energy Policy-2023 released by the Rajasthan Government?
(a) 1 October   (b) 3 October
(c) 6 October   (d) 10 October

Q.34 When is 'International Day of Non-Violence' celebrated -
(a) 1 October   (b) 2 October
(c) 12 October   (d) 31 October

Q.35 When is 'International Girl Child Day' celebrated?
(a) 10 October   (b) 9 October
(c) 11 October   (d) 12 October

Q.36 Recently, Nobel Prizes were awarded for the year 2023. Identify the mismatched pair among these –
(a) Nobel Peace Prize – Nargis Mohammadi
(b) Nobel Prize in Medicine – Catoline Carico and Drew Weissman
(c) Nobel Prize in Chemistry – Mongi Bawendi and Lewis Bruce
(d) Nobel Prize for Literature – Claudia Goldin

Q.37 Who was recently handed over the presidency of the Indian Ocean Rim Association?
(a) India   (b) China
(c) Nepal   (d) Sri Lanka

Q.38 How many gold medals were won by India in the Asian Games-2023?
(a) 24   (b) 25
(c) 28   (d) 30

Q.39 Who was recently honored with Saraswati Samman-2022?
(a) Shivshankari   (b) Anjuma
(c) Gauri Devi   (d) Rashida

Q.40 Which village was given the title of best tourism village by the United Nations World Tourism Organization (UNWTO)?
(a) Abhaneri (Dausa)
(b) Dhordon (Gujarat)
(c) Kangri (Uttarakhand)
(d) Sihare (MP)

Q.41 Where was the Para Asian Games-2023 organized -
(a) Shanghai   (b) Guangzhou
(c) Chaoyang   (d) Hogzhou

Q.42 Who was recently appointed the coach of the Indian women's cricket team?
(a) M.S.Dhoni   (b) Rahul Dravid
(c) Kapil Dev   (d) Amol Majumdar

Q.43 Who was elected as the new king of Malaysia –
(a) Al Sultan Abdullah
(b) Ibrahim Sikandar
(c) Al Sultan Ibrahim
(d) Al Sultan Sikandar

Q.44 Who wrote the book 'An Indian Success Story: Agriculture and Co-operative'?
(a) S. S. gill   (b) Claudia Gouldin
(c) Jhumpa Lahiri (d) Shivshankari

Q.45 Recently M.S. Swaminathan passed away, he was related to –
(a) Social worker (b) Politician
(c) scientist   (d) none of these

Q.46 Recently in which country the constitution maker Dr. B. R. 19 feet high statue of Ambedkar unveiled –
(a) Canada   (b) America
(c) Thailand   (d) Britain

Q.47 Recently Bishansingh Bedi passed away, the stories related to him were -
(a) Hockey   (b) football
(c) Handball   (d) cricket

Q.48 Which Indian was recently given the Global Leadership Award-2023?
(a) Anil Ambani
(b) Rakesh Jhunjhunwala
(c) Meera Singh
(d) Nita Ambani

Q.49 Where was the primary section of India's first rapid transit system inaugurated?
(a) Gandhinagar (Jaipur)
(b) Sahibabad (Uttar Pradesh)
(c) Gandhinagar (Gujarat)
(d) Nainital (Uttarakhand)

Q.50 Which portals were showcased in 'Indian Mobile Congress-2023' -
(a) Saras   (b) accomplished
(c) both   (d) none

Answer Key

1.	C	2.	D	3.	D	4.	B	5.	C
6.	A	7.	D	8.	A	9.	D	10.	A
11.	A	12.	B	13.	B	14.	C	15.	D
16.	C	17.	A	18.	B	19.	D	20.	A
21.	C	22.	D	23.	A	24.	A	25.	C
26.	B	27.	C	28.	B	29.	A	30.	D
31.	A	32.	B	33.	C	34.	B	35.	C
36.	D	37.	D	38.	C	39.	A	40.	B
41.	D	42.	D	43.	B	44.	A	45.	C
46.	B	47.	D	48.	D	49.	B	50.	C